Belden

Master Catalog

INDUSTRIAL
RESIDENTIAL
BROADCAST
NETWORKING
SOUND, SECURITY & ALARM

ELECTRONIC WIRE & CABLE
FIBER OPTIC CABLE

Welcome To The Most Complete Resource In The Industry For Reliable Electronic Wire And Cable:

The Belden® Master Catalog is a uniquely distinctive publication. An unparalleled resource for electronic wire and cable solutions, the catalog represents Belden's commitment to providing you with the most reliable electronic wire and cable products, whatever the application or need.

The Industry's Premier Source Of Information For Today's Designers And Specifiers.

The catalog, however, is much more than a listing of products. It is also the industry's premier source of information for today's designers and specifiers. We believe you'll find our Master Catalog to be an essential tool for solving a wide range of application problems.

Choose From More Than 3,000 Wire And Cable Products

Belden has one of the largest product offerings in the markets we serve. Our selection of more than 3,000 wire and cable products is devoted to applications such as:

- Home automation systems and networks
- Computer networking and equipment for commercial organizations
- Alarm, security and communications
- Industrial networking, instrumentation and control systems
- Broadcast, entertainment and broadband markets
- Wireless communications
- Electrical equipment, including motors and apparatus

Every one of our products is the result of foresight and leadership, and a proactive response to both emerging technologies and the changing needs of our customers.

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To assure Belden products meet your requirements, we use a formal, documented Quality Management System based on our Quality Policy and the ISO 9000 family of international standards. Belden Electronics was the first UL Registered Wire and Cable Company to receive registration to ISO 9001:2002. Our ISO certification is a confirmation of Belden's pledge to total quality and to continual improvement through our company's quality processes.

What this all adds up to is an unceasing dedication to reliability, which is at the root of Belden's aggressive, continual search for ways to meet the often complicated needs of our customers.

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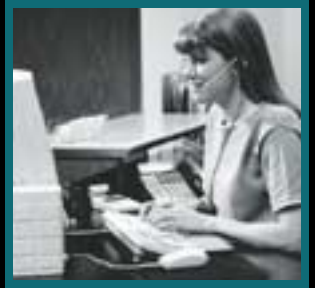

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How to Use the Belden® Master Catalog

If You're Not Sure Of What You Need...

Select By Cable Type or Application

Use the Section Index below or look at the more detailed Table of Contents pages found at the beginning of *each* section to find your cable type or application.

Select By Keyword

Reference the *Table of Contents* section on the following pages for an alphabetical listing of product keywords.

Consult the Cable Finder Guide

If you know the gage size, shielding type, and/or number of conductors needed for your application, you can locate a part number and corresponding catalog page number for all matching multi-conductor and paired cable products in the *Cable Finder Guide* (Section 2).

If You Know The Belden Part Number...

Consult the Index in the Back of the Catalog

In the *Part Number Index* (Section 17), you'll find a numerical listing of Belden part numbers. This comprehensive Index lists *every* product featured in the *Belden Master Catalog*.

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Please refer to "Terms of Use of Master Catalog" on page 16.30.

Visit our Web Site at www.belden.com

Our Web site is a valuable online resource for Belden wire and cable products, services, support, solutions, and purchasing information. Point your browser to www.belden.com to find out more.

Contact One of Our Sales Representatives for Assistance

Call **1-800-BELDEN-1** in the U.S. or **1-765-983-5200** outside the U.S. You can also fax us at **1-765-983-5656** or email us at **techsupport@belden.com**.

To Place an Order

For many of the products in the catalog, you will find everything you need in this catalog to place an order. Should you need assistance, please contact your Belden sales representative. A complete list of all of our sales offices can be found on the back cover of this catalog or at www.belden.com.

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2 Cable Finder Guide

The Belden® Cable Finder Guide is a tool for the user of the Belden Master Catalog. It is designed to give quick access and page reference to current Belden product offerings by AWG size, shielding type and number of conductors.

Use the Cable Finder to locate where the specific cable you seek is detailed in the body of the catalog.

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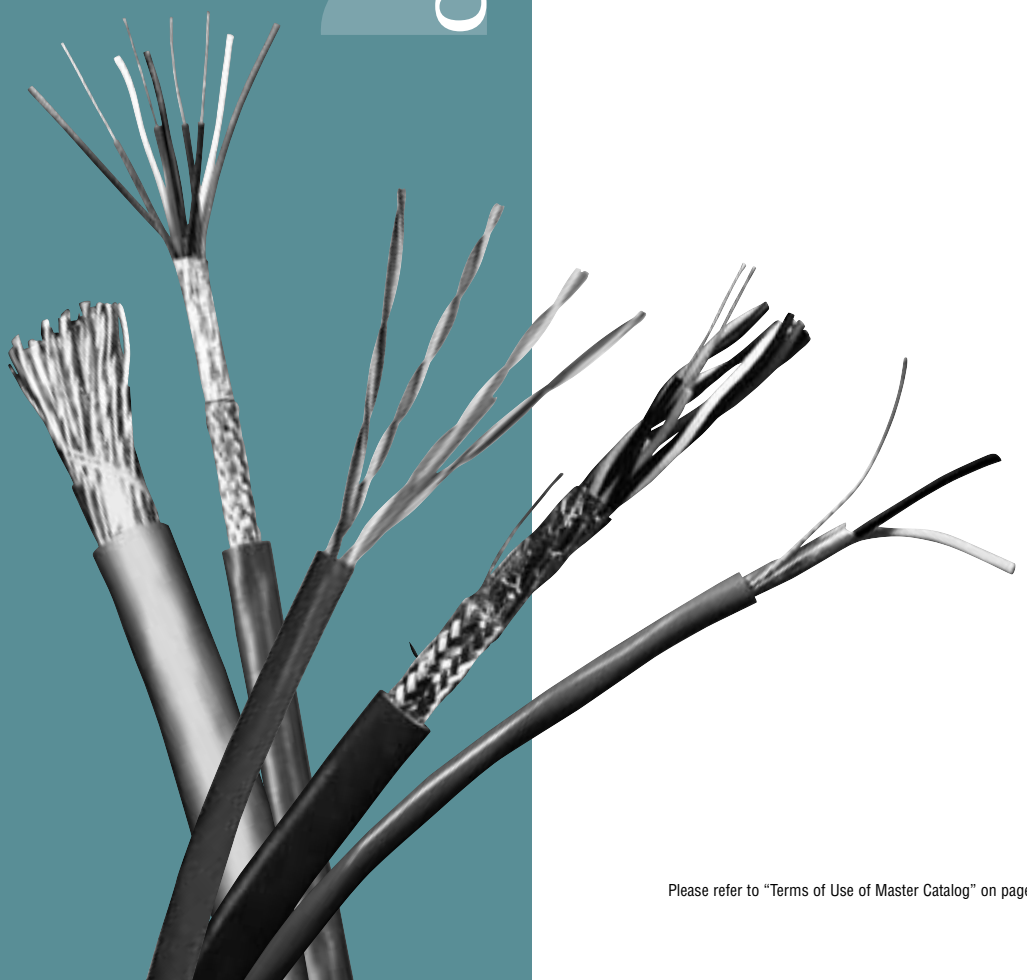

Please refer to “Terms of Use of Master Catalog” on page 16.30.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
25 AWG and smaller														
1	—	—	—	—	83303	4.30	—	—	—	—	—	—	—	—
2	—	—	9454 8416	12.38 12.38	83317	4.30	9180 9271	12.28 12.56 6.84	—	—	—	—	—	—
3	—	—	8791	4.14	83332 8643	4.30 4.14	—	—	—	—	—	—	—	—
4	—	—	—	—	83347 1804A 1172A	4.30 12.9 12.9	1211A● 8132FO	4.21 5.14	9804 8132	5.26 5.27	1215A■ 7891A■	11.21 12.29	—	—
6	—	—	—	—	—	—	1212A● 8133FO	4.21 5.14	9791 9805 8133 1538A	4.16 5.26 5.27 11.22	—	—	—	—
7	—	—	—	—	—	—	—	—	1540A	11.22	—	—	—	—
8	—	—	—	—	7884A◗	12.18	1213A● 8134FO	4.21 5.14	9806 8134	5.26 5.27	7890A■	12.29	—	—
10	—	—	—	—	—	—	8135FO	5.14	9807 8135	5.26 5.27	—	—	—	—
14	—	—	—	—	—	—	—	—	9808	5.26	9868■	4.10	—	—
16	—	—	—	—	7885A◗	12.18	1214A● 8138FO	4.21 5.14	8138	5.27	7880A■	12.29	—	—
18	—	—	—	—	—	—	—	—	9809	5.26	—	—	—	—
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*Armored
†Triad

▼ Solid conductors
◆ Siamese version
◗ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
24 AWG *(continued)*														
6	—	—	—	—	—	—	9536 9503 82503 89503 9680 1420A 88103	4.11 5.11 5.13 5.49 5.13 5.49 5.15 5.15 5.50	9611 9931 83506 9843 9830 8103 1543A▼ 3120A 7202A	4.17 4.18 4.25 5.28 5.30 5.31 11.22 15.25 15.38	9730 89730 8163■ 9990	12.30 5.35 12.31 5.36 5.53 5.44 5.37	—	—
7	—	—	—	—	—	—	9537	4.11	9612 9932 1536A▼	4.17 4.18 11.22	—	—	—	—
8	1875GA 1875GB 1700A▼ 1700R▼ 1701A▼ 1701LC▼ 1752A 1500A▼ 1500R▼ 1501A▼ 1583A▼ 1583R▼ 1583B▼ 1594A▼ 1585A▼ 1585B▼ 1585LC▼ 1592A 1229A1▼ 1245A2▼ 121700A* 7883A 11700A 121700A* 7924A 7928A 7918A 11872A 12872A* 7923A	11.4 11.4 11.6 11.6 14.10 11.6 14.10 11.6 11.7 11.8 11.8 14.10 11.8 11.9 11.9 14.11 11.9 11.9 11.10 14.10 11.10 11.10 11.11 11.13 11.13 15.6 11.5 15.7 15.7 15.7 15.8 15.8 15.9 15.9 15.6	—	—	—	—	9538 9504 82504 89504 9681 1421A 88104 1533R▼ 1533P▼ 1624R▼ 1624P▼ 1633A▼ 7929A 7919A	4.11 5.11 5.13 5.49 5.13 5.49 5.15 5.15 5.50 11.14 11.14 11.15 11.15 11.16 15.6 15.8	9613 9933 9844 8334 9831 7203A 7921A 8104	4.17 4.18 5.28 5.29 5.30 15.38 15.6 5.31	9728 89728 8164■ 1408R■ 1510C■ 1803F■	5.35 12.30 5.36 5.53 12.31 5.44 12.19 12.20 12.29	1904A	12.21
9	—	—	—	—	—	—	9539	4.11	9614 9934 83509	4.17 4.18 4.25	—	—	—	—
10	—	—	—	—	—	—	9540 9505 82505 89505 1422A 88105	4.11 5.11 5.13 5.49 5.13 5.49 5.15 5.50	9615 9935 8335 9832 8105	4.17 4.18 5.29 5.30 5.31	8165■ 89705	5.44 5.53 12.31	—	—
12	9566▼	5.4	—	—	—	—	9506 82506 9682 1423A 88106	5.12 5.13 5.15 5.15 5.50	83512 8336 9839 8106	4.25 5.29 5.30 5.31	9731 89731	5.35 12.30 5.36 5.53 12.31	1906A	12.21

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
▸ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
24 AWG *(continued)*														
12 *(cont'd)*											9991 8166■ 1409R■ 1511C■	5.37 5.44 12.19 12.20		
14	—	—	—	—	—	—	9507	5.12	8337 9833 8107	5.29 5.30 5.31	8167■ 89757	5.44 5.53 12.31	—	—
15	—	—	—	—	—	—	9541 88107	4.11 5.50	9616 9936 83515	4.17 4.18 4.25	—	—	—	—
16	1702A◆▼ 1703A◆▼	11.6 11.6	—	—	—	—	9508 1668A▼	5.12 11.16	8108	5.31	8168■ 1410R■ 1512C■ 1805F■	5.45 12.19 12.20 12.29	1908A	12.21
18	—	—	—	—	—	—	9509 82509 9683 88109	5.12 5.13 5.49 5.15 5.50	9834	5.30	9732 89732 9992	5.35 12.30 5.36 5.53 12.31 5.37	—	—
20	9570▼	5.4	—	—	—	—	9542 9510	4.11 5.12	8340 9835 8110	5.29 5.30 5.31	8170■	5.45	—	—
22	—	—	—	—	—	—	—	—	—	—	9733	5.35 12.30	—	—
24	—	—	—	—	—	—	—	—	9836	5.30	9734 9993 89734 1411R■ 1513C■ 1806F■	5.35 12.30 5.37 5.53 12.31 12.19 12.20 12.29	1912A	12.21
23 AWG														
8	7851A▼ 7852A▼ 1872A▼ 1874A▼ 7881A▼ 7882A▼ 11872A▼ 121872A▼	11.3 11.3 11.4 11.4 11.5 14.9 11.5 14.9 15.9 15.9	—	—	—	—	—	—	—	—	—	—	—	—
22 AWG														
1	—	—		—	9965 83305	4.15 4.30	—	—	—	—	—	—	—	—
2	8795▼ 8442 88442 82442 9712 9151 8740▼ 9407	4.3 4.3 12.36 4.4 4.23 5.6 5.48 4.4 4.23 5.6 5.48 12.33 12.34 5.4 15.41	8737	5.24 12.12	9966 83319 8422 8437▼ 8441	4.15 4.30 12.6 5.23 5.23	83394 8450▼ 9414 9462 8761 9461 8451 9451 1266A	4.29 5.18 12.11 5.18 5.18 5.18 12.12 5.18 12.12 5.19 12.11 5.19 12.11 5.19 12.11	83552 3079A 3105A 1696A	4.25 15.19 15.26 12.27	—	—	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
‣ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
22 AWG *(continued)*														
2 *(cont'd)*							1503A 88761 87761 82761 9182• 89182• 3077F 3078F 9322	5.19 12.11 5.20 5.51 12.12 5.20 5.51 12.12 5.20 5.51 12.12 6.84 6.84 15.19 15.19 15.41						
3	8794▼ 8443 9491†	4.3 4.3 15.42	—	—	8735 9967 83334	4.14 4.15 4.30	9770 8771 83395 9363†	4.12 4.12 4.29 15.42	9939 83553 3106A	4.19 4.25 15.26	—	—	—	—
4	9794▼ 8444 88444 82444 8741▼ 9744 88741 82741	4.3 4.3 4.4 4.23 4.4 4.23 5.4 5.5 5.6 5.48 5.6 5.48	—	—	9968 83349	4.15 4.30	8729 83396 9302▼ 9184▼ 3000A 9512	4.12 4.29 5.17 5.17 15.41 15.41	9940 83554 8302 9855▼ 1268A▼ 89855▼ 1269A▼ 9696▼ 89696▼ 3107A	4.19 4.25 5.32 5.33 5.33 5.33 5.52 5.33 5.52 5.33 5.33 5.52 15.26	9406 8723 82723 88723 87723 8728■ 9688■▼ 82688■▼ 1634A■▼ 3087A 9328 3001A■ 1814R■ 1502P 1502R 9451D◆ 1504A◆	5.38 5.38 12.13 14.18 5.38 5.54 12.13 5.38 5.54 12.13 5.38 5.54 12.13 5.46 11.20 11.20 11.20 15.23 15.42 15.42 12.22 12.39 12.39 5.19 5.19 12.14	—	—
5	8445	4.3	—	—	—	—	—	—	9941	4.19	—	—	—	—
6	9576▼ 8742▼ 9745 82742	4.32 5.4 5.5 5.6 5.48	—	—	—	—	3002A† 9513	15.42 15.41	9942 83556 8303 3108A	4.19 4.25 5.32 15.26	3003A†▼ 8767▼ 8777 82777 88777 87777 9329	15.42 5.37 5.40 12.25 5.41 5.54 12.25 5.41 5.54 12.25 5.41 5.54 12.25 15.42		
7	9430	4.3	—	—	—	—	—	—	9943	4.19	—	—	—	—

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
▸ Quad

• Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
22 AWG *(continued)*														
8	9421 8757▼ 9746 88757 82757	4.3 5.4 5.5 5.6 5.48 5.6 5.48	—	—	—	—	9305▼ 3004A 9514	5.17 15.41 15.41	9944 8304 3109A	4.19 5.32 15.26	9330 3005A■ 1815R■ 1217B	15.42 15.42 12.22 12.24	—	—
9	9423	4.3	—	—	—	—	—	—	9945 83559	4.19 4.25	—	—	—	—
10	8456	4.3	—	—	—	—	—	—	9946 8305	4.19 5.32	—	—	—	—
12	8457 8743▼ 8747 82743	4.4 5.4 5.5 5.6	—	—	—	—	9306▼ 9516	5.17 15.41	83562 8306	4.25 5.32	8768▼ 8778 82778 88778 87778 9331 1816R■ 1218B	5.37 5.40 12.24 5.41 5.54 12.25 5.41 5.54 12.25 5.41 5.54 12.25 15.42 12.22 12.23	—	—
14	—	—	—	—	—	—	—	—	8307	5.32	—	—	—	—
15	8458	4.4	—	—	—	—	—	—	9947	4.19	—	—	—	—
16	9160▼	5.4	—	—	—	—	3006A	15.41	8308	5.32	3007A■ 1817R■	15.42 12.22	—	—
18	8744▼ 8748	5.4 5.5	—	—	—	—	9309▼ 9520	5.17 15.41	—	—	8764▼ 8774 9332 1219B	5.37 5.40 12.24 15.42 12.23	—	—
19	—	—	—	—	—	—	—	—	83569	4.25	—	—	—	—
20	9431	4.4	—	—	—	—	—	—	8310	5.32	—	—	—	—
22	—	—	—	—	—	—	9521	15.41	—	—	8765▼ 8775 9333	5.37 5.40 12.24 15.42	—	—
24	9747	5.5	—	—	—	—	3008A	15.41	—	—	9768 3009A■ 1818R■ 1220B	5.40 12.24 15.42 12.22 12.23	—	—
20 AWG														
1	—	—	—	—	9961 83306	4.15 4.31	—	—	—	—	—	—	—	—
2	85220 7400A 83930 83932 83934 83915 83900 83905 83910 8649 8205	4.28 15.33 15.54 15.54 15.54 15.54 15.54 15.54 15.54 12.33 5.7	8759	5.24 12.14	9962 83320 8412 8402 9272	4.15 4.31 12.6 12.6 6.83	9802▼ 83393 85230 8762 9464 9154 9320 1033A	4.22 4.29 4.29 5.20 12.14 5.20 12.14 5.20 12.14 15.43 15.43	83602 9207● 9463 9463DB 89463 129463* 139463* 189463* 9463F	4.26 6.83 6.83 15.13 15.13 15.14 15.14 15.14 15.13	22671■ 23543*■ 26530*■	15.76 15.78 15.78	—	—

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
‣ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
20 AWG *(continued)*														
2 *(cont'd)*	8205 9408	12.36 15.43					3111A 3112A 3113A 83955 83950 83952 83954	15.53 15.53 15.53 15.54 15.54 15.54 15.54						
3	7101A 7401A 9492†	15.30 15.33 15.44	—	—	9963 83335 7401AS 8423 8403	4.15 4.31 15.33 12.8 12.8	8772 9803▼ 85240 9364† 1526A†	4.12 4.22 4.29 15.44 15.44	—	—	22660†■ 23545*†■ 26539*†■	15.76 15.78 15.78	—	—
4	9444 7102A 7402A	4.5 15.30 15.33	—	—	9964 83350 7402AS 8424 8404	4.15 4.31 15.33 12.9 12.9	3016A	15.43	83604	4.26	9402 1075A■ 3115A■ 22638■ 23534*■ 26531*■	5.41 15.43 15.53 15.76 15.78 15.78	—	—
5	9445 7403A	4.5 15.33	—	—	7403AS 8405 8425	15.33 12.39 12.39	—	—	—	—	—	—	—	—
6	9750	5.7	—	—	9260 8426	4.14 12.39	3017A†	15.44	83606	4.26	3018A†■ 22662†■ 23546*†■ 26540*†■ 9883 9873	15.44 15.76 15.78 15.78 5.41 5.42	—	—
7	9439 7404A	4.5 15.33	—	—	7404AS 8427	15.33 12.39	—	—	—	—	—	—	—	—
8	—	—	—	—	8418	12.39	85164 1056A 1102A	5.11 15.43 15.53	—	—	8725 9901•■ 89901•■ 1076A■ 1112A■ 1006A■ 1012A■ 22639■ 23514*■ 26532*■	5.47 11.18 11.18 15.43 15.53 15.53 15.53 15.76 15.78 15.78	—	—
9	9455 7105A 7405A	4.5 15.30 15.33	—	—	—	—	—	—	83609	4.26	—	—	—	—
10	—	—	—	—	—	—	9890▼	4.22	—	—	9902•■	11.18	—	—
12	9457 7106A 7406A 9751	4.5 15.30 15.33 5.7	—	—	9261 7106AS	4.14 15.30	3020A†	15.44	83612	4.26	1083A†■ 22663†■ 23547*†■ 26541*†■ 9886 9874 22640■ 23513*■ 26533*■	15.44 15.76 15.78 15.78 5.41 5.42 15.76 15.78 15.78	—	—
15	9458	4.5	—	—	—	—	9894▼	4.22	—	—	—	—	—	—
16	—	—	—	—	—	—	85168 1057A 1001A 1103A	5.11 15.43 15.53 15.53	—	—	1077A■ 1007A■ 1013A■ 22641■ 23503*■ 26534*■	15.43 15.53 15.53 15.76 15.78 15.78	—	—

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†Triad
▼ Solid conductors
◆ Siamese version
‣ Quad
• Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
20 AWG *(continued)*														
18	7107A 7407A 9752	15.30 15.33 5.7	—	—	—	—	—	—	—	—	9875	5.42	—	—
22	—	—	—	—	—	—	—	—	—	—	9876	5.42	—	—
24	—	—	—	—	—	—	3021A† 1058A 1002A	15.44 15.43 15.53	—	—	1084A†■ 22672†■ 23548*†■ 26542*†■ 9877 1078A■ 1008A■ 1014A■ 1025A■ 22676■ 23521*■ 26535*■	15.44 15.76 15.78 15.78 5.42 15.43 15.53 15.53 15.53 15.76 15.78 15.78	—	—
19 AWG														
2	8486	5.7	—	—	—	—	—	—	—	—	—	—	—	—
18 AWG														
1	—	—	—	—	83307	4.31	—	—	—	—	—	—	—	—
2	9571▼ 7409A 27916A 27325A 9708 8460 1863A 8461 29030* 9740 89740 87740 82740 9409 9486	4.32 15.34 15.63 15.63 12.33 12.34 12.34 5.7 12.35 15.88 5.8 5.9 5.48 5.9 5.48 5.9 5.48 15.45 15.56	8790	5.24 12.15	83321 8428 9250 8208	4.31 12.7 6.83 5.23	27325AS 9574▼ 8760 9460 88760 87760 82760 3076F 9318 1032A 9341 1120A 3088A	15.63 4.32 5.21 12.15 5.21 12.15 5.21 5.51 12.15 5.21 5.51 12.15 5.21 5.51 12.15 25.19 15.45 15.46 15.56 15.56 15.56	83652 3073F 3074F	4.26 15.16 15.16	22645■ 23533*■ 26514*■ 22417■ 24511*■ 25506*■	15.76 15.78 15.78 15.80 15.81 15.81	—	—
3	7110A 7410A 9493† 27334A 29031*	15.30 15.34 15.42 15.63 15.88	—	—	83336	4.31	27334AS 8770 88770 9365† 1036A† 1121A† 3089A†	15.63 4.13 4.13 4.24 15.47 15.47 15.57 15.57	83653	4.26	22677†■ 23505*†■ 26522 22442†■ 24516*†■ 25500*†■	15.76 15.78 15.78 15.80 15.81 15.81	—	—
4	8489 88489 82489 7411A 27326A 29032* 9156	4.5 4.6 4.23 4.6 4.23 15.34 15.63 15.88 5.8	—	—	83351 7111AS 7411AS	4.31 15.30 15.34	27326AS 9418 89418 82418 9578▼ 9552 3025A 1063A	15.63 4.13 4.13 4.24 4.13 4.24 4.32 15.45 15.46 15.56	83654	4.26	9368 1474A■ 1048A■ 22633■ 23511*■ 26515*■ 22405■ 24512*■ 25514*■	15.45 15.46 15.56 15.76 15.78 15.78 15.80 15.81 15.81	—	—
5	8465 7412A	4.5 15.34	—	—	—	—	—	—	—	—	—	—	—	—

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No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
18 AWG *(continued)*														
5 *(cont'd)*	27335A 29033*	15.63 15.88												
6	27600A 29034* 8690	15.63 15.88 5.8	—	—	—	—	3027A† 9553 1529A	15.47 15.45 15.46	83656	4.26	3028A†■ 3064A†■ 22678†■ 23516*†■ 26523*†■ 22443†■ 24517*†■ 25522*†■ 9773 9369	15.47 15.57 15.76 15.78 15.78 15.80 15.81 15.81 5.42 15.45	—	—
7	8467 7113A 7413A 27327A 29035*	4.5 15.30 15.34 15.63 15.88	—	—	7413AS	15.34	—	—	—	—	—	—	—	—
8	27601A 29036* 9157	15.63 15.88 5.8	—	—	—	—	9554 1466A 1064A	15.45 15.46 15.56	—	—	3029A 9388 1475A■ 1049A■ 22648■ 23530*■ 26516*■ 22404■ 24513*■ 25503*■	15.45 15.45 15.46 15.56 15.76 15.78 15.78 15.80 15.81 15.81	—	—
9	8469 7414A 27336A	4.5 15.34 15.63	—	—	—	—	—	—	83659	4.26	—	—	—	—
10	27328A 29038* 9159	15.63 15.88 5.8	—	—	—	—	—	—	—	—	—	—	—	—
11	27602A	15.63	—	—	—	—	—	—	—	—	—	—	—	—
12	8466 7115A 7415A 27329A 29040* 8691	4.5 15.30 15.34 15.63 15.88 5.8	—	—	7115AS 7415AS	15.30 15.34	3030A† 9556	15.47 15.45	83662	4.26	3031A†■ 1093A†■ 22679†■ 23515*†■ 26524*†■ 22444†■ 24518*†■ 25520*†■ 9774 9389 22634■ 23528*■ 26517*■	15.47 15.57 15.76 15.78 15.78 15.80 15.81 15.81 5.42 15.45 15.76 15.78 15.78	—	—
13	27603A	15.63	—	—	—	—	—	—	—	—	—	—	—	—
14	27604A	15.63	—	—	—	—	—	—	—	—	—	—	—	—
15	8468 27605A 29043*	4.5 15.63 15.88	—	—	—	—	—	—	—	—	—	—	—	—
16	27606A 9161	15.63 5.8	—	—	—	—	1467A 1065A	15.46 15.56	—	—	1476A■ 1050A■ 22635■ 23531*■ 26518*■ 22418■ 24514*■ 25505*■	15.46 15.56 15.76 15.78 15.78 15.80 15.81 15.81	—	—
17	27607A	15.63	—	—	—	—	—	—	—	—	—	—	—	—

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†Triad
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◆ Siamese version
▸ Quad
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Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
18 AWG *(continued)*														
18	7116A 7416A 27608A 8692	15.30 15.34 15.63 5.8	—	—	7416AS	15.34	9559	15.45	—	—	23508*†■ 26525*†■ 9775 9390	15.78 15.78 5.42 15.45	—	—
19	8619 27609A	4.6 15.63	—	—	—	—	—	—	—	—	—	—	—	—
20	27610A 29048*	15.63 15.88	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	—	—	9563	15.45	—	—	9391	15.45	—	—
24	9741	5.8	—	—	—	—	3032A† 1468A 1066A	15.47 15.46 15.56	—	—	3033A†■ 1094A†■ 22680†■ 23523*†■ 26526*†■ 22445†■ 24519*†■ 25523*†■ 9776 1477A■ 1051A■ 22636■ 23524*■ 26519*■ 22421■ 24515*■ 25501	15.47 15.57 15.76 15.78 15.78 15.80 15.81 15.81 5.42 15.58 15.56 15.76 15.78 15.78 15.80 15.81 15.81	—	—
16 AWG														
1	—	—	—	—	9951 83308	4.15 4.31	—	—	—	—	—	—	—	—
2	8677 85221 85102 9572▼ 7421A 27917A 27337A 9716 8470 9497 1862A 8471 29017* 9410 1035A 9487	4.8 4.28 4.28 4.32 15.35 15.64 15.64 12.33 14.17 12.34 12.34 12.34 5.9 12.36 15.88 15.48 15.48 15.58	8780	5.24 12.16	9952 83322 7121AS 8408	4.15 4.31 15.31 12.7	85231 9575▼ 27337AS 8719 9316 1030A 1101A 1000A 1018A 1023A 1114A 1115A 1116A 1117A 83951 83953 9342 1118A 3090A	4.29 4.32 15.64 5.22 12.16 15.48 15.48 15.53 15.53 15.53 15.53 15.54 15.54 15.54 15.54 15.54 15.54 15.58 15.58 15.58	83702 9860•▼	4.27 6.84	22646■ 23501*■ 26500*■ 22416■ 24500*■ 25504*■	15.77 15.79 15.79 15.80 15.81 15.81	—	—
3	9498 85103 7122A 7422A 9494† 1034A† 27331A 29004*	4.6 4.28 15.31 15.35 15.49 15.49 15.64 15.88	—	—	9953 83337 7422AS	4.15 4.31 15.35	8618 85241 9366† 1031A† 1119A† 3091A† 27331AS	4.13 4.29 15.49 15.49 15.59 15.59 15.64	83703	4.27	22603†■ 23507*†■ 26502*†■ 22413†■ 24501*†■ 25502*†■	15.77 15.79 15.79 15.80 15.81 15.81	—	—
4	8620 7423A 27338A 29018* 3082K	4.6 15.35 15.64 15.88 15.22	—	—	9954 83352 7123AS 7423AS 8407	4.15 4.31 15.31 15.35 12.9	9579▼ 3043A 1069A	4.32 15.48 15.58	83704 29500	4.27 15.28	1492A■ 1055A■ 22628■ 23527*■ 26501*■	15.48 15.58 15.77 15.79 15.79	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
‣ Quad
• Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
16 AWG *(continued)*														
4 *(cont'd)*	3082KP	15.22									22409■ 24505*■ 25510*■	15.80 15.81 15.81		
5	9620 9420 85105 7424A 27339A 29019*	4.6 4.9 9.10 4.28 15.35 15.64 15.88	—	—	—	—	—	—	—	—	—	—	—	—
6	27615A 29005*	15.64 15.88	—	—	—	—	3044A† 1528A 1527A	15.49 15.48 15.58	83706	4.27	3045A†■ 22687†■ 23522*†■ 26509*†■ 22448†■ 24507*†■ 25507*†■ 1037A■	15.49 15.77 15.79 15.79 15.80 15.81 15.81 15.58	—	—
7	8621 9422 85107 7125A 7425A 27323A 29020*	4.6 4.9 9.10 4.28 15.31 15.35 15.64 15.88	—	—	—	—	—	—	—	—	—	—	—	—
8	9721 27616A 29021*	4.6 15.64 15.88	—	—	—	—	1484A 1070A	15.48 15.58	—	—	1493A■ 1039A■ 22629■ 23509■ 26503*■ 22410■ 24502*■ 25511*■	15.48 15.58 15.77 15.79 15.79 15.80 15.81 15.81	—	—
9	9621 9424 85109 7126A 7426A 27340A	4.6 4.9 9.10 4.28 15.31 15.35 15.64	—	—	—	—	—	—	83709	4.27	—	—	—	—
10	27617A 29022*	15.64 15.88	—	—	—	—	—	—	—	—	—	—	—	—
11	27618A	15.64	—	—	—	—	—	—	—	—	—	—	—	—
12	8622 9425 7127A 7427A 27341A 29006*	4.6 4.9 9.10 15.31 15.35 15.64 15.88	—	—	7427AS	15.35	3046A†	15.49	83712	4.27	3047A†■ 1097A†■ 22675†■ 23520*†■ 26510*†■ 22414†■ 24508*†■ 25509*†■ 1040A■ 22630■ 23500*■ 26504*■ 22446■ 24506*■ 25512*■	15.49 15.59 15.77 15.79 15.79 15.80 15.81 15.81 15.58 15.77 15.79 15.79 15.80 15.81 15.81	—	—
13	27619A	15.64	—	—	—	—	—	—	—	—	—	—	—	—
14	27620A	15.64	—	—	—	—	—	—	—	—	—	—	—	—

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
▸ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
16 AWG *(continued)*														
15	8623 27621A 29023*	4.6 15.64 15.88	—	—	—	—	—	—	83715	4.27	—	—	—	—
16	9427 27330A	4.9 9.10 15.64	—	—	—	—	1485A 1071A	15.48 15.58	—	—	1494A■ 1041A■ 22631■ 23510*■ 26505*■ 22411■ 24503*■ 25513*■	15.48 15.58 15.77 15.79 15.79 15.80 15.81 15.81	—	—
17	27622A	15.64	—	—	—	—	—	—	—	—	—	—	—	—
18	7128A 7428A 27623A	15.31 15.35 15.64	—	—	7428AS	15.35	—	—	—	—	22688†■ 23529*†■ 26511*†■	15.77 15.79 15.79	—	—
19	8624 27624A	4.6 15.64	—	—	—	—	—	—	83719	4.27	—	—	—	—
20	9429 27625A 29007*	4.9 9.10 15.64 15.88	—	—	—	—	—	—	—	—	—	—	—	—
24	—	—	—	—	—	—	3048A† 1486A 1072A	15.49 15.48 15.58	—	—	3049A†■ 1098A†■ 22689†■ 23526*†■ 26512*†■ 22415†■ 24509*†■ 25508*†■ 1495A■ 1042A■ 22632■ 23525*■ 26506*■ 22412■ 24504*■ 25518*■	15.49 15.59 15.77 15.79 15.79 15.80 15.81 15.81 15.48 15.58 15.77 15.79 15.79 15.80 15.81 15.81	—	—
14 AWG														
2	8675 9580▼ 7434A 27080A 27636A 9717 1861A 8473 27243* 28243* 27840* 28840* 22100 27000 C5500* 9411 9488	4.8 4.33 15.36 15.65 15.65 12.31 14.17 12.33 5.9 12.34 15.70 15.70 15.73 15.73 15.82 15.84 15.89 15.50 15.60	—	—	—	—	9581▼ 8720 9314 9343 3080A	4.33 5.22 12.16 15.50 15.60 15.60	83752	4.34	—	—	—	—
3	7435A 9495† 27081A	15.36 15.50 15.65	—	—	—	—	9367† 3081A† 27081AS	15.50 15.60 15.65	83753	4.34	—	—	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
‣ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
14 AWG *(continued)*														
3 *(cont'd)*	27244* 28244* 27841* 28841* 22101 27001 C5501* C5701*	15.70 15.70 15.73 15.73 15.82 15.84 15.89 15.92												
4	8627 7136A 7436A 27082A 1810A 27245* 28245* 27842* 28842* 22102 27002 C5502* C5702*	4.7 15.31 15.36 15.65 12.35 15.70 15.70 15.73 15.73 15.82 15.84 15.89 15.92	—	—	7136AS 7436AS	15.31 15.36	27082AS	15.65	83754 29501	4.34 15.28	—	—	—	—
5	9623 27083A 27246* 28246* 27843* 28843* 22103 27003 C5503*	4.7 15.65 15.70 15.70 15.73 15.73 15.82 15.84 15.89	—	—	—	—	—	—	—	—	—	—	—	—
6	27084A 27247* 28247* 27844* 28844* 22104 27004 C5504*	15.65 15.70 15.70 15.73 15.73 15.82 15.84 15.89	—	—	—	—	—	—	83756	4.34	—	—	—	—
7	8628 7438A 27085A 27248* 28248* 27845* 28845* 22105 27005 C5505*	4.7 15.36 15.65 15.70 15.70 15.73 15.73 15.82 15.84 15.89	—	—	7438AS	15.36	—	—	—	—	—	—	—	—
8	27086A 1811A 27269* 28269* 27846* 28846* 22106 27006 C5506*	15.65 12.35 15.70 15.70 15.73 15.73 15.82 15.84 15.89	—	—	—	—	—	—	—	—	—	—	—	—
9	7439A 27087A 27535* 28535*	15.36 15.65 15.70 15.70	—	—	—	—	—	—	—	—	—	—	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
▸ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
14 AWG *(continued)*														
9 *(cont'd)*	22107 27007	15.82 15.84												
10	27088A 27249* 28249* 27847* 28847* 22108 27008 C5508*	15.65 15.70 15.70 15.73 15.73 15.82 15.84 15.89	—	—	—	—	—	—	—	—	—	—	—	—
11	27089A 27009	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—
12	8629 7440A 27090A 27250* 28250* 27848* 28848* 22110 27010 C5510*	4.7 15.36 15.65 15.70 15.70 15.73 15.73 15.82 15.84 15.89	—	—	—	—	—	—	—	—	—	—	—	—
13	27091A 27011	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—
14	27092A 27012	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—
15	27093A 27251* 28251* 27849* 28849* 27013 C5513*	15.65 15.70 15.70 15.73 15.73 15.84 15.89	—	—	—	—	—	—	—	—	—	—	—	—
16	27094A 22114 27014	15.65 15.82 15.84	—	—	—	—	—	—	—	—	—	—	—	—
17	27095A 27015	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—
18	27096A 27016	15.65 15.84	—	—	7141AS	15.31	—	—	—	—	—	—	—	—
19	27097A 27969* 28969* 27017	15.65 15.70 15.70 15.84	—	—	—	—	—	—	—	—	—	—	—	—
20	27098A 27252* 28252* 27850* 28850* 22118 27018 C5518*	15.65 15.70 15.70 15.73 15.73 15.82 15.84 15.89	—	—	—	—	—	—	—	—	—	—	—	—
21	27099A 27019	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—
22	27100A 27020	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—
23	27101A 27021	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—
24	27102A 27022	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
▸ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
12 AWG														
2	8673 9582▼ 27109A 27641A 9718 1860A 8477 27254* 28254* 27853* 28853* 22120 27029 C5530* C5730* 9412 9489	4.8 4.33 15.66 15.66 12.33 14.17 12.35 5.9 12.36 15.70 15.70 15.73 15.73 15.82 15.85 15.89 15.92 15.51 15.61	—	—	—	—	9583▼ 8718 9312 9344 3103A	4.33 5.22 12.16 15.51 15.61 15.61	83802	4.34	—	—	—	—
3	7444A 27110A 27255* 28255* 27854* 28854* 22121 27030 C5531* C5731*	15.36 15.66 15.70 15.70 15.73 15.73 15.82 15.85 15.89 15.92	—	—	—	—	3102A† 3104A†	15.51 15.61	83803	4.34	—	—	—	—
4	7145A 7445A 27111A 27256* 28256* 27855* 28855* 22122 27031 C5532* C5732*	15.32 15.36 15.66 15.70 15.70 15.73 15.73 15.82 15.85 15.89 15.92	—	—	7445AS	15.36	—	—	83804 29502	4.34 15.28	—	—	—	—
5	27112A 27271* 28271* 27856* 28856* 22123 27032 C5533*	15.66 15.70 15.70 15.73 15.73 15.82 15.85 15.89	—	—	—	—	—	—	—	—	—	—	—	—
6	27113A 27272* 28272* 27857* 28857* 22124 27033 C5534*	15.66 15.70 15.70 15.73 15.73 15.82 15.85 15.89	—	—	—	—	—	—	83806	4.34	—	—	—	—

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
▸ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
12 AWG *(continued)*														
7	27114A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27273*	15.70												
	28273*	15.70												
	27858*	15.73												
	28858*	15.73												
	22125	15.82												
	27034	15.85												
	C5535*	15.89												
8	27115A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27274*	15.70												
	28274*	15.70												
	27859*	15.73												
	28859*	15.73												
	22126	15.82												
	27035	15.85												
	C5536*	15.89												
9	27116A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27538*	15.70												
	28538*	15.70												
	22127	15.82												
	27036	15.85												
10	27117A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27275*	15.70												
	28275*	15.70												
	27860*	15.73												
	28860*	15.73												
	22128	15.82												
	27037	15.85												
	C5538*	15.89												
11	27118A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27038	15.85												
12	27119A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27276*	15.70												
	28276*	15.70												
	27861*	15.73												
	28861*	15.73												
	22130	15.82												
	27039	15.85												
	C5540*	15.89												
13	27120A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27040	15.85												
14	27121A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27041	15.85												
15	27122A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27277*	15.70												
	28277*	15.70												
	27862*	15.73												
	28862*	15.73												
	27042	15.85												
	C5543*	15.89												
16	27123A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	22134	15.82												
	27043	15.85												
17	27124A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27044	15.85												
18	27125A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27045	15.85												
19	27126A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27539*	15.70												
	28539*	15.70												
	27046	15.85												

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Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
12 AWG *(continued)*														
20	27127A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27278*	15.70												
	28278*	15.70												
	27863*	15.73												
	28863*	15.73												
	22138	15.82												
	27047	15.85												
	C5548*	15.89												
21	27128A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27048	15.85												
22	27129A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27049	15.85												
23	27130A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27050	15.85												
24	27131A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
	27051	15.85												
10 AWG														
2	8678	4.8	—	—	—	—	—	—	—	—	—	—	—	—
	27138A	15.67												
	27643A	15.67												
	27257*	15.71												
	28257*	15.71												
	27866*	15.74												
	28866*	15.74												
	22140	15.82												
	27058	15.86												
	C5560*	15.90												
	C5760*	15.92												
3	27139A	15.67	—	—	—	—	—	—	—	—	—	—	—	—
	27258*	15.71												
	28258*	15.71												
	27867*	15.74												
	28867*	15.74												
	22141	15.82												
	27059	15.86												
	C5561*	15.90												
	C5761*	15.92												
4	7147A	15.32	—	—	7447AS	15.37	—	—	29503	15.28	—	—	—	—
	7447A	15.37												
	27140A	15.67												
	27259*	15.71												
	28259*	15.71												
	27868*	15.74												
	28868*	15.74												
	22142	15.82												
	27060	15.86												
	C5562*	15.90												
	C5762*	15.92												
5	27141A	15.67	—	—	—	—	—	—	—	—	—	—	—	—
	27281*	15.71												
	28281*	15.71												
	27869*	15.74												
	28869*	15.74												
	22143	15.82												
	27061	15.86												
	C5563*	15.90												
6	27142A	15.67	—	—	—	—	—	—	—	—	—	—	—	—
	27282*	15.71												
	28282*	15.71												
	27870*	15.74												
	28870*	15.74												
	22144	15.82												

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◆ Siamese version
▸ Quad
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Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
10 AWG *(continued)*														
6 *(cont'd)*	27062 C5564*	15.86 15.90												
7	27143A 27283* 28283* 27877* 28877* 22145 27063 C5565*	15.67 15.71 15.71 15.74 15.74 15.82 15.86 15.90	—	—	—	—	—	—	—	—	—	—	—	—
8	27144A 27284* 28284* 27878* 28878* 22146 27064 C5566*	15.67 15.71 15.71 15.74 15.74 15.82 15.86 15.90	—	—	—	—	—	—	—	—	—	—	—	—
9	27145A 27541* 28541* 22147 27065	15.67 15.71 15.71 15.82 15.86	—	—	—	—	—	—	—	—	—	—	—	—
10	27146A 27285* 28285* 27879* 28879* 22148 27066 C5568*	15.67 15.71 15.71 15.74 15.74 15.82 15.86 15.90	—	—	—	—	—	—	—	—	—	—	—	—
11	27147A 27067	15.67 15.86	—	—	—	—	—	—	—	—	—	—	—	—
12	27148A 27286* 28286* 27880* 28880* 22150 27068 C5570*	15.67 15.71 15.71 15.74 15.74 15.82 15.86 15.90	—	—	—	—	—	—	—	—	—	—	—	—
13	27069	15.86	—	—	—	—	—	—	—	—	—	—	—	—
14	22152 27070	15.82 15.86	—	—	—	—	—	—	—	—	—	—	—	—
15	27287* 28287* 27881* 28881* 27071 C5573*	15.71 15.71 15.74 15.74 15.86 15.90	—	—	—	—	—	—	—	—	—	—	—	—
16	22154 27072	15.82 15.86	—	—	—	—	—	—	—	—	—	—	—	—
17	27073	15.86	—	—	—	—	—	—	—	—	—	—	—	—
18	27074	15.86	—	—	—	—	—	—	—	—	—	—	—	—
19	27075	15.86	—	—	—	—	—	—	—	—	—	—	—	—
20	27288* 28288* 27882* 28882* 27076 C5578*	15.71 15.71 15.74 15.74 15.86 15.90	—	—	—	—	—	—	—	—	—	—	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
▸ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
8 AWG														
2	27149A 27291* 28291* 27871* 28871* 22160 27077 C5583*	15.67 15.71 15.71 15.74 15.74 15.83 15.86 15.90 15.92	—	—	—	—	—	—	—	—	—	—	—	—
3	7449A 27150A 27260* 28260* 27872* 28872* 22161 27078 C5581*	15.37 15.67 15.71 15.71 15.74 15.74 15.83 15.86 15.90 15.92	—	—	—	—	—	—	—	—	—	—	—	—
4	7450A 27151A 27261* 28261* 27873* 28873* 22162 27079 C5582*	15.37 15.67 15.71 15.71 15.74 15.74 15.83 15.86 15.90 15.92	—	—	7450AS	15.37	—	—	29504	15.28	—	—	—	—
6 AWG														
2	27152A 27293* 28293* 27874* 28874* 22170 C5590*	15.67 15.71 15.71 15.74 15.74 15.83 15.93	—	—	—	—	—	—	—	—	—	—	—	—
3	7152A 27153A 27262* 28262* 27875* 28875* 22171 C5591*	15.32 15.67 15.71 15.71 15.74 15.74 15.83 15.93	—	—	—	—	—	—	—	—	—	—	—	—
4	7453A 27154A 27263* 28263* 27876* 28876* C5592*	15.37 15.67 15.71 15.71 15.74 15.74 15.93	—	—	—	—	—	—	29505	15.28	—	—	—	—
4 AWG														
2	27155A 22180	15.68 15.83	—	—	—	—	—	—	—	—	—	—	—	—
3	27156A 27264* 28264* 27894* 28894* 22181 C5601*	15.68 15.72 15.72 15.74 15.74 15.83 15.93	—	—	—	—	—	—	—	—	—	—	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
▸ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

Less than 25 Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
4 AWG *(continued)*														
4	27157A 27265* 28265* 27895* 28895* C5602*	15.68 15.72 15.72 15.74 15.74 15.93	—	—	—	—	—	—	29506	15.28	—	—	—	—
3 AWG														
3	27896* 28896* C5611*	15.74 15.74 15.93	—	—	—	—	—	—	—	—	—	—	—	—
2 AWG														
2	27158A	15.68	—	—	—	—	—	—	—	—	—	—	—	—
3	7158A 27159A 27267* 28267* 27888* 28888* C5621*	15.32 15.68 15.72 15.72 15.75 15.75 15.93	—	—	—	—	—	—	—	—	—	—	—	—
4	27160A 27268* 28268* 27889* 28889* C5622*	15.68 15.72 15.72 15.75 15.75 15.93	—	—	—	—	—	—	29507	15.28	—	—	—	—
1 AWG														
3	27161A C5625*	15.68 15.94	—	—	—	—	—	—	—	—	—	—	—	—
1/0 AWG														
3	C5627*	15.94	—	—	—	—	—	—	—	—	—	—	—	—

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
▸ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

25 or More Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
25 AWG and smaller														
25	—	—	—	—	—	—	8142FO	5.14	9637 8142	4.16 5.27 12.55	—	—	—	—
26	—	—	—	—	—	—	—	—	9813	5.26	—	—	—	—
32	—	—	—	—	—	—	—	—	—	—	7893A■	12.29	7886A◗	12.18
36	—	—	—	—	—	—	8148FO	5.14	8148 9819	5.27 5.26	—	—	—	—
48	—	—	—	—	—	—	—	—	—	—	—	—	7887A◗	12.18
50	—	—	—	—	—	—	8155FO	5.14	9825 8155 1401A	5.26 5.27 11.23	—	—	—	—
62	—	—	—	—	—	—	—	—	9814	5.26	—	—	—	—
64	—	—	—	—	—	—	—	—	—	—	—	—	7888A◗	12.18
68	—	—	—	—	—	—	—	—	1403A	11.23	—	—	—	—
96	—	—	—	—	—	—	—	—	—	—	—	—	7889A◗	12.18
24 AWG														
25	—	—	—	—	—	—	9543 9684 1424A 82512 88112	4.11 5.15 5.15 5.49 5.50	9617 9937 8342 8112	4.17 4.18 5.29 5.31 12.55	—	—	—	—
30	—	—	—	—	—	—	9544 9515 1425A	4.11 5.12 5.15	8345 8115	5.29 5.31	9735 8175■	5.35 12.30 5.45	—	—
32	—	—	—	—	—	—	—	—	—	—	1412R■ 1514C■ 1850F■	12.19 12.20 12.29	1916A	12.21
34	—	—	—	—	—	—	—	—	—	—	9736	5.35 12.30	—	—
36	—	—	—	—	—	—	—	—	8348 9837 8118	5.29 5.30 5.31	8178■ 89758	5.45 5.53 12.31	—	—
37	—	—	—	—	—	—	88118	5.50	9618 9938	4.17 4.18	—	—	—	—
38	—	—	—	—	—	—	9519	5.12	—	—	9737	5.35 12.30	—	—
40	—	—	—	—	—	—	9545	4.11	—	—	1413R■ 1515C■	12.19 12.20	—	—
48	—	—	—	—	—	—	—	—	—	—	1414R■ 1516C■ 1852F■	12.19 12.20 12.29	1924A	12.21
50	9585▼ 1864A▼ 1871A▼ 1232A1▼	5.4 11.12 11.12 11.13	—	—	—	—	9546 9525 88125	4.11 5.12 5.50	9619 8355 9838 8125	4.17 5.29 5.30 5.31	9995 8185■	5.37 5.45	—	—
52	—	—	—	—	—	—	—	—	—	—	1415R■ 1517C■	12.19 12.20	—	—
54	—	—	—	—	—	—	—	—	—	—	9738	5.35 12.30	—	—
64	—	—	—	—	—	—	—	—	—	—	1416R■ 1518C■ 1854F■	12.19 12.20 12.29	1932A	12.21
100	—	—	—	—	—	—	9550	5.12	—	—	—	—	—	—
104	—	—	—	—	—	—	—	—	—	—	1519C■	12.24	—	—
22 AWG														
25	8459	4.4	—	—	—	—	—	—	9948 8312	4.19 5.32	—	—	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
◗ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

25 or More Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
22 AWG *(continued)*														
30	9432 8749	4.4 5.5	—	—	—	—	9315▼ 9524	5.17 15.41	8315	5.32	8766▼ 8776	5.37 5.40 12.24	—	—
32	—	—	—	—	—	—	3010A	15.41	—	—	3011A■ 1819R■ 1222B	15.42 12.22 12.23	—	—
34	—	—	—	—	—	—	—	—	—	—	9769	5.40 12.24	—	—
36	—	—	—	—	—	—	9772†	4.20	8318	5.32	—	—	—	—
37	—	—	—	—	—	—	—	—	9949	4.19	—	—	—	—
38	9748	5.5	—	—	—	—	9319▼ 9526	5.17 15.41	—	—	8769 9335	12.24 5.40 15.42	—	—
40	9433	4.4	—	—	—	—	—	—	—	—	1820R■ 1225B	12.22 12.23	—	—
48	—	—	—	—	—	—	3012A	15.41	—	—	3013A■ 1821R■ 1427B	15.42 12.22 12.23	—	—
50	9434	4.4	—	—	—	—	—	—	9950 8325	4.19 5.32	—	—	—	—
52	—	—	—	—	—	—	—	—	—	—	1822R■	12.22	—	—
54	8750	5.5	—	—	—	—	9327▼ 9527	5.17 15.41	—	—	8773	5.40 12.24	—	—
56	—	—	—	—	—	—	—	—	—	—	1221B	12.23	—	—
64	—	—	—	—	—	—	—	—	—	—	1823R■ 1226B	12.22 12.23	—	—
74	—	—	—	—	—	—	—	—	—	—	9767	12.24 5.40	—	—
76	—	—	—	—	—	—	8752▼	5.18	—	—	—	—	—	—
100	—	—	—	—	—	—	3014A	15.41	—	—	3015A■	15.42	—	—
102	—	—	—	—	—	—	8751▼ 9551	5.17 15.41	—	—	9337	15.42	—	—
104	—	—	—	—	—	—	—	—	—	—	1428B	12.23	—	—
20 AWG														
25	7108A 7408A	15.30 15.33	—	—	—	—	—	—	—	—	—	—	—	—
30	9755	5.7	—	—	—	—	—	—	—	—	9879	5.42	—	—
32	—	—	—	—	—	—	1059A	15.43	—	—	1079A■ 1009A■ 1015A■ 22643■ 23532*■ 26536*■	15.43 15.53 15.53 15.76 15.78 15.78	—	—
36	—	—	—	—	—	—	3022A†	15.44	—	—	1085A†■ 23571*†■ 26553*†■	15.44 15.78 15.78	—	—
40	—	—	—	—	—	—	—	—	—	—	1091A■	15.43	—	—
48	—	—	—	—	—	—	3023A† 1060A	15.44 15.43	—	—	1092A†■ 22673†■ 23549*†■ 26543*†■ 1080A■ 1016A■ 22647■ 23506*■ 26537*■	15.44 15.76 15.78 15.78 15.43 15.53 15.76 15.78 15.78	—	—

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
‣ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

25 or More Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
20 AWG *(continued)*														
60	—	—	—	—	—	—	—	—	—	—	1086A†■	15.44	—	—
72	—	—	—	—	—	—	3024A† 1061A	15.44 15.43	—	—	3067A†■ 22674†■ 23550*†■ 26544*†■ 1081A■ 1017A■ 22670■ 23544*■ 26538*■	15.44 15.76 15.78 15.78 15.43 15.53 15.76 15.78 15.78	—	—
100	—	—	—	—	—	—	1062A	15.43	—	—	1082A■ 23575*■ 26546*■	15.43 15.78 15.78	—	—
18 AWG														
25	9626 7117A 7417A 27611A 29053*	4.6 15.30 15.34 15.63 15.88	—	—	7117AS 7417AS	15.30 15.34	—	—	—	—	—	—	—	—
30	27612A 29058* 9742	15.63 15.88 5.8	—	—	—	—	9565	15.45	—	—	9777 9392	5.42 15.45	—	—
32	—	—	—	—	—	—	3034A 1067A	15.46 15.56	—	—	3035A■ 1052A■ 22654■ 23519*■ 26520*■	15.46 15.56 15.76 15.78 15.78	—	—
34	7118A 7418A	15.30 15.34	—	—	—	—	—	—	—	—	—	—	—	—
36	—	—	—	—	—	—	—	—	—	—	3068A†■ 1095A†■ 23512*†■ 26527*†■	15.47 15.57 15.78 15.78	—	—
37	27613A	15.63	—	—	—	—	—	—	—	—	—	—	—	—
38	9743	5.8	—	—	—	—	—	—	—	—	—	—	—	—
40	29068*	15.88	—	—	—	—	—	—	—	—	—	—	—	—
41	7419A	15.34	—	—	—	—	—	—	—	—	—	—	—	—
48	—	—	—	—	—	—	3036A† 1471A 1068A	15.47 15.46 15.56	—	—	3037A†■ 3066A†■ 22681†■ 22683†■ 23537*†■ 26528*†■ 1480A■ 1053A■ 22637■ 23542*■ 26521*■ 22419■ 24520*■ 25517*■	15.47 15.57 15.76 15.76 15.78 15.78 15.46 15.56 15.76 15.78 15.78 15.80 15.81 15.81	—	—
50	7142A 27614A 29078*	15.31 15.63 15.88	—	—	—	—	—	—	—	—	—	—	—	—
60	27632A	15.63	—	—	—	—	—	—	—	—	—	—	—	—
72	—	—	—	—	—	—	3038A† 1472A 1087A	15.47 15.46 15.56	—	—	3039A†■ 1096A†■ 22682†■ 22684†■	15.47 15.57 15.76 15.76	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
▸ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

25 or More Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
18 AWG *(continued)*														
72 *(cont'd)*											23536*†■ 26529*†■ 1481A■ 1054A■ 23554*■ 26555*■	15.78 15.78 15.46 15.56 15.78 15.78		
100	—	—	—	—	—	—	3041A 1088A	15.46 15.56	—	—	3042A■ 1038A■	15.46 15.56	—	—
16 AWG														
25	9622 7129A 27324A 29024* 7429A	4.6 15.31 15.64 15.88 15.35	—	—	—	—	—	—	—	—	—	—	—	—
30	27626A 29008*	15.64 15.88	—	—	—	—	—	—	—	—	—	—	—	—
32	—	—	—	—	—	—	3050A 1073A	15.48 15.58	—	—	3051A■ 1043A■ 22685■ 23539*■ 26507*■	15.48 15.58 15.77 15.79 15.79	—	—
34	7130A 7430A	15.31 15.35	—	—	—	—	—	—	—	—	—	—	—	—
36	—	—	—	—	—	—	—	—	—	—	3069A†■ 1099A†■ 22690†■ 23541*†■ 26513*†■	15.49 15.59 15.77 15.79 15.79	—	—
37	27627A	15.64	—	—	—	—	—	—	—	—	—	—	—	—
40	29009*	15.88	—	—	—	—	—	—	—	—	1044A■	15.58	—	—
48	—	—	—	—	—	—	3052A† 1489A 1074A	15.49 15.48 15.58	—	—	3053A†■ 3118A†■ 23567*†■ 26545*†■ 1498A■ 1045A■ 22686■ 23538*■ 26508*■ 22447■ 24510*■ 25519*■	15.49 15.59 15.79 15.79 15.48 15.58 15.77 15.79 15.79 15.80 15.81 15.81	—	—
50	7132A 27628A 29016*	15.31 15.64 15.88	—	—	—	—	—	—	—	—	—	—	—	—
60	27633A 29025*	15.64 15.88	—	—	—	—	—	—	—	—	—	—	—	—
72	—	—	—	—	—	—	3054A† 1490A 1089A	15.49 15.48 15.58	—	—	3055A†■ 1100A†■ 23578*†■ 26547*†■ 1499A■ 1046A■ 23568*■ 26551*■	15.49 15.59 15.79 15.79 15.48 15.58 15.79 15.79	—	—
100	—	—	—	—	—	—	3056A 1090A	15.48 15.58	—	—	3057A■ 1047A■	15.48 15.58	—	—
108	—	—	—	—	—	—	—	—	—	—	3130A†■	15.59	—	—

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
▸ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

25 or More Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
14 AWG														
25	7142A 7442A 27103A 27270* 28270* 27851* 28851* 27023 C5503*	15.31 15.36 15.65 15.70 15.70 15.73 15.73 15.84 15.89	—	—	—	—	—	—	—	—	—	—	—	—
26	27104A 27024	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—
27	27105A 27025	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—
28	27106A 27026	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—
29	27107A 27027	15.65 15.84	—	—	—	—	—	—	—	—	—	—	—	—
30	27108A 27253* 28253* 27852* 28852* 27028 C5528*	15.65 15.70 15.70 15.73 15.73 15.84 15.89	—	—	—	—	—	—	—	—	—	—	—	—
37	27629A 27292* 28292* 27830	15.65 15.70 15.70 15.84	—	—	—	—	—	—	—	—	—	—	—	—
40	27433* 28433* 27885* 28885* C5529*	15.70 15.70 15.73 15.73 15.89	—	—	—	—	—	—	—	—	—	—	—	—
50	27912A 27434* 28434* 27886* 28886* C6064*	15.65 15.70 15.70 15.73 15.73 15.89	—	—	—	—	—	—	—	—	—	—	—	—
12 AWG														
25	27132A 27279* 28279* 27864* 28864* 27052 C5553*	15.66 15.70 15.70 15.73 15.73 15.85 15.89	—	—	—	—	—	—	—	—	—	—	—	—
26	27133A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
27	27134A 27054	15.66 15.85	—	—	—	—	—	—	—	—	—	—	—	—
28	27135A 27055	15.66 15.85	—	—	—	—	—	—	—	—	—	—	—	—
29	27136A 27056	15.66 15.85	—	—	—	—	—	—	—	—	—	—	—	—
30	27137A 27280* 28280* 27865* 28865* 27057 C5558*	15.66 15.70 15.70 15.73 15.73 15.85 15.89	—	—	—	—	—	—	—	—	—	—	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
▸ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cable

25 or More Conductors

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
12 AWG *(continued)*														
37	27630A 27540* 28540* 27831	15.66 15.70 15.70 15.85	—	—	—	—	—	—	—	—	—	—	—	—
40	27432* 28432* 27887* 28887*	15.70 15.70 15.73 15.73	—	—	—	—	—	—	—	—	—	—	—	—
50	27634A	15.66	—	—	—	—	—	—	—	—	—	—	—	—
10 AWG														
25	27289* 28289* 27883* 28883* C5579*	15.71 15.71 15.74 15.74 15.90	—	—	—	—	—	—	—	—	—	—	—	—
30	27290* 28290* 27884* 28884* C5580*	15.71 15.71 15.74 15.74 15.90	—	—	—	—	—	—	—	—	—	—	—	—

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
▸ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cables

Combination Gages (Unshielded, Shielded and Partially Shielded)

No. of Conductors or Pairs	Part No.	Conductor/Gage Description	Shielding	Page
Combination Gages				
4	3084A	1pr — 24 AWG 1pr — 22 AWG	Beldfoil® each pair plus braid overall	15.22
	3084F	1pr — 24 AWG 1pr — 22 AWG	Beldfoil each pair plus braid overall	15.22
	3085A	1pr — 24 AWG 1pr — 22 AWG	Beldfoil each pair plus braid overall	15.22
	7895A	1pr — 20 AWG 1pr — 18 AWG	Beldfoil each pair plus braid overall	15.22
	7900A	1pr — 18 AWG 1pr — 16 AWG	Unshielded	15.20
	7896A	1pr — 18 AWG 1pr — 16 AWG	Beldfoil each pair plus braid overall	15.20
	7897A	1pr — 18 AWG 1pr — 15 AWG	Beldfoil each pair plus braid overall	15.20
	3082A	1pr — 18 AWG 1pr — 15 AWG	Beldfoil each pair plus braid overall	15.21
	3083A	1pr — 18 AWG 1pr — 15 AWG	Beldfoil each pair plus braid overall	15.21
	3082F	1pr — 18 AWG 1pr — 15 AWG	Beldfoil each pair plus braid overall	15.21
	3086A	1pr — 20 AWG 1pr — 16 AWG	Individual Beldfoil each pair	15.23
	3124A	2c — 22 AWG 2c — 18 AWG	Overall Beldfoil	15.24
	3125A	2c — 22 AWG 2c — 16 AWG	Overall Beldfoil	15.24
	1502P	1pr — 22 AWG	Beldfoil	12.39
		2c — 18 AWG	Unshielded	
	1502R	1pr — 22 AWG	Beldfoil	12.39
		2c — 18 AWG	Unshielded	
	9155	1pr — 20 AWG	Beldfoil	5.47
		1pr — 18 AWG	Unshielded	
6	8446	4c — 22 AWG 2c — 18 AWG	Unshielded	4.7
	9686	3c — 20 AWG 3c — 16 AWG	Unshielded	4.7
	8786	4c — 24 AWG 2c — 22 AWG	Beldfoil over 4c, Unshielded	4.20
	3126A	2c — 22 AWG 2c — 16 AWG 2c — 12 AWG	Overall Beldfoil	15.24
	27428*	3c — 14 AWG 3c — 12 AWG	Unshielded	15.72
	28428*	3c — 14 AWG 3c — 12 AWG	Unshielded	15.72
	27429*	3c — 14 AWG 3c — 10 AWG	Unshielded	15.72
	28429*	3c — 14 AWG 3c — 10 AWG	Unshielded	15.72
	27430*	3c — 14 AWG 3c — 8 AWG	Unshielded	15.72
	28430*	3c — 14 AWG 3c — 8 AWG	Unshielded	15.72
	27431*	3c — 14 AWG 3c — 6 AWG	Unshielded	15.72

No. of Conductors or Pairs	Part No.	Conductor/Gage Description	Shielding	Page
Combination Gages				
6 *(cont'd)*	28431*	3c — 14 AWG 3c — 6 AWG	Unshielded	15.72
	27890*	3c — 14 AWG 3c — 12 AWG	Unshielded	15.75
	28890*	3c — 14 AWG 3c — 12 AWG	Unshielded	15.75
	27891*	3c — 14 AWG 3c — 10 AWG	Unshielded	15.75
	28891*	3c — 14 AWG 3c — 10 AWG	Unshielded	15.75
	27892*	3c — 14 AWG 3c — 8 AWG	Unshielded	15.75
	28892*	3c — 14 AWG 3c — 8 AWG	Unshielded	15.75
	27893*	3c — 14 AWG 3c — 6 AWG	Unshielded	15.75
	28893*	3c — 14 AWG 3c — 6 AWG	Unshielded	15.75
	6054*	3c — 14 AWG 3c — 12 AWG	Unshielded	15.91
	6051*	3c — 14 AWG 3c — 10 AWG	Unshielded	15.91
	6059*	3c — 14 AWG 3c — 8 AWG	Unshielded	15.91
	6060*	3c — 14 AWG 3c — 6 AWG	Unshielded	15.91
8	9405	6c — 18 AWG 2c — 16 AWG	Unshielded	4.8
	8448	6c — 22 AWG 2c — 18 AWG	Unshielded	4.8
	9903●	3pr — 28 AWG 1pr — 24 AWG	Individual Beldfoil plus braid	11.18
9	3119A●	3pr — 24 AWG 3c — 18 AWG	Overall Beldfoil plus braid	15.25
10	8787	4c — 24 AWG 4c — 24 AWG 2c — 22 AWG	Red or Green Beldfoil over (2) Quads, Unshielded	4.20
12	7949A	4pr — 24 AWG▼ 4c — 16 AWG	Unshielded	14.8
	7950A	4pr — 24 AWG▼ 4c — 16 AWG	Unshielded	14.8
	7951A	4pr — 24 AWG▼ 4c — 18 AWG	Unshielded	14.8
	7952A	4pr — 24 AWG▼ 4c — 14 AWG	Unshielded	14.8
23	9641	6pr — 26 AWG 10c — 26 AWG 1c — 24 AWG	Overall foil plus braid	4.16

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
▸ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Multi-conductor and Paired Cables

Partially Shielded Cables (Combination Unshielded and Shielded Conductors)

No. of Conductors	Part No.	Conductor/Gage Description	Shielding	Page
25 AWG				
4	8434	1pr — 25 AWG	Beldfoil®	5.46
		1pr — 25 AWG	Unshielded plus overall foil shield	
22 AWG				
3	8734	1c — 22 AWG	Braid	4.14
		2c — 22 AWG	Unshielded	
	9685	1pr — 22 AWG	Beldfoil	5.46
		1c — 22 AWG	Unshielded	
4	8732	1pr — 22 AWG	Braid	5.23
		1pr — 22 AWG	Unshielded	
	8730	1pr — 22 AWG	Beldfoil	5.46
		1pr — 22 AWG	Unshielded	
	8724	1pr — 22 AWG	Beldfoil	5.46
		1pr — 22 AWG	Unshielded	
5	8788	3c — 22 AWG	Individual Beldfoil	4.20
		2c — 22 AWG	Unshielded	
12	9689	2pr — 22 AWG	Individual Beldfoil plus overall braid	11.21
		4pr — 22 AWG	Unshielded	
	82689	2pr — 22 AWG	Individual Beldfoil plus overall braid	11.21
		4pr — 22 AWG	Unshielded	
20 AWG				
3	8763	1pr — 20 AWG	Beldfoil	5.47
		1c — 20 AWG	Unshielded	
4	8722	1pr — 20 AWG	Beldfoil	5.47
		1pr — 20 AWG	Unshielded	

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
‣ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Paired Cable

No. of Pairs	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
25 AWG and smaller														
1	—	—	—	—	—	—	9271 9180	15.15 6.84 12.28 12.56	—	—	—	—	—	—
2	—	—	—	—	—	—	8132FO	5.14	9804 8132	5.26 5.27	1215A■ 7891A■	11.21 12.29	—	—
3	—	—	—	—	—	—	8133FO	5.14	9805 8133 1538A	5.26 5.27 11.22	—	—	—	—
4	—	—	—	—	—	—	8134FO	5.14	9806 8134	5.26 5.27	7890A■	12.29	—	—
5	—	—	—	—	—	—	8135FO	5.14	9807 8135	5.26 5.27	—	—	—	—
7	—	—	—	—	—	—	—	—	9808	5.26	—	—	—	—
8	—	—	—	—	—	—	8138FO	5.14	8138	5.27	7880A■	12.29	—	—
9	—	—	—	—	—	—	—	—	9809	5.26	—	—	—	—
12	—	—	—	—	—	—	—	—	9812	5.26	7892A■	12.29	—	—
12-1/2	—	—	—	—	—	—	8142FO	5.14	8142	12.55 5.27	—	—	—	—
13	—	—	—	—	—	—	—	—	9813	5.26	—	—	—	—
16	—	—	—	—	—	—	—	—	—	—	7893A■	12.29	—	—
18	—	—	—	—	—	—	8148FO	5.14	8148	5.27	—	—	—	—
19	—	—	—	—	—	—	—	—	9819	5.26	—	—	—	—
25	—	—	—	—	—	—	8155FO	5.14	9825 8155 1401A	5.26 5.27 11.23	—	—	—	—
31	—	—	—	—	—	—	—	—	9814	5.26	—	—	—	—
34	—	—	—	—	—	—	—	—	1403A	11.23	—	—	—	—
24 AWG														
1	—	—	—	—	1901A 1800F	12.6 12.10 12.5	9501 82641 88641 1508A 1883A 8641 88641 82641 1800B 1801B	5.11 12.10 5.13 5.16 5.49 12.10 5.13 5.16 5.49 12.10 12.10 5.16 12.10 5.13 5.49 12.10 5.13 5.49 12.10 12.28 14.17 12.28	9841 82841 89841 7200A 7205A 7206A	5.28 5.28 5.52 5.28 5.52 15.38 15.38 15.38	—	—	—	—
2	9562▼ 1588A▼ 1588R▼ 1590A▼ 1227A1▼ 1243A2▼	5.4 11.9 11.9 11.10 11.13 11.13	—	—	—	—	9502 82502 1419A 88102	5.11 5.13 5.49 5.15 5.50	9842 82842 8332 9829 8102	5.28 5.28 5.52 5.29 5.30 5.31	9729 89729	5.35 12.30 15.27 12.31 5.36 5.53	1902A	12.21

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†Triad

▼ Solid conductors
◆ Siamese version
▸ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Paired Cable

No. of Pairs	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
24 AWG *(continued)*														
2 *(cont'd)*									7201A	15.38	82729 1802B 8162■ 1509C■	12.31 5.36 5.53 12.28 5.44 12.20		
3	—	—	—	—	—	—	9503 82503 89503 9680 1420A 88103	5.11 5.13 5.49 5.13 5.49 5.15 5.15 5.50	9843 8333 9830 8103 1534A▼ 3120A 7202A	5.28 5.29 5.30 5.31 11.22 15.25 15.38	9730 89730 8163■ 9990	12.30 5.35 12.31 5.36 5.53 5.44 5.37	—	—
4	1875GA 1875GB 1700A▼ 1700R▼ 1701A▼ 1701LC▼ 1752A 1500A▼ 1500R▼ 1501A▼ 1583A▼ 1583R▼ 1583B▼ 1594A▼ 1585A▼ 1585B▼ 1585LC▼ 1592A 1229A1▼ 1245A2▼ 11700A 121700A* 7923A 7924A 7928A 7918A	11.4 11.4 11.6 11.6 14.10 11.6 11.7 11.8 11.8 14.10 11.8 11.9 11.9 14.11 11.9 11.9 11.10 14.11 11.10 11.10 11.11 11.13 11.13 15.7 15.7 15.6 15.7 15.8 15.8	—	—	—	—	9504 82504 89504 9681 1421A 88104 1533R▼ 1533P▼ 1624R▼ 1624P▼ 1633A▼ 7929A 7919A	5.11 5.13 5.49 5.13 5.15 5.15 5.50 11.14 11.14 11.15 11.15 11.16 15.6 15.8	9844 8334 9831 8104 7203A 7921A	5.28 5.29 5.30 5.31 15.38 15.6	9728 89728 8164■ 1408R■ 1510C■ 1803F■	12.30 5.35 12.31 5.36 5.53 5.44 12.19 12.20 12.29	1904A	12.21
5	—	—	—	—	—	—	9505 82505 89505 1422A 88105	5.11 5.13 5.49 5.13 5.49 5.15 5.50	8335 9832 8105	5.29 5.30 5.31	8165■ 89705	5.44 12.31 5.53	—	—
6	9566▼	5.4	—	—	—	—	9506 82506 9682 1423A 88106	5.12 5.13 5.15 5.15 5.50	8336 9839 8106	5.29 5.30 5.31	9731 89731 9991 8166■ 1409R■ 1511C■	12.30 5.35 12.31 5.36 5.53 5.37 5.44 12.19 12.20	1906A	12.23
7	—	—	—	—	—	—	9507	5.12	8337 9833 8107	5.29 5.30 5.31	8167■ 89757	5.44 12.31 5.53	—	—
7-1/2	—	—	—	—	—	—	88107	5.50	—	—	—	—	—	—

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
▸ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Paired Cable

No. of Pairs	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
24 AWG *(continued)*														
8	1702A◆▼ 1703A◆▼	11.6 11.6	—	—	—	—	9508 1668A▼	5.12 11.16	8108	5.31	8168■ 1410R■ 1512C■ 1805F■	5.45 12.19 12.20 12.29	1908A	12.23
9	—	—	—	—	—	—	9509 82509 9683 88109	5.12 5.13 5.49 5.15 5.50	9834	5.30	9732 89732 9992	12.30 5.35 12.31 5.36 5.53 5.37	—	—
10	9570▼	5.4	—	—	—	—	9510	5.12	8340 9835 8110	5.29 5.30 5.31	8170■	5.45	—	—
11	—	—	—	—	—	—	—	—	—	—	9733	12.30 5.35	—	—
12	—	—	—	—	—	—	—	—	9836	5.30	9734 9993 89734 1411R■ 1513C■ 1806F■	12.30 5.35 5.37 12.31 5.53 12.19 12.20 12.29	1912A	12.23
12-1/2	—	—	—	—	—	—	9684 1424A 82512 88112	5.15 5.15 5.49 5.50	8342 8112	5.29 12.51 5.31	—	—	—	—
15	—	—	—	—	—	—	9515 1425A	5.12 5.15	8345 8115	5.29 5.31	9735 8175■	12.30 5.35 5.45	—	—
16	—	—	—	—	—	—	—	—	—	—	1412R■ 1514C■ 1850F■	12.19 12.20 12.29	1916A	12.23
17	—	—	—	—	—	—	—	—	—	—	9736	12.30 5.35	—	—
18	—	—	—	—	—	—	—	—	8348 9837 8118	5.29 5.30 5.31	8178■ 89758	5.45 12.31 5.53	—	—
18-1/2	—	—	—	—	—	—	88118	5.50	—	—	—	—	—	—
19	—	—	—	—	—	—	9519	5.12	—	—	9737	12.30 5.35	—	—
20	—	—	—	—	—	—	—	—	—	—	1413R■ 1515C■	12.19 12.20	—	—
24	—	—	—	—	—	—	—	—	—	—	1414R■ 1516C■ 1852F■	12.19 12.20 12.29	1924A	12.23
25	9585▼ 1864A▼ 1871A▼ 1232A1▼	5.4 11.12 11.12 11.13	—	—	—	—	9525 88125	5.12 5.50	8355 9838 8125	5.29 5.30 5.31	9995 8185■	5.37 5.45	—	—
26	—	—	—	—	—	—	—	—	—	—	1415R■ 1517C■	12.19 12.20	—	—
27	—	—	—	—	—	—	—	—	—	—	9738	12.30 5.35	—	—
32	—	—	—	—	—	—	—	—	—	—	1416R■ 1518C■ 1854F■	12.19 12.20 12.29	1932A	12.23
50	—	—	—	—	—	—	9550	5.12	—	—	—	—	—	—
52	—	—	—	—	—	—	—	—	—	—	1519C■	12.20	—	—

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†Triad
▼ Solid conductors
◆ Siamese version
▸ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Paired Cable

No. of Pairs	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
23 AWG														
4	7851A▼	11.3	—	—	—	—	—	—	—	—	—	—	—	—
	7852A▼	11.3												
	1872A▼	11.4												
	1874A▼	11.4												
	7881A▼	11.5												
		14.9												
	7882A▼	11.5												
		14.9												
	7883A▼	11.5												
	11872A	15.9												
	121872A	15.9												
22 AWG														
1	8740▼	5.4	8737	5.24	8437▼	5.23	8450▼	12.11	3079A	15.19	—	—	—	—
	88442	4.4			8441	5.23	9414	5.18	3105A	15.26				
		4.23					9462	5.18	1696A	12.27				
		5.6					8761	12.12						
		5.48						5.18						
	82442	4.4					9461	12.12						
		4.23						5.18						
		5.6					8451	12.11						
		5.48						5.19						
	9407	15.41					9451	12.11						
								5.19						
							1266A	12.11						
								5.19						
							1503A	12.11						
								5.19						
							88761	12.12						
								5.20						
								5.51						
							87761	12.12						
								5.20						
								5.51						
							82761	12.12						
								5.20						
								5.51						
							9182●	15.15						
								6.84						
							89182●	15.15						
								6.84						
							3077F	15.19						
							3078F	15.19						
							9322	15.41						
1-1/2	—	—	—	—	—	—	—	—	3106A	15.26	—	—	—	—
2	8741▼	5.4	—	—	—	—	9302▼	5.17	8302	5.32	9406	5.38	—	—
	9744	5.5					9184▼	5.17	9855▼	5.33	8723	12.13		
	88741	5.6					3000A	15.41	1268A▼	5.33		14.18		
		5.48					9512	15.41	89855▼	5.33		15.27		
	82741	5.6								5.52		5.38		
									1269A▼	5.33	82723	12.13		
									9696▼	5.33		5.38		
									89696▼	5.33		5.54		
										5.52	88723	12.13		
									3107A	15.26		15.27		
												5.38		
												5.54		
											87723	12.13		
												5.38		
												5.54		
											8728■	5.46		
											9688■▼	11.20		
											82688■▼	11.20		
											1634A■▼	11.20		
											3087A	15.23		

*Armored
†Triad

▼ Solid conductors
◆ Siamese version
◗ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Paired Cable

No. of Pairs	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
22 AWG *(continued)*														
2 *(cont'd)*											9451D◆ 1504A◆ 9328 3001A■ 1814R■	12.14 12.14 5.19 15.42 15.42 12.22		
3	8742▼ 9745 82742	5.4 5.5 5.6 5.48	—	—	—	—	9513	15.41	8303 3108A	5.32 15.26	8767▼ 8777 82777 88777 87777 9329	5.37 12.24 15.27 5.40 12.25 5.41 5.54 12.25 5.41 5.54 12.25 5.41 5.54 15.42	—	—
4	8757▼ 9746 88757 82757	5.4 5.5 5.6 5.48 5.6 5.48	—	—	—	—	9305▼ 3004A 9514	5.17 15.41 15.41	8304 3109A	5.32 15.26	9330 3005A■ 1815R■ 1217B	15.42 15.42 12.22 12.23	—	—
5	—	—	—	—	—	—	—	—	8305	5.32	—	—	—	—
6	8743▼ 8747 82743	5.4 5.5 5.6 5.48	—	—	—	—	9306▼ 9516	5.17 15.41	8306	5.32	8768▼ 8778 82778 88778 87778 9331 1816R■ 1218B	5.37 12.24 5.40 12.25 5.41 5.54 12.25 5.41 5.54 12.25 5.41 5.54 15.42 12.22 12.23	—	—
7	—	—	—	—	—	—	—	—	8307	5.32	—	—	—	—
8	9160▼	5.4	—	—	—	—	3006A	15.41	8308	5.32	3007A■ 1817R■	15.42 12.22	—	—
9	8744▼ 8748	5.4 5.5	—	—	—	—	9309▼ 9520	5.17 15.41	—	—	8764▼ 8774 9332 1219B	5.37 12.24 5.40 15.42 12.23	—	—
10	—	—	—	—	—	—	—	—	8310	5.32	—	—	—	—
11	—	—	—	—	—	—	9521	15.41	—	—	8765▼ 8775 9333	5.37 12.24 5.40 15.42	—	—
12	9747	5.5	—	—	—	—	3008A	15.41	—	—	9768 3009A■ 1818R■ 1220B	12.24 5.40 15.42 12.22 12.23	—	—
12-1/2	—	—	—	—	—	—	—	—	8312	5.32	—	—	—	—

*Armored
†Triad
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◆ Siamese version
▸ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Paired Cable

No. of Pairs	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
22 AWG *(continued)*														
15	8749	5.5	—	—	—	—	9315▼ 9524	5.17 15.41	8315	5.32	8766▼ 8776	5.37 12.24 5.40	—	—
16	—	—	—	—	—	—	3010A	15.41	—	—	3011A■ 1819R■ 1222B	15.42 12.22 12.23	—	—
17	—	—	—	—	—	—	—	—	—	—	9769	12.24 5.40	—	—
18	—	—	—	—	—	—	—	—	8318	5.32	—	—	—	—
19	9748	5.5	—	—	—	—	9319▼ 9526	5.17 15.41	—	—	8769 9335	12.24 5.40 15.42	—	—
20	—	—	—	—	—	—	—	—	—	—	1820R■ 1225B	12.22 12.23	—	—
24	—	—	—	—	—	—	3012A	15.41	—	—	3013A■ 1821R■ 1427B	15.42 12.22 12.23	—	—
25	—	—	—	—	—	—	—	—	8325	5.32	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	1822R■	12.22	—	—
27	8750	5.5	—	—	—	—	9327▼ 9527	5.17 15.41	—	—	8773	12.24 5.40	—	—
28	—	—	—	—	—	—	—	—	—	—	1221B	12.23	—	—
32	—	—	—	—	—	—	—	—	—	—	1823R■ 1226B	12.22 12.23	—	—
37	—	—	—	—	—	—	—	—	—	—	9767	12.24 5.40	—	—
38	—	—	—	—	—	—	8752▼	5.18	—	—	—	—	—	—
50	—	—	—	—	—	—	3014A	15.41	—	—	3015A■	15.42	—	—
51	—	—	—	—	—	—	8751▼ 9551	5.17 15.41	—	—	9337	15.42	—	—
52	—	—	—	—	—	—	—	—	—	—	1428B	12.23	—	—
20 AWG														
1	8205 9408	12.36 15.43	8759	12.14	—	—	8762 9464 9154 9320 1033A 3111A 3112A 3113A 83955 83950 83952 83954	12.14 5.20 12.14 5.20 12.14 5.20 15.43 15.43 15.53 15.53 15.53 15.54 15.54 15.54 15.54	9463 9463DB 89463 129463* 139463* 189463*	15.13 6.83 15.13 15.13 15.14 15.14 15.14	22671■ 23543*■ 26530*■	15.76 15.78 15.78	—	—
2	—	—	—	—	—	—	—	—	—	—	9402 1075A■ 3115A■ 22638■ 23534*■ 26531*■	5.41 15.43 15.53 15.76 15.78 15.78	—	—
3	9750	5.7	—	—	—	—	—	—	—	—	9883 9873	5.41 5.42	—	—
4	—	—	—	—	—	—	85164 1056A 1102A	5.11 15.43 15.53	—	—	8725 9901●■ 89901●■ 1076A■ 1112A■	5.47 11.18 11.18 15.43 15.53	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
▸ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Paired Cable

No. of Pairs	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
20 AWG *(continued)*														
4 *(cont'd)*											1006A■ 1012A■ 22639■ 23514*■ 26532*■	15.53 15.53 15.76 15.78 15.78		
5	—	—	—	—	—	—	—	—	—	—	9902•■	11.18	—	—
6	9751	5.7	—	—	—	—	—	—	—	—	9886 9874 22640■ 23513*■ 26533*■	5.41 5.42 15.76 15.78 15.78	—	—
8	—	—	—	—	—	—	85168 1057A 1001A 1103A	5.11 15.43 15.53 15.53	—	—	1077A■ 1007A■ 1013A■ 22641■ 23503*■ 26534*■	15.43 15.53 15.53 15.76 15.78 15.78	—	—
9	9752	5.7	—	—	—	—	—	—	—	—	9875	5.42	—	—
11	—	—	—	—	—	—	—	—	—	—	9876	5.42	—	—
12	—	—	—	—	—	—	1058A 1002A	15.43 15.43	—	—	9877 1078A■ 1008A■ 1014A■ 1025A■ 22676■ 23521*■ 26535*■	5.42 15.43 15.53 15.53 15.53 15.76 15.78 15.78	—	—
15	9755	5.7	—	—	—	—	—	—	—	—	9879	5.42	—	—
16	—	—	—	—	—	—	1059A	15.43	—	—	1079A■ 1009A■ 1015A■ 22643■ 23532*■ 26536*■	15.43 15.53 15.53 15.76 15.78 15.78	—	—
20	—	—	—	—	—	—	—	—	—	—	1091A■	15.43	—	—
24	—	—	—	—	—	—	1060A	15.43	—	—	1080A■ 1016A■ 22647■ 23506*■ 26537*■	15.43 15.53 15.76 15.78 15.78	—	—
36	—	—	—	—	—	—	1061A	15.43	—	—	1081A■ 1017A■ 22670■ 23544*■ 26538*■	15.43 15.53 15.76 15.78 15.78	—	—
50	—	—	—	—	—	—	1062A	15.43	—	—	1082A■ 23575*■ 26546*■	15.43 15.78 15.78	—	—
19 AWG														
1	8486	5.7	—	—	—	—	—	—	—	—	—	—	—	—
18 AWG														
1	8461 9740 89740 87740 82740	12.36 5.7 5.8 5.9 5.48 5.9 5.48 5.9 5.48	8790	12.15 5.24	8208	5.23	8760 9460 88760 87760	12.15 5.21 12.15 5.21 12.15 5.21 5.51 12.15 5.21 5.51	3073F 3074F	15.16 15.16	22645■ 23533*■ 26514*■ 22417■ 24511*■ 25506*■	15.76 15.78 15.78 15.80 15.81 15.81	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
▸ Quad
• Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Paired Cable

No. of Pairs	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
18 AWG *(continued)*														
1 *(cont'd)*	9409 9486	15.45 15.56					82760 3076F 9318 1032A 9341 1120A 3088A	12.15 5.21 5.51 15.19 15.45 15.46 15.56 15.56 15.56						
2	9156	5.8	—	—	—	—	9552 3025A 1063A	15.45 15.46 15.56	—	—	9368 1474A■ 1048A■ 22633■ 23511*■ 26515*■ 22405■ 24512*■ 25514*■	15.45 15.46 15.56 15.76 15.78 15.78 15.80 15.81 15.81	—	—
3	8690	5.8	—	—	—	—	9553 1529A	15.45 15.46	—	—	9773 9369	5.42 15.45	—	—
4	9157	5.8	—	—	—	—	9554 1466A 1064A	15.45 15.46 15.56	—	—	3029A 9388 1475A■ 1049A■ 22648■ 23530*■ 26516*■ 22404■ 24513*■ 25503*■	15.45 15.45 15.46 15.56 15.76 15.78 15.78 15.80 15.81 15.81	—	—
5	9159	5.8	—	—	—	—	—	—	—	—	—	—	—	—
6	8691	5.8	—	—	—	—	9556	15.45	—	—	9774 9389 22634■ 23528*■ 26517*■	5.42 15.45 15.76 15.78 15.78	—	—
8	9161	5.8	—	—	—	—	1467A 1065A	15.46 15.56	—	—	1476A■ 1050A■ 22635■ 23531*■ 26518*■ 22418■ 24514*■ 25505*■	15.46 15.56 15.76 15.78 15.78 15.80 15.81 15.81	—	—
9	8692	5.8	—	—	—	—	9559	15.45	—	—	9775 9390	5.42 15.45	—	—
11	—	—	—	—	—	—	9563	15.45	—	—	9391	15.45	—	—
12	9741	5.8	—	—	—	—	1468A 1066A	15.46 15.56	—	—	9776 1477A■ 1051A■ 22636■ 23524*■ 26519*■ 22421■ 24515*■ 25501*■	5.42 15.46 15.56 15.76 15.78 15.78 15.80 15.81 15.81	—	—
15	9742	5.8	—	—	—	—	9565	15.45	—	—	9777 9392	5.42 15.45	—	—
16	—	—	—	—	—	—	3034A 1067A	15.46 15.56	—	—	3035A■ 1052A■ 22654■	15.46 15.56 15.76	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
▸ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Paired Cable

No. of Pairs	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
18 AWG *(continued)*														
16 *(cont'd)*											23519*■ 26520*■	15.78 15.78		
19	9743	5.8	—	—	—	—	—	—	—	—	—	—	—	—
24	—	—	—	—	—	—	1471A 1068A	15.46 15.56	—	—	1480A■ 1053A■ 22637■ 23542*■ 26521*■ 22419■ 24520*■ 25517*■	15.46 15.56 15.76 15.78 15.78 15.80 15.81 15.81	—	—
36	—	—	—	—	—	—	1472A 1087A	15.46 15.56	—	—	1481A■ 1054A■ 23554*■ 26555*■	15.46 15.56 15.78 15.78	—	—
50	—	—	—	—	—	—	3041A 1088A	15.46 15.56	—	—	3042A■ 1038A■	15.46 15.56	—	—
16 AWG														
1	8471 9410 1035A 9487	12.36 5.9 15.48 15.48 15.58	8780	12.16 5.24	—	—	8719 9316 1030A 1101A 1000A 1018A 1023A 1114A 1115A 1116A 1117A 83951 83953 9342 1118A 3090A	12.16 5.22 15.48 15.48 15.53 15.53 15.53 15.53 15.54 15.54 15.54 15.54 15.54 15.54 15.58 15.58 15.58	—	—	22646■ 23501*■ 26500*■ 22416■ 24500*■ 25504*■	15.77 15.79 15.79 15.80 15.81 15.81	—	—
2	3082K 3082KP	15.22 15.22	—	—	—	—	3043A 1069A	15.48 15.58	—	—	1492A■ 1055A■ 22628■ 23527*■ 26501*■ 22409■ 24505*■ 25510*■	15.48 15.58 15.77 15.79 15.79 15.80 15.81 15.81	—	—
3	—	—	—	—	—	—	1528A 1527A	15.48 15.58	—	—	1037A■	15.58	—	—
4	—	—	—	—	—	—	1484A 1070A	15.48 15.58	—	—	1493A■ 1039A■ 22629■ 23509■ 26503*■ 22410■ 24502*■ 25511*■	15.48 15.58 15.77 15.79 15.79 15.80 15.81 15.81	—	—
6	—	—	—	—	—	—	—	—	—	—	1040A■ 22630■ 23500*■ 26504*■ 22446■ 24506*■ 25512*■	15.58 15.77 15.79 15.79 15.80 15.81 15.81	—	—

*Armored
†Triad
▼ Solid conductors
◆ Siamese version
▸ Quad
● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Paired Cable

No. of Conductors	Unshielded		Spiral Shield		Braid Shield		Overall Beldfoil®		Overall Foil/Braid		Individual Beldfoil		Individual Braid	
	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
16 AWG *(continued)*														
8	—	—	—	—	—	—	1485A 1071A	15.48 15.58	—	—	1494A■ 1041A■ 22631■ 23510*■ 26505 22411■ 24503*■ 25513*■	15.48 15.58 15.77 15.79 15.79 15.80 15.81 15.81	—	—
12	—	—	—	—	—	—	1486A 1072A	15.48 15.58	—	—	1495A■ 1042A■ 22632■ 23525*■ 26506*■ 22412■ 24504*■ 25518*■	15.48 15.58 15.77 15.79 15.79 15.80 15.81 15.81	—	—
16	—	—	—	—	—	—	3050A 1073A	15.48 15.58	—	—	3051A■ 1043A■ 22685■ 23539*■ 26507*■	15.48 15.58 15.77 15.79 15.79	—	—
20	—	—	—	—	—	—	—	—	—	—	1044A■	15.58	—	—
24	—	—	—	—	—	—	1489A 1074A	15.48 15.58	—	—	1498A■ 1045A■ 22686■ 23538*■ 26508*■ 22447■ 24510*■ 25519*■	15.48 15.58 15.77 15.79 15.79 15.80 15.81 15.81	—	—
36	—	—	—	—	—	—	1490A 1089A	15.48 15.58	—	—	1499A■ 1046A■ 23568*■ 26551*■	15.48 15.58 15.79 15.79	—	—
50	—	—	—	—	—	—	3056A 1090A	15.48 15.58	—	—	3057A■ 1047A■	15.48 15.58	—	—
14 AWG														
1	8473 9411 9488 3080A	12.36 5.9 15.50 15.60 15.60	—	—	—	—	8720 9314 9343	12.16 5.22 15.50 15.60	—	—	—	—	—	—
12 AWG														
1	8477 9412 9489	12.36 5.9 15.51 15.61	—	—	—	—	8718 9312 9344 3103A	12.16 5.22 15.51 15.61 15.61	—	—	—	—	—	—

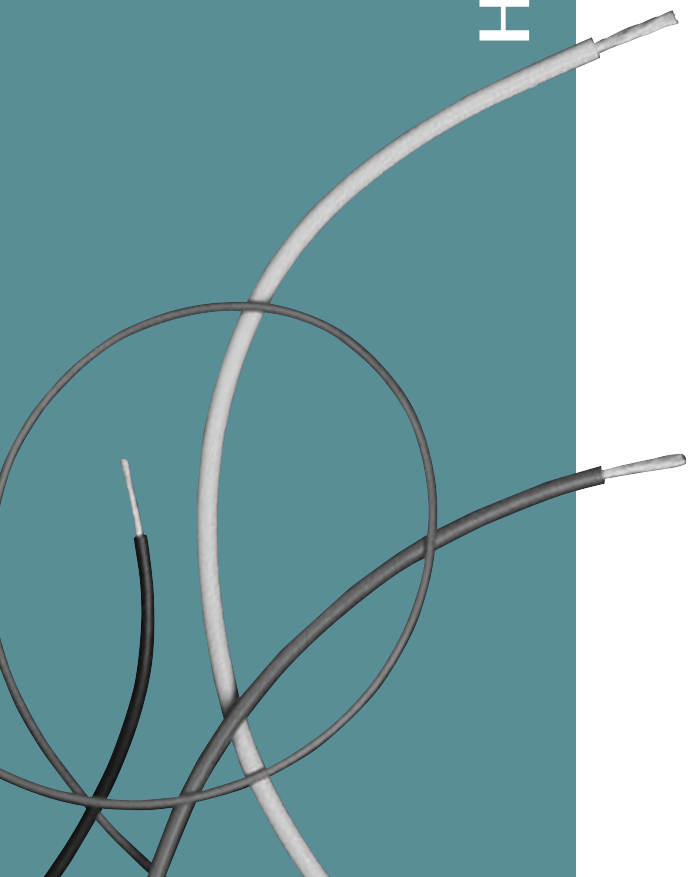
*Armored
†Triad

▼ Solid conductors
◆ Siamese version
▸ Quad

● Duofoil® shield
■ Individually shielded pairs or triads, plus overall foil, overall braid or overall foil and braid.

Belden

3 Hook-Up and Lead Wire



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Hypalon and Teflon are DuPont trademarks.

Please refer to "Terms of Use of Master Catalog" on page 16.30.

Introduction

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	Silicone Rubber Glass Braid	3.20
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Belden® hook-up and lead wire products are manufactured in a variety of materials, sizes and designs to meet rigid industry and government specifications. Manufactured in-house, our hook-up and lead wire manufacturing process begins with copper rod. Our rubber formulation and plastic mixing facilities give us complete control of the product from start to finish. As a result, consistent quality of these products is always assured.

Our hook-up and lead wire products can be used in a wealth of applications including inter-connection circuits, internal wiring of computer and data processing equipment, appliances, lighting, motor leads, heating and cooling equipment, harness fabrication and automotive.

Most of our hook-up and lead wire constructions are available from stock in a wide variety of colors and packages. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find hook-up or lead wire in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Special Ordering Information

Number Printed Wire

Thermosetting and thermoplastic constructions can be supplied with printed numbers. Price and delivery information is available upon request.

Hypalon and Neoprene Constructions

These constructions may require a special topcoat to facilitate printing by customers. Minimum order is 5000′ per AWG. Please order the standard item and specify "Top-Coated" and specify color. Orders must be in multiples of standard packages. Price and delivery information is available upon request.

Manufacturer's Identification

Identification of the hook-up and lead wire is provided by our UL and CSA files numbers or printed name on the wire jacket.

UL/CSA	File Number	Style
UL	E-12683	1XXX, 2XXX, 3XXX, 4XXX, 5XXX
	E-9147	GTO 10
	E-6934	SF-1, SFF-1, SF-2, SFF-2
	E-3197	SIS
CSA	LL-7874	All Types

Appliance Wiring Material (AWM)

Appliance Wiring Material is Underwriter Laboratories, Inc.'s recognized covering of insulated wire and cable intended for internal wiring of appliances and equipment. Each construction satisfies the requirements for use in particular applications. Wiring materials recognized under this classification bear the Underwriters' "Appliance Wiring Material Label."

UL & CSA Type by Belden Series

UL Style*	CSA Type	Belden Series Number	Temp. Rating	Page No.
1007	TR-64	328, 99	80°C	3.4
1015	TEW	327, 99, 89	105°C	3.5
1028	TEW	99, 89	105°C	3.6
1061	AWM	99	80°C	3.3
1180	—	830	200°C	3.9
1213	—	830	105°C	3.10
1283	TEW	99	105°C	3.6
1371	—	830	105°C	3.11
1569	TRSR-64	99	105°C	3.4
1855	—	—	80°C	3.24
3044	CL902	315	90°C	3.18
3046	CL903	315, 325	90°C	3.18
3048	CL902	315	90°C	3.18
3049	CL902	315	90°C	3.18
3069	SEWF-2	308	150°C	3.21
3070	SEWF-2	308	150°C	3.21
3071	SEW-2	324	200°C	3.20
3074	SEW-2	324	200°C	3.20
3075	SEW-2	324	200°C	3.20
3101	SEWF-2	308	150°C	3.21
3123	—	340	150°C	3.21
3125	SEW-2	308	200°C	3.20
3126	SEW-2	308	200°C	3.20
3135	—	334	200°C	3.19
3173	CL1251	356	125°C	3.14
3190	CL1052	349	105°C	3.17
3191	CL1052	344	105°C	3.16
3192	CL1052	344	105°C	3.16
3193	CL1052	344	105°C	3.16
3195	CL1251	356	125°C	3.14
3196	CL1251	356	125°C	3.14
3199	CL1054	357	105°C	3.14
3212	AWM	333	150°C	3.19
3213	AWM	333	150°C	3.19
3214	AWM	333	150°C	3.19
3239	—	—	80°C	3.22
3321	AWM	354	150°C	3.15
3340	CL1254	371	150°C	3.12
3374	CL1254	371	150°C	3.12
3436	CL1251	354	150°C	3.15
3484	AWM	372	125°C	3.13
3499	—	375	150°C	3.13
GTO-10	GTO-10	390	105°C	3.24
SIS	—	310	90°C	3.15

*These UL Styles are the Belden product which are listed in this catalog.

Hypalon and Teflon are DuPont trademarks.

PVC

UL AWM Style 1061
300V, 80°C
(CSA AWM)

Product Description

Tinned copper, semi-rigid PVC insulated (solid conductors suitable for wire wrap applications).

Solid Conductor

Stranded Conductor

Part No.	AWG (stranding)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
300V, 80°C (UL & CSA)										
UL AWM Style 1061 • CSA AWM										
9978	30 (solid)	.010	.25	.030	.76	100	30.5	.1	.05	1–5, 7–10, 13
						1000	304.8	1.0	.50	1–5, 7–10, 13
9987	30 (7x38)	.010	.25	.032	.81	100	30.5	.1	.05	2, 7–10
						1000	304.8	3.0	1.40	2, 7–10
9977	28 (solid)	.010	.25	.033	.84	100	30.5	.1	.05	1–5, 7–10, 13
						1000	304.8	1.0	.50	1–5, 7–10, 13
9986	28 (7x36)	.010	.25	.035	.89	100	30.5	.1	.05	1–5, 7–10, 13
						1000	304.8	3.0	1.40	1–5, 7–10, 13
						10000	3048.0	10.0	4.50	1–5, 7–10, 13
9976	26 (solid)	.010	.25	.036	.91	100	30.5	.2	.10	1–5, 7–10, 13
						1000	304.8	2.0	.90	1–5, 7–10, 13
9985	26 (7x34)	.010	.25	.039	.99	100	30.5	.2	.10	1–5, 7–10, 13
						1000	304.8	2.0	.90	1–5, 7–10, 13
						5000	1524.0	10.0	4.50	1–5, 7–10, 13
						10000	3048.0	20.0	9.10	1–5, 7–10, 13
9975	24 (solid)	.010	.25	.040	1.02	100	30.5	.2	.10	1–5, 7–10, 13
						1000	304.8	4.0	1.80	1–5, 7–10, 13
						5000	1524.0	10.0	4.50	1–5, 7–10, 13
						10000	3048.0	20.0	9.10	1–5, 7–10, 13
9984	24 (7x32)	.010	.25	.044	1.12	100	30.5	.2	.10	1–5, 7–10, 13
						1000	304.8	3.0	1.40	1–5, 7–10, 13
						5000	1524.0	10.0	4.50	1–5, 7–10, 13
						10000	3048.0	20.0	9.10	1–5, 7–10, 13
9979	22 (solid)	.010	.25	.047	1.19	1000	304.8	4.0	1.80	1–5, 7–10, 13
						5000	1524.0	15.0	6.80	1–5, 7–10, 13
						10000	3048.0	30.0	13.60	1–5, 7–10, 13
9983	22 (7x30)	.010	.25	.050	1.27	100	30.5	.3	.10	1–5, 7–10, 13
						1000	304.8	4.0	1.80	1–5, 7–10, 13
						5000	1524.0	15.0	6.80	1–5, 7–10, 13
						10000	3048.0	30.0	13.60	1–5, 7–10, 13
9982	20 (7x28)	.010	.25	.057	1.45	100	30.5	.5	.20	1–5, 7–10, 13
						1000	304.8	5.0	2.30	1–5, 7–10, 13
						5000	1524.0	25.0	11.40	1–5, 7–10, 13
9917	20 (10x30)	.010	.25	.056	1.42	1000	304.8	5.0	2.30	1–5, 7–10, 13
						5000	1524.0	20.0	9.10	1–5, 7–10, 13
9911	18 (16x30)	.010	.25	.067	1.70	1000	304.8	7.0	3.20	1–5, 7–10, 13
						5000	1524.0	35.0	15.90	1–5, 7–10, 13
9981	18 (19x30)	.010	.25	.066	1.68	100	30.5	.8	.40	1–5, 7–10, 13
						1000	304.8	7.0	3.20	1–5, 7–10, 13
9980	16 (19x28)	.010	.25	.078	1.98	100	30.5	1.3	.60	1–5, 7–10, 13
						1000	304.8	12.0	5.50	1–5, 7–10, 13
9909	16 (26x30)	.010	.25	.080	2.03	100	30.5	1.2	.50	1–5, 7–10, 13
						1000	304.8	12.0	5.50	1–5, 7–10, 13
						5000	1524.0	50.0	22.70	1–5, 7–10, 13

PVC

UL AWM Style 1007 300V, 80°C

(JQA-F-)
VW-1

Product Description

Tinned copper, PVC insulated. Rated 80°C, 300V. Rated 600V peak for electronic circuits, and internal wiring of electronic and electrical equipment.

Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
300V, 80°C (UL)										
UL AWM Style 1007 • JQA-F-										
9930	30 (7x38)	.015	.38	.044	1.12	100	30.5	.2	.1	1–5, 7–10, 13
						1000	304.8	2.0	.9	1–5, 7–10, 13

UL and CSA Dual-Rated Wire

UL AWM Style 1007 — 300V, 80°C
(CSA Type TR-64, 90°C)

UL AWM Style 1569 — 300V, 105°C
(CSA Type TRSR-64, 105°C)

(JQA-F- [except 9989])
VW-1

Product Description

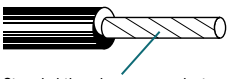
Tinned copper, PVC insulated. Rated 105°C, 300V. Rated 600V peak for electronic circuits, and internal wiring of electronic and electrical equipment.

Dual-Rated • 300V, 80°C and 300V, 105°C (UL & CSA)										
UL AWM Style 1007 and 1569 • CSA Types TR-64 and TRSR-64 • JQA-F-										
9928	28 (7x36)	.015	.38	.047	1.19	100	30.5	.2	.1	1–5, 7, 9, 10, 13
						1000	304.8	2.0	.9	1–5, 7–10, 13
						5000	1524.0	10.0	4.5	1–5, 7– 10, 13
9926	26 (7x34)	.015	.38	.051	1.30	100	30.5	.2	.1	1–5, 7–10, 13
						1000	304.8	3.0	1.4	1–5, 7–10, 13
						5000	1524.0	10.0	4.5	1–5, 7–10, 13
9923	24 (7x32)	.015	.38	.056	1.42	100	30.5	.3	.1	1–5, 7–10, 13
						1000	304.8	4.0	1.8	1–5, 7–10, 13
						5000	1524.0	15.0	6.8	1–5, 7–10, 13
9921	22 (7x30)	.015	.38	.062	1.57	100	30.5	.4	.2	1–10, 13
						1000	304.8	5.0	2.3	1–10, 13
						5000	1524.0	20.0	9.1	1–10, 13
9919	20 (7x28)	.015	.38	.069	1.75	100	30.5	.7	.3	1–5, 7–10, 13
						1000	304.8	6.0	2.7	1–5, 7–10, 13
9920	20 (10x30)	.015	.38	.067	1.70	1000	304.8	6.0	2.7	1–10, 13
						5000	1524.0	25.0	11.4	1–10, 13
9918	18 (16x30)	.015	.38	.079	2.01	100	30.5	.9	.4	1–10, 13
						1000	304.8	8.0	3.6	1–10, 13
						5000	1524.0	40.0	18.2	1–10, 13
9916	16 (26x30)	.015	.38	.092	2.34	100	30.5	1.3	.6	1–5, 7–10, 13
						1000	304.8	12.0	5.5	1–5, 7–10, 13
						5000	1524.0	55.0	25.0	1–5, 7–10, 13
UL AWM Style 1569 • CSA Type TR-64 and TRSR-64										
9989	14 (41x30)	.015	.38	.110	2.79	1000	304.8	17.0	7.7	1–5, 7–10, 13
						5000	1524.0	85.0	38.6	1–5, 7–10, 13

UL AWM Style 1007 300V, 80°C

(CSA Type TR-64, 90°C)
(JQA-F-)
VW-1

Recommended maximum baking cycles:
24 hours @ 300°F (149°C)



Stranded tinned copper conductor (Uni-Strand®)

300V, 80°C (UL) • **300V, 90°C** (CSA)										
UL AWM Style 1007 • CSA Type TR-64 • JQA-F-										
32822	22 (7x30) [.36 (7x.25)]	.015	.38	.062	1.58	5000†	1524.0	25.0	11.4	1–5, 7–9, 10, 13
32820	20 (7x28) [.56 (7x.32)]	.015	.38	.068	1.73	5000†	1524.0	30.0	13.6	9, 10

†Spools may contain more than one piece. Length may vary ±10% from length shown.

PVC

UL AWM Style 1015 600V, 105°C

(CSA Type TEW)

(JQA-F-)

VW-1

Product Description

Tinned copper, PVC insulated. Rated 105°C, 600V. Rated 2500V peak for electronic circuits, and internal wiring of electronic and electrical equipment.

Part No.	AWG (stranding)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
600V, 105°C (UL & CSA)										
UL AWM Style 1015 • CSA Type TEW • JQA-F-										
9924	24 (7x32)	.030	.76	.088	2.24	100	30.5	.7	.3	1–5, 9, 10, 13
						1000	304.8	6.0	2.7	1–5, 7–10, 13
						5000	1524.0	25.0	11.4	1–5, 7–10, 13
8920	22 (7x30)	.030	.76	.093	2.36	100	30.5	.8	.4	1–5, 9, 10, 13
						1000	304.8	7.0	3.2	1–5, 7–10, 13
						5000	1524.0	30.0	13.6	1–5, 7–10, 13
8919	20 (10x30)	.030	.76	.100	2.54	100	30.5	.9	.4	1–5, 9, 10, 13
						1000	304.8	8.0	3.6	1–5, 7–10, 13
						5000	1524.0	40.0	18.2	1–5, 7–10, 13
8918	18 (16x30)	.030	.76	.110	2.79	100	30.5	1.2	.5	1–5, 9, 10, 13, 189
						1000	304.8	10.0	4.5	1–5, 7–10, 13, 189
						5000	1524.0	50.0	22.7	1–5, 7–10, 13
8915	18 (solid)	.030	.76	.105	2.67	1000	304.8	10.0	4.5	1–5, 7–10, 13
						5000	1524.0	50.0	22.7	1–5, 7–10, 13
8917	16 (26x30)	.030	.76	.123	3.12	100	30.5	2.2	1.0	1–5, 9, 10, 13, 189
						500	152.4	8.0	3.6	1–5, 9, 10, 13
						1000	304.8	14.0	6.4	1–5, 7–10, 13, 189
						5000	1524.0	70.0	31.8	1–5, 7–10, 13
8916	14 (41x30)	.030	.76	.138	3.51	100	30.5	2.8	1.3	1–5, 7–10, 13, 189
						500	152.4	10.5	4.8	1–5, 7–10, 13, 189
						4000	1219.2	80.0	36.4	1–5, 7–10, 13
9912	12 (65x30)	.030	.76	.158	4.01	100	30.5	3.7	1.7	1–5, 7–10, 13
						250	76.2	7.8	3.5	1–5, 7–10, 13
						2000	609.6	60.0	27.3	1–5, 7–10, 13
9910	10 (65x28)	.030	.76	.180	4.57	100	30.5	5.1	2.3	2, 4, 9, 10
						250	76.2	11.8	5.3	2, 4, 9, 10
						2000	609.6	86.0	39.1	2, 9, 10
8910	10 (105x30)	.030	.76	.186	4.72	500	152.4	23.5	10.7	1–5, 7–10, 13
						2000	609.6	92.0	41.8	1–5, 7–10, 13

UL AWM Style 1015 600V, 105°C

(CSA Type TEW)

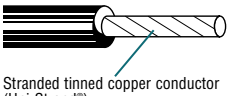
(JQA-F-)

VW-1

Product Description

Uni-Strand® conductors.

Recommended maximum baking cycles:
48 hours @ 275°F (135°C) • 24 hours @ 300°F (149°C)



Stranded tinned copper conductor (Uni-Strand®)

Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
600V, 105°C (UL & CSA)										
UL AWM Style 1015 • CSA Type TEW • JQA-F-										
32722	22 (7x30) [.36 (7x.25)]	.030	.76	.093	2.36	5000	1524.0	30.0	13.6	2, 4, 8, 9, 10, 13
32720	20 (7x28) [.56 (7x.32)]	.030	.76	.099	2.52	4000	1219.2	32.0	14.5	1–5, 9, 10, 12, 13
32718	18 (7x26) [.90 (7x.40)]	.030	.76	.108	2.74	4000	1219.2	44.0	20.0	2–5, 7, 9, 10, 13

PVC

UL AWM Style 1028 and 1015 600V, 105°C

(CSA Type TEW)

VW-1

Product Description

Tinned copper, PVC insulated.

Part No.	AWG (stranding)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
600V, 105°C (UL & CSA)										
UL AWM Style 1028 and 1015 • CSA Type TEW										
9908	8 (84x27)	.045	1.14	.250	6.35	100	30.5	8.4	3.8	2, 4, 9, 10
						250	76.2	19.0	8.7	2, 4, 9, 10
8908	8 (133x29)	.045	1.14	.262	6.65	250	76.2	20.0	9.1	1–5, 7–10, 13
						1500	457.2	114.0	51.8	2–5, 7–10, 13

UL AWM Style 1283 and 1015 600V, 105°C

(CSA Type TEW)

VW-1

Product Description

Tinned copper, PVC insulated.

600V, 105°C (UL & CSA)										
UL AWM Style 1283 and 1015 • CSA Type TEW										
9906	6 (133x27)	.060	1.52	.331	8.41	100	30.5	13.5	6.1	1–5, 7–10, 13
						1000	304.8	122.0	55.5	1–5, 7–10, 13
9904	4 (133x25)	.060	1.52	.392	9.96	50	15.2	11.2	5.1	1–5, 7–10, 13
						500	152.4	100.5	45.7	1–5, 7–10, 13

PVC

(Type MW) MIL-W-76C-PVC 1000V, 80°C*

Product Description

Tinned copper, PVC insulated, medium wall. The extruded PVC insulation is flame and ozone resistant and inert to most chemicals, oils, and solvents. Covers single conductor, PVC insulated hook-up wire for internal wiring of electrical and electronic equipment.

Solid Conductor

Stranded Conductor

Part No.	AWG (stranding)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
1000V, 80°C (MIL-Spec)										
(Type MW) MIL-W-76C-PVC										
8538	24 (solid) MW-C24 (1) A	.017	0.43	.055	1.40	100	30.5	.3	.1	1–13
						1000	304.8	3.0	1.4	1–10
8525	24 (7x32) MW-C24 (7) A	.017	0.43	.058	1.47	100	30.5	.3	.1	1–22
						1000	304.8	4.0	1.8	1–22
8530	22 (solid) MW-C22 (1) A	.017	0.43	.059	1.50	100	30.5	.4	.2	1–13
						1000	304.8	4.0	1.8	1–13
8524	22 (7x30) MW-C22 (7) A	.017	0.43	.064	1.63	100	30.5	.4	.2	1–22, 24–30
						1000	304.8	5.0	2.3	1–30
8529	20 (solid) MW-C20 (1) A	.017	0.43	.066	1.68	100	30.5	.7	.3	1–10, 12, 13
						1000	304.8	6.0	2.7	1–10, 13
8523	20 (10x30) MW-C20 (10) A	.017	0.43	.070	1.78	100	30.5	.7	.3	1–25, 27, 29, 30
						1000	304.8	6.0	2.7	1–24, 29, 30
8522	18 (16x30) MW-C18 (16) A	.017	0.43	.080	2.03	100	30.5	.9	.4	1–30
						1000	304.8	8.0	3.6	1–30
8521	16 (26x30) MW-C16 (26) A	.019	0.48	.098	2.49	100	30.5	1.4	.6	1–22
						1000	304.8	12.0	5.5	1–22
8520	14 (41x30) MW-C14 (41) A	.018	0.46	.111	2.82	100	30.5	1.9	.9	1–11, 13–16, 18, 19, 22
						1000	304.8	17.0	7.7	1–10, 13–22
8527	12 (65x30) MW-C12 (65) A	.018	0.46	.128	3.25	100	30.5	3.3	1.5	1–7, 9, 10
						1000	304.8	25.0	11.4	1–10

*Certification available upon special request.

(Type B) MIL-W-16878/1-PVC 600V, 105°C*

Product Description

Tinned copper, PVC insulated. Covers insulated wire for internal wiring of meters, panels, and electrical or electronic equipment. Temperatures to 105°C. For high-temperature MIL-Spec hook-up wire, see pages 3.9 to 3.11.

600V, 105°C (MIL-Spec)										
(Type B) MIL-W-16878/1-PVC										
8597	28 (7x36) B-28	.010	.25	.035	.89	100	30.5	.1	.05	1–10
						1000	304.8	1.0	.50	1–10
8505	26 (7x34) B-26	.010	.25	.039	.99	100	30.5	.2	.10	1–10, 14-22
						1000	304.8	4.0	1.80	1–10, 14-22
8504	24 (7x32) B-24	.010	.25	.044	1.12	100	30.5	.2	.10	1–10, 14-22
						1000	304.8	3.0	1.40	1–10, 14-22
8503	22 (7x30) B-22	.010	.25	.050	1.27	100	30.5	.3	.10	1–10, 14-22
						1000	304.8	4.0	1.80	1–10, 14-22
8502	20 (7x28) B-20	.010	.25	.058	1.47	100	30.5	.5	.20	1–10, 14-16, 18–20
						1000	304.8	5.0	2.30	1–10, 14-16, 18–20
8501	18 (7x26) B-18	.010	.25	.068	1.73	100	30.5	.9	.40	1–10, 14-22
						1000	304.8	8.0	3.60	1–10, 14-22
8500	16 (19x29) B-16	.010	.25	.079	2.01	100	30.5	1.2	.50	1–10, 14-22
						1000	304.8	11.0	5.00	1–10, 14-22

*Certification available upon special request.

PVC

Hook-Up Wire on Racks

Wire Dispenser Kits

Product Description

Great for R and D labs, engineers, servicemen and hobbyists.

Specify Part No. 8800 for Rack only.

Part No.	No. of Spools	Type of Wire (Part No.)	Temp. Rating	AWG (stranding)	Spool Lengths		Standard Unit Weight		Colors in Kits (See Color Codes Chart on Page 3.29)
					Ft.	m	Lbs.	kg	
Wire Dispenser Kits									
Hook-Up Wire on Racks									
8816	8	Tinned PVC (8522)	80°C	18 (16x30)	25	7.6	2.5	1.1	1,2,3,4,5,6,9,10
8824	8	Tinned PVC (8523)	80°C	20 (10x30)	25	7.6	2.1	1.0	1,2,3,4,5,6,9,10
8825	5	Tinned PVC (8502)	105°C	20 (7x28)	100	30.5	3.1	1.4	2,4,5,9,10
9531	5	Tinned PVC (8524)	80°C	22 (7x30)	100	30.5	2.7	1.2	2,5,6,9,10

Teflon®
High-Temperature

UL AWM Style 1180
300V, 200°C
(Type EE) MIL-W-16878/5
Teflon — 1000V, 200°C
VW-1

Product Description

Stranded silver-coated copper conductor insulated with extruded TFE Teflon.

Part No.	AWG (stranding)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
300V, 200°C (UL) • **1000V, 200°C** (MIL-Spec)										
UL AWM Style 1180 • (Type EE) MIL-W-16878/5 — Teflon										
83023*	24 (19x36)	.015	.38	.053	1.35	100†	30.5	.4	.2	1–10
						500†	152.4	3.0	1.4	2, 4, 5, 9, 10
						1000†	304.8	4.0	1.8	1–10
83025	22 (7x30)	.015	.38	.060	1.52	100†	30.5	.5	.2	1–7, 9, 10
						500†	152.4	3.0	1.4	2, 9, 10
						1000†	304.8	5.0	2.3	1–7, 9, 10
83026*	22 (19x34)	.015	.38	.059	1.50	100†	30.5	.5	.2	1–10
						500†	152.4	3.0	1.4	2, 9, 10
						1000†	304.8	5.0	2.3	1–10
83027*	20 (19x32)	.015	.38	.068	1.73	100†	30.5	.8	.4	1–10
						500†	152.4	4.0	1.8	2, 9, 10
						1000†	304.8	7.0	3.2	1–10
83028	20 (7x28)	.015	.38	.068	1.73	100†	30.5	.8	.4	1–10
						1000†	304.8	7.0	3.2	1–10
83029*	18 (19x30)	.015	.38	.077	1.96	100†	30.5	1.1	.5	1–10
						500†	152.4	5.5	2.5	2, 5, 6, 9, 10
						1000†	304.8	10.0	4.5	1–10
83030*	16 (19x29)	.015	.38	.088	2.24	100†	30.5	1.3	.6	1–10
						500†	152.4	6.5	3.0	2, 9, 10
						1000†	304.8	13.0	5.9	1–10

*Complies with MIL-W-16878 except stranding.
†Spools may contain more than one piece. Length may vary ±10% from length shown.

Teflon is a DuPont trademark.

Teflon®
High-Temperature

UL AWM Style 1213 — 105°C
(Type E) MIL-W-16878/4
Teflon — 600V, 200°C
VW-1

Product Description

Stranded silver-coated copper conductor insulated with extruded TFE Teflon.

Part No.	AWG (stranding)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
105°C (UL) • **600V, 200°C** (MIL-Spec)										
UL AWM Style 1213 • (Type E) MIL-W-16878/4 — Teflon										
83000	30 (7x38)	.010	.25	.032	.81	100†	30.5	.1	.05	1–10
						1000†	304.8	1.0	.50	1–10
83001*	28 (7x36)	.010	.25	.035	.89	100†	30.5	.2	.10	1–10
						1000†	304.8	2.0	.90	1–10
83002	26 (7x34)	.010	.25	.037	.94	100†	30.5	.2	.10	1–10
						500†	152.4	1.0	.50	9
						1000†	304.8	3.0	1.40	1–10
83003*	24 (19x36)	.010	.25	.043	1.09	100†	30.5	.3	.10	1–10
						500†	152.4	1.5	.70	1–10
						1000†	304.8	3.0	1.40	1–10
83004	24 (7x32)	.010	.25	.043	1.09	100†	30.5	.3	.10	1–10
						500†	152.4	1.5	.70	2, 10
						1000†	304.8	3.0	1.40	1–10
83005	22 (7x30)	.010	.25	.049	1.24	100†	30.5	.4	.20	1–10
						500†	152.4	3.0	1.40	2, 9, 10
						1000†	304.8	4.0	1.80	1–10
83006*	22 (19x34)	.010	.25	.048	1.22	100†	30.5	.4	.20	1–10
						500†	152.4	3.0	1.40	1–10
						1000†	304.8	4.0	1.80	1–10
83007*	20 (19x32)	.010	.25	.056	1.42	100†	30.5	.5	.20	1–10
						500†	152.4	4.0	1.80	2, 9, 10
						1000†	304.8	6.0	2.70	1–10
83008	20 (7x28)	.010	.25	.058	1.47	100†	30.5	.5	.20	1–10
						500†	152.4	4.0	1.80	1–10
						1000†	304.8	6.0	2.70	1–10

*Complies with MIL-W-16878 except stranding.
†Spools may contain more than one piece. Length may vary ±10% from length shown.

Teflon is a DuPont trademark.

Teflon®
High-Temperature

UL AWM Style 1371 — 105°C
(Type E) MIL-W-16878/4
Teflon — 600V, 200°C
VW-1

Product Description

Stranded silver-coated copper conductor insulated with extruded TFE Teflon.

Part No.	AWG (stranding)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
105°C (UL) • **600V, 200°C** (MIL-Spec)										
UL AWM Style 1371 • (Type E) MIL-W-16878/4 — Teflon										
83009*	18 (19x30)	.011	.28	.068	1.73	100†	30.5	1.0	.5	1–10
						500†	152.4	4.5	2.0	1–10
						1000†	304.8	9.0	4.1	1–10
83010*	16 (19x29)	.012	.30	.076	1.93	100†	30.5	1.2	.5	1–10
						500†	152.4	6.0	2.7	1–10
						1000†	304.8	11.0	5.0	1–10

*Complies with MIL-W-16878 except stranding.
†Spools may contain more than one piece. Length may vary ±10% from length shown.

UL AWM Style 1371 — 105°C
(Type ET) MIL-W-16878/6
Teflon — 250V, 200°C
VW-1

Product Description

Stranded silver-coated copper conductor insulated with extruded TFE Teflon.

105°C (UL) • **250V, 200°C** (MIL-Spec)										
UL AWM Style 1371 • (Type ET) MIL-W-16878/6 — Teflon										
83041	32 (7x40)	.006	.15	.022	.56	100†	30.5	.1	.05	6, 7, 10
						1000†	304.8	1.0	.50	6, 7, 10
83043	30 (7x38)	.006	.15	.024	.61	100†	30.5	.1	.05	2, 5, 7–10
						1000†	304.8	1.0	.50	2, 5, 7, 9, 10
83045	28 (7x36)	.006	.15	.027	.69	100†	30.5	.1	.05	1, 2, 5, 6, 9, 10
						1000†	304.8	1.0	.50	1, 2, 5, 6, 9, 10
83046	26 (7x34)	.006	.15	.031	.79	100†	30.5	.2	.10	1–4, 6–9
						1000†	304.8	2.0	.90	1–4, 6–10
83047	24 (7x32)	.006	.15	.036	.91	100†	30.5	.2	.10	6, 8–10
						1000†	304.8	2.0	.90	2, 6, 8–10
83048	24 (19x36)	.006	.15	.036	.91	100†	30.5	.2	.10	1–3, 5, 7, 8, 10
						1000†	304.8	2.0	.90	1–3, 5, 7, 8, 10
83049	22 (7x30)	.006	.15	.042	1.07	100†	30.5	.3	.10	1–10
						1000†	304.8	4.0	1.80	1–10
83050	22 (19x34)	.006	.15	.042	1.07	100†	30.5	.3	.10	1–3, 5–9
						1000†	304.8	4.0	1.80	1–3, 5–9

†Spools may contain more than one piece. Length may vary ±10% from length shown.

Teflon is a DuPont trademark.

EPDM
High-Temperature

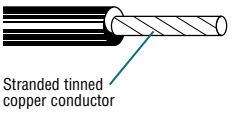
UL AWM Style 3340 and 3374 600V, 125°C Flex/150°C No Flex
(CSA Type CL1254)

Product Description

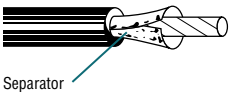
The insulation used for this High-Temperature lead wire is a chemically cross-linked ethylene-propylene diene elastomer. Never before could you find many of the characteristics that are found in Silicone and Hypalon® combined into one insulation. This 150°C EPDM wire offers more abrasion resistance than Hypalon… has the temperature rating of Silicone… at a price less than Silicone. EPDM has exceptional qualities that help you achieve new levels of economy and quality. 150°C EPDM wire is recommended for Class 130(B), 155(F) and also in some 180(H) systems. It's UL Recognized under Style 3374 as a 150°C—600V Appliance Wiring Material. The CSA Listing, as a coil lead, is 125°C, 600V. For additional technical information, see Technical Information pages at the end of this section.

Recommended maximum baking cycles:
24 hours @ 350°F (177°C) • 4 hours @ 375°F (190°C)

Stranded Conductor



Separator Over Conductor



Hypalon is a DuPont trademark.

Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
600V, 125°C Flex/150°C No Flex (UL) • **600V, 125°C** (CSA)										
UL AWM Style 3340 and 3374 • CSA Type CL1254										
37118	18 (16x30) [.82 (16x.25)]	.045	1.14	.142	3.61	500†	152.4	7.5	3.4	2, 4, 5, 9, 10, 13
						5000†	1524.0	70.0	31.8	2, 4, 9, 10, 13
37116	16 (26x30) [1.32 (26x.25)]	.045	1.14	.154	3.91	500†	152.4	9.5	4.3	2, 4, 5, 9, 10, 13
						4000†	1219.2	72.0	32.7	10
						5000†	1524.0	90.0	40.9	10
37114	14 (41x30) [2.08 (41x.25)]	.045	1.14	.169	4.29	500†	152.4	12.5	5.7	2, 10
						4000†	1219.2	96.0	43.6	2, 10
						5000†	1524.0	125.0	56.8	10
37112	12 (65x30) [3.29 (65x.25)]	.045	1.14	.190	4.83	500†	152.4	18.0	8.2	2, 10
						3000†	914.4	105.0	47.7	10
						5000†	1524.0	175.0	79.5	10
37110	10 (65x28) [5.23 (65x.32)]	.060	1.52	.240	6.10	500†	152.4	27.5	12.5	10
						2000†	609.6	108.0	49.2	10
						5000†	1524.0	275.0	125.0	10
37108*	8 (84x27) [8.60 (84x.36)]	.080	2.03	.327	8.31	250†	76.2	24.3	11.0	10
						500†	152.4	50.0	22.7	10
						2500†	762.0	235.0	106.8	10
37106*	6 (84x25) [13.66 (84x.46)]	.080	2.03	.383	9.73	100†	30.5	14.2	6.5	10
						250†	76.2	35.0	15.9	10
						500†	152.4	70.5	32.0	10
						2500†	762.0	345.0	156.8	10
37104*	4 (105x24) [21.53 (105x.51)]	.080	2.03	.432	10.97	100†	30.5	20.3	9.2	10
						250†	76.2	51.8	23.5	10
						500†	152.4	98.5	44.8	10
						1000†	304.8	196.0	89.1	10
37103*	3 (133x24) [27.28 (133x.51)]	.080	2.03	.453	11.51	100†	30.5	24.4	11.1	10
						250†	76.2	61.8	28.1	10
37102*	2 (163x24) [33.43 (163x.51)]	.080	2.03	.494	12.55	100†	30.5	31.1	14.1	10
						250†	76.2	73.8	33.5	10
						1000†	304.8	286.0	130.0	10
37101*	1 (210x24) [43.07 (210x.51)]	.095	2.41	.583	14.81	100†	30.5	41.0	18.6	10
						250†	76.2	95.0	43.2	10
						1000†	304.8	376.0	170.9	10
37190*	1/0 (262x24) [53.73 (262x.51)]	.095	2.41	.633	16.08	50†	15.2	24.7	11.2	10
						100†	30.5	48.3	22.0	10
						250†	76.2	115.5	52.5	10
						500†	152.4	223.5	101.6	10
37100*	2/0 (504x26) [67.85 (504x.41)]	.095	2.41	.698	17.73	50†	15.2	30.9	14.0	10
						100†	30.5	58.8	26.7	10
						250†	76.2	141.8	64.4	10
						500†	152.4	279.5	127.0	10
37130*	3/0 (630x26) [84.81 (630x.41)]	.095	2.41	.758	19.25	50†	15.2	38.5	17.5	10
						250†	76.2	174.0	79.1	10
						500†	152.4	346.0	157.3	10
37140*	4/0 (805x26) [108.37 (805x.41)]	.095	2.41	.849	21.57	50†	15.2	46.3	21.0	10
						250†	76.2	215.8	98.1	10
						500†	152.4	429.5	195.2	10

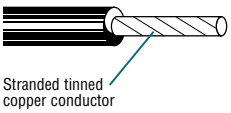
*Separator over conductor.
†Spools may contain more than one piece. Length may vary ±10% from length shown.

EPDM
High-Temperature

UL AWM Style 3484
600V, 125°C
(CSA Type AWM)

Product Description

This series of EPDM (ethylene-propylene diene elastomer) will provide you with a lead wire which possesses excellent characteristics. The reduced wall thickness results in a UL and CSA Rating of 600V, 125°C. For additional technical information, see Technical Information pages at the end of this section.



Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
600V, 125°C (UL & CSA)										
UL AWM Style 3484 • CSA Type AWM										
37222	22 (7x30) [.36 (7x.25)]	.030	.76	.093	2.36	*	*	*	*	Special Order*
37220	20 (10x30) [.51 (10x.25)]	.030	.76	.102	2.59	*	*	*	*	Special Order*
37218	18 (16x30) [.81 (16x.25)]	.030	.76	.109	2.77	*	*	*	*	Special Order*
37216	16 (26x30) [1.32 (26x.25)]	.030	.76	.123	3.12	*	*	*	*	Special Order*
37214	14 (41x30) [2.08 (41x.25)]	.030	.76	.138	3.51	*	*	*	*	Special Order*
37212	12 (65x30) [3.29 (65x.25)]	.030	.76	.158	4.01	*	*	*	*	Special Order*

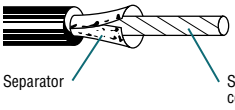
*Contact Belden's Customer Service Department for order requirements. **1-800-BELDEN-1**.

UL AWM Style 3499
7500V, 150°C
High-Voltage EPDM

Product Description

The insulation used for this High-Voltage wire is a chemically cross-linked ethylene-propylene diene elastomer with a separator for improved strippability. EPDM is naturally corona resistant and more heat resistant than many other rubber compounds and is able to take the longer bake cycles frequently needed for the big jobs. EPDM has superior weather resistance and low temperature pliability. EPDM is used in many high voltage applications. For additional technical information, see Technical Information pages at the end of this section.

Recommended maximum baking cycles:
24 hours @ 350°F (177°C) • 4 hours @ 375°F (190°C)



Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
7500V, 150°C (UL)										
UL AWM Style 3499										
37508	8 (84x27) [8.60 (84x.36)]	.125	3.18	.423	10.74	50†	15.2	9.6	4.4	10
						500†	152.4	66.0	30.0	10
						1000†	304.8	130.0	59.1	10
37506	6 (84x25) [13.66 (84x.46)]	.125	3.18	.470	11.94	50†	15.2	11.8	5.3	10
						500†	152.4	90.0	40.9	10
						1000†	304.8	176.0	80.0	10
37504	4 (105x24) [21.53 (105x.51)]	.125	3.18	.526	13.36	50†	15.2	15.0	6.8	10
						500†	152.4	122.0	55.5	10
						1000†	304.8	240.0	109.1	10
37502	2 (163x24) [33.43 (163x.51)]	.125	3.18	.581	14.76	50†	15.2	19.4	8.8	10
						500†	152.4	167.0	75.9	10
						1000†	304.8	333.0	151.4	10
37501	1 (210x24) [43.07 (210x.51)]	.125	3.18	.638	16.21	50†	15.2	23.1	10.5	10
						500†	152.4	206.0	93.6	10
37590	1/0 (262x24) [53.73 (262x.51)]	.125	3.18	.688	17.48	50†	15.2	27.3	12.4	10
						250†	76.2	123.5	56.1	10
						500†	152.4	243.0	110.5	10
37500	2/0 (504x26) [67.85 (504x.41)]	.125	3.18	.753	19.13	50†	15.2	34.2	15.5	10
						250†	76.2	150.5	68.4	10
						500†	152.4	302.5	137.5	10
37530	3/0 (630x26) [84.81 (630x.41)]	.125	3.18	.813	20.65	50†	15.2	40.5	18.4	10
						250†	76.2	184.0	83.6	10
37540	4/0 (805x26) [108.37 (805x.41)]	.125	3.18	.909	23.09	50†	15.2	48.7	22.1	10
						250†	76.2	228.8	104.0	10
						500†	152.4	472.0	214.5	10

†Spools may contain more than one piece. Length may vary ±10% from length shown.

XL-Dur®

UL AWM Style 3199
300V, 105°C
(CSA Type CL1054)

Product Description

This insulation is a chemically cross-linked polyethylene applied in a single extrusion. This construction has excellent thermal aging characteristics, moisture resistance, and solvent resistance. It provides an economic alternative to Hypalon® where extreme flexibility is not required. The insulation resists deformation when subjected to momentary high temperatures in customer assembly processes.

Recommended maximum baking cycles:
24 hours @ 300°F (149°C) • 12 hours @ 325°F (163°C)
8 hours @ 350°F (177°C)

Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
300V, 105°C (UL & CSA)										
UL AWM Style 3199 • CSA Type CL1054										
35722	22 (7x30) [.36 (7x.25)]	.015	.38	.062	1.58	*	*	*	*	Special Order*
35720	20 (10x30) [.51 (10x.25)]	.015	.38	.073	1.85	*	*	*	*	Special Order*
35718	18 (19x30.5) [.83 (19x.24)]	.015	.38	.078	1.98	5000†	1524.0	40.0	18.2	1, 3, 5, 6, 9, 10, B02
35716	16 (19x29) [1.23 (19x.29)]	.015	.38	.091	2.31	*	*	*	*	Special Order*

*Contact Belden's Customer Service Department for order requirements. **1-800-BELDEN-1**.
† Spools may contain more than one piece. Length may vary ±10% from length shown.

UL AWM Style 3173, 3195, 3196
600V, 125°C
(CSA Type CL1251)

Product Description

This insulation is a chemically cross-linked polyethylene applied in a single extrusion. This construction has excellent thermal aging characteristics, moisture resistance, and solvent resistance. It provides an economic alternative to Hypalon where extreme flexibility is not required. The insulation resists deformation when subjected to momentary high temperatures in customer assembly processes. The 356-series of XL-DUR is recommended for Class 130(B) as motor leads.

Recommended maximum baking cycles:
24 hours @ 300°F (149°C) • 12 hours @ 325°F (163°C)
8 hours @ 350°F (177°C)

Stranded Conductor

Separator Over Conductor

Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
600V, 125°C (UL & CSA)										
UL AWM Style 3173 • CSA Type CL1251										
35622	22 (7x30) [.36 (7x.25)]	.030	.76	.093	2.36	5000†	1524.0	35.0	15.9	2, 9, 10
35620	20 (10x30) [.51 (10x.25)]	.030	.76	.101	2.57	500†	152.4	5.0	2.3	10
						5000†	1524.0	40.0	18.2	1, 2, 4, 6, 9, 10
35618	18 (16x30) [.81 (16x.25)]	.030	.76	.109	2.77	500†	152.4	6.0	2.7	2, 4, 5, 10, 13
						5000†	1524.0	55.0	25.0	1–10, 12, 13 620, B02
35616	16 (26x30) [1.32 (26x.25)]	.030	.76	.122	3.10	500†	152.4	8.5	3.9	2, 4, 5, 9, 10
						5000†	1524.0	75.0	34.1	1–6, 8–10, B02
35614	14 (41x30) [2.08 (41x.25)]	.030	.76	.137	3.48	500†	152.4	10.5	4.8	10
						5000†	1524.0	105.0	47.7	2–5, 6, 9, 10
35612	12 (65x30) [3.29 (65x.25)]	.030	.76	.153	3.89	500†	152.4	15.0	6.8	10
						3000†	914.4	90.0	40.9	9, 10
35610	10 (65x28) [5.23 (65x.32)]	.030	.76	.177	4.50	2000†	609.6	86.0	39.1	9, 10
UL AWM Style 3195 • CSA Type CL1251										
35608††	8 (133x29) [8.60 (133x.29)]	.045	1.14	.263	6.68	2000†	609.6	158.0	71.8	9, 10
UL AWM Style 3196 • CSA Type CL1251										
35606††	6 (133x27) [13.61 (133x.36)]	.060	1.52	.333	8.46	2000†	609.6	252.0	114.5	9, 10

† Spools may contain more than one piece. Length may vary ±10% from length shown.
†† Separator over conductor.

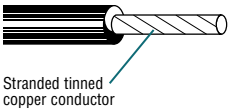
Hypalon is a DuPont trademark.

XL-Dur® (High-Temperature) and SIS Wire

UL AWM Style 3436 and 3321 XL-Dur — 600V, 150°C
(CSA Type CL1251 and AWM)

Product Description

This series of chemically cross-linked polyethylene lead wire is available for higher temperature applications. It is UL Recognized to 600V, 150°C. As with other cross-linked lead wire, it has excellent heat aging characteristics in combination with excellent electrical and physical properties.



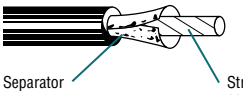
Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
600V, 150°C (UL & CSA)										
UL AWM Style 3436 and 3321 • CSA Type CL1251 and AWM										
35422	22 (7x30) [.36 (7x.25)]	.030	.76	.093	2.36	*	*	*	*	Special Order*
35420	20 (10x30) [.51 (10x.25)]	.030	.76	.102	2.59	500†	152.4	4.5	2.0	9, 10
						5000†	1524.0	40.0	18.2	9, 10
35418	18 (16x30) [.81 (16x.25)]	.030	.76	.110	2.79	500†	152.4	5.5	2.5	9, 10
						5000†	1524.0	50.0	22.7	9, 10
35416	16 (26x30) [1.32 (26x.25)]	.030	.76	.123	3.12	500†	152.4	7.5	3.4	9, 10
						5000†	1524.0	70.0	31.8	9, 10
35414	14 (41x30) [2.08 (41x.25)]	.030	.76	.138	3.51	500†	152.4	10.0	4.5	9, 10
						5000†	1524.0	95.0	43.2	9, 10
35412	12 (65x30) [3.29 (65x.25)]	.030	.76	.153	3.89	500†	152.4	14.5	6.6	9, 10
						5000†	1524.0	140.0	63.6	9, 10
35410	10 (65x28) [5.23 (65x.32)]	.030	.76	.177	4.50	500†	152.4	22.0	10.0	9, 10
						5000†	1524.0	210.0	95.5	9, 10

*Contact Belden's Customer Service Department for order requirements. **1-800-BELDEN-1**.
†Spools may contain more than one piece. Length may vary ±10% from length shown.

UL Type SIS — 600V, 90°C (UL)

Product Description

For wiring switchboards, panelboards, distribution boards, including instrument and control wiring in these applications. The wire is covered by a separator for improved strippability.



Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
600V, 90°C (UL)										
UL Type SIS • VW-1										
31014	14 (41x30) [2.08 (41x.25)]	.030	.76	.144	3.66	2500†	762.2	50.0	22.7	8
						5000†	1524.0	105.0	47.7	8
31012	12 (65x30) [3.29 (65x.25)]	.030	.76	.167	4.24	2500†	762.2	77.5	35.2	8
						3000†	914.4	93.0	42.3	8
31010 new	10 (65x28) [5.23 (65x.32)]	.030	.76	.184	4.67	2500†	762.2	105.0	47.7	8
31008	8 (133x29) [8.60 (133x.29)]	.045	1.14	.268	6.75	2500†	762.2	190.0	86.4	8
UL Type SIS										
31014N new	14 (41x30) [2.08 (41x.25)]	.030	.76	.144	3.66	2500†	762.2	52.5	23.9	8
31012N new	12 (65x30) [3.29 (65x.25)]	.030	.76	.167	4.24	2500†	762.2	77.5	35.2	8
31010N new	10 (65x28) [5.23 (65x.32)]	.030	.76	.184	4.67	2500†	762.2	107.5	48.9	8
31008N new	8 (133x29) [8.60 (133x.29)]	.045	1.14	.268	6.75	2500†	762.2	197.5	89.8	8

†Spools may contain more than one piece. Length may vary ±10% from length shown.

Hypalon®

UL AWM Style 3191
600V, 105°C
(CSA Type CL1053)

Product Description

This insulation is chlorosulfonated polyethylene. Hypalon insulation has excellent heat resistance, color stability and electrical properties. Hypalon is recommended for motor leads for Class 130(B) insulation systems. It may be considered as an alternative to Silicone rubber to withstand 155°C varnish baking temperatures, but is not suitable for operating temperatures above Class 130(B).

Recommended maximum baking cycles:
24 hours @ 300°F (149°C)

Stranded tinned copper conductor

Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
600V, 105°C (UL & CSA)										
UL AWM Style 3191 • CSA Type CL1053										
34418	18 (16x30) [.81 (16x.25)]	.045	1.14	.142	3.61	100†	30.5	2.3	1.0	2, 10
						500†	152.4	8.0	3.6	2, 4, 5, 8–10, 13
						5000†	1524.0	75.0	34.1	2, 4, 5, 8, 10, 13
34416	16 (26x30) [1.32 (26x.25)]	.045	1.14	.155	3.94	100†	30.5	2.8	1.3	2, 10
						500†	152.4	10.5	4.8	2, 4, 5, 8–10, 13
						4000†	1219.2	80.0	36.4	8–10
34414	14 (41x30) [2.08 (41x.25)]	.045	1.14	.170	4.32	100†	30.5	3.5	1.6	2, 8, 10
						500†	152.4	13.5	6.1	2, 5, 8, 10
						4000†	1219.2	108.0	49.1	2, 8, 10
34412	12 (65x30) [3.29 (65x.25)]	.045	1.14	.190	4.83	100†	30.5	4.4	2.0	2, 8, 10
						500†	152.4	21.5	9.8	2, 5, 6, 8, 10
						3000†	914.4	114.0	51.8	2, 8, 10

†Spools may contain more than one piece. Length may vary ±10% from length shown.

UL AWM Style 3191, 3192, 3193
600V, 105°C
(CSA Type CL1052, 300V)

Product Description

This insulation is chlorosulfonated polyethylene. Hypalon insulation has excellent heat resistance, color stability and electrical properties. Hypalon is recommended for motor leads for Class 130(B) insulation systems. It may be considered as an alternative to Silicone rubber to withstand 155°C varnish baking temperatures, but is not suitable for operating temperatures above Class 130(B).

Recommended maximum baking cycles:
24 hours @ 300°F (149°C)

Stranded Conductor

Stranded tinned copper conductor

Separator Over Conductor

Separator

Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
600V, 105°C (UL) • **300V, 105°C** (CSA)										
UL AWM Style 3191 • CSA Type CL1052††										
34410	10 (65x28) [5.23 (65x.32)]	.045	1.14	.209	5.31	100†	30.5	5.8	2.6	8, 10
						500†	152.4	25.5	11.6	8, 10
						2000†	609.6	100.0	45.5	8, 10
UL AWM Style 3192 • CSA Type CL1052††										
34408*	8 (84x27) [8.60 (84x.36)]	.060	1.52	.290	7.37	100†	30.5	9.9	4.5	8, 10
						250†	76.2	24.3	11.0	8, 10
34406*	6 (84x25) [13.66 (84x.46)]	.060	1.52	.343	8.71	100†	30.5	13.7	6.2	8, 10
						250†	76.2	34.3	15.6	10
						1000†	304.8	136.0	61.8	10
34404*	4 (105x24) [21.53 (105x.51)]	.060	1.52	.399	10.14	100†	30.5	19.4	8.8	8, 10
						250†	76.2	51.0	23.2	10
						500†	152.4	97.0	44.1	10
34403*	3 (133x24) [27.28 (133x.51)]	.060	1.52	.420	10.69	500†	152.4	118.0	53.6	10
34402*	2 (163x24) [33.43 (163x.51)]	.060	1.52	.454	11.53	100†	30.5	30.3	13.8	8, 10
						250†	76.2	70.8	32.2	10
						500†	152.4	139.0	63.2	10
UL AWM Style 3193 • CSA Type CL1052††										
34401*	1 (210x24) [43.07 (210x.51)]	.080	2.03	.557	14.15	50†	15.2	20.2	9.2	10
						100†	30.5	42.3	19.2	8, 10
						250†	76.2	97.0	44.1	10
34490*	1/0 (262x24) [53.73 (262x.51)]	.080	2.03	.607	15.42	50†	15.2	25.7	11.7	8, 10
						100†	30.5	48.9	22.2	10
						250†	76.2	114.8	52.2	10
34400*	2/0 (504x26) [67.85 (504x.41)]	.080	2.03	.668	16.97	50†	15.2	30.4	13.8	8
						100†	30.5	57.9	26.3	10
						250†	76.2	139.5	63.4	10
34430*	3/0 (630x26) [84.81 (630x.41)]	.080	2.03	.732	18.59	50†	15.2	38.5	17.5	10
						250†	76.2	175.8	79.9	10
34440*	4/0 (805x26) [108.37 (805x.41)]	.080	2.03	.819	20.80	50†	15.2	46.2	21.0	8, 10
						250†	76.2	215.0	97.7	10

* Separator over conductor.
† Spools may contain more than one piece. Length may vary ±10% from length shown.
†† CSA requires additional wall thickness in sizes 10 AWG and larger to meet CL1053 requirements.

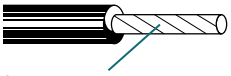
Hypalon is a DuPont trademark.

Hypalon®

UL AWM Style 3190 300V, 105°C
(CSA Type CL1052)

Product Description

This insulation is chlorosulfonated polyethylene. Hypalon insulation has excellent heat resistance, color stability and electrical properties. Hypalon is recommended for motor leads for Class 130(B) insulation systems. It may be considered as an alternative to Silicone rubber to withstand 155°C varnish baking temperatures, but is not suitable for operating temperatures above Class 130(B).



Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
300V, 105°C (UL & CSA)										
UL AWM Style 3190 • CSA Type CL1052										
34922	22 (7x30) [.36 (7x.25)]	.030	.76	.093	2.36	5000†	1524.0	35.0	15.9	10
34920	20 (10x30) [.51 (10x.25)]	.030	.76	.100	2.54	5000†	1524.0	45.0	20.5	8, 10
34918	18 (16x30) [.81 (16x.25)]	.030	.76	.110	2.79	500†	152.4	6.5	3.0	2, 4, 10
						5000†	1524.0	55.0	25.0	2, 4, 10
34916	16 (26x30) [1.32 (26x.25)]	.030	.76	.123	3.12	500†	152.4	9.0	4.1	2, 9, 10
						5000†	1524.0	80.0	36.4	10
34914	14 (41x30) [2.08 (41x.25)]	.030	.76	.138	3.51	*	*	*	*	Special Order*

*Contact Belden's Customer Service Department for order requirements. **1-800-BELDEN-1**.
†Spools may contain more than one piece. Length may vary ±10% from length shown.

5000V High-Voltage Hypalon

Product Description

This insulation is chlorosulfonated polyethylene. Hypalon insulation has excellent heat resistance, color stability and electrical properties.

Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
5000V										
High-Voltage										
36108	8 (84x27) [8.60 (84x.36)]	.150	3.81	.480	12.19	50†	15.2	11.6	5.3	10
						500†	152.4	86.5	39.3	10
36106	6 (84x25) [13.66 (84x.46)]	.150	3.81	.532	13.51	50†	15.2	14.2	6.4	10
						500†	152.4	113.5	51.6	10
36104	4 (105x24) [21.53 (105x.51)]	.150	3.81	.588	14.94	50†	15.2	15.6	7.1	10
						500†	152.4	148.0	67.3	10
36102	2 (163x24) [33.43 (163x.51)]	.150	3.81	.643	16.33	50†	15.2	22.4	10.2	10
						500†	152.4	194.0	88.2	10
36101	1 (210x24) [43.07 (210x.51)]	.150	3.81	.700	17.78	50†	15.2	26.4	12.0	10
						250†	76.2	121.8	55.3	10
36190	1/0 (262x24) [53.73 (262x.51)]	.150	3.81	.750	19.05	50†	15.2	32.4	14.7	10
						500†	152.4	287.5	130.7	10
36100	2/0 (504x26) [67.85 (504x.41)]	.150	3.81	.815	20.70	50†	15.2	37.5	17.0	10
36140	4/0 (805x26) [108.37 (805x.41)]	.150	3.81	.959	24.36	50†	15.2	52.5	23.8	10
						250†	76.2	247.5	112.5	10

†Spools may contain more than one piece. Length may vary ±10% from length shown.

Hypalon is a DuPont trademark.

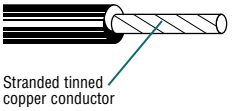
Neoprene

UL AWM Style 3044
300V, 90°C
(CSA Type CL902)

Product Description

Neoprene insulation has good heat aging characteristics and is an excellent low-cost motor lead wire. It may be considered for use in hazardous locations and is being used in explosion-proof motors recognized by UL. 12 AWG and smaller sizes are dual labeled UL and CSA.

Recommended maximum baking cycles:
24 hours @ 300°F (149°C) • 8 hours @ 325°F (163°C)
15 minutes @ 450°F (232°C)



Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
300V, 90°C (UL & CSA)										
UL AWM Style 3044 • CSA Type CL902										
31520	20 (10x30) [.51 (10x.25)]	.030	.76	.100	2.54	500†	152.4	5.0	2.3	10
						5000†	1524.0	40.0	18.2	10
31518	18 (16x30) [.81 (16x.25)]	.030	.76	.109	2.77	500†	152.4	6.5	3.0	2, 4, 5, 6, 9, 10
						2000†	609.6	22.0	10.0	1–6, 9, 10
						5000†	1524.0	55.0	25.0	1–6, 9, 10, 620, B02
						10000†	3048.8	110.0	50.0	5, 9, 10
31516	16 (26x30) [1.32 (26x.25)]	.030	.76	.122	3.10	500†	152.4	9.0	4.1	2–6, 9, 10
						5000†	1524.0	75.0	34.1	2, 4, 5, 9, 10

†Spools may contain more than one piece. Length may vary ±10% from length shown.

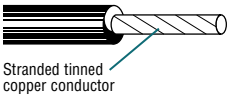
UL AWM Style 3046, 3048, 3049
600V, 90°C
(CSA Type CL903 available as shown)

Product Description

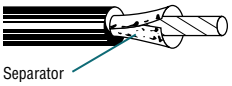
Neoprene insulation has good heat aging characteristics and is an excellent low-cost motor lead wire. It may be considered for use in hazardous locations and is being used in explosion-proof motors recognized by UL. 12 AWG and smaller sizes are dual labeled UL and CSA.

Recommended maximum baking cycles:
24 hours @ 300°F (149°C) • 8 hours @ 325°F (163°C)
15 minutes @ 450°F (232°C)

Stranded Conductor



Separator Over Conductor



Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
600V, 90°C (UL)										
UL AWM Style 3046 • CSA Type CL903										
32518	18 (16x30) [.81 (16x.25)]	.045	1.14	.142	3.61	500†	152.4	8.5	3.9	9, 10
						5000†	1524.0	80.0	36.4	9, 10
32516	16 (26x30) [1.32 (26x.25)]	.045	1.14	.155	3.94	500†	152.4	11.0	5.0	2–6, 9, 10
						5000†	1524.0	105.0	47.7	2, 9, 10
31514	14 (41x30) [2.08 (41x.25)]	.045	1.14	.169	4.29	500†	152.4	13.5	6.1	2, 4, 5, 9, 10
						4000†	1219.2	108.0	49.1	2, 4, 5, 9, 10
31512	12 (65x30) [3.29 (65x.25)]	.045	1.14	.190	4.83	250†	76.2	10.0	4.5	10
						3000†	914.4	117.0	53.2	10
UL AWM Style 3046††										
31510	10 (65x28) [5.29 (65x.32)]	.045	1.14	.209	5.31	250†	76.2	13.0	5.9	10
						2000†	609.6	106.0	48.2	10
UL AWM Style 3048††										
31508*	8 (84x27) [8.60 (84x.36)]	.060	1.52	.285	7.24	500†	152.4	47.5	21.6	2, 10
31506*	6 (84x25) [13.66 (84x.46)]	.060	1.52	.343	8.71	500†	152.4	68.0	30.9	10
31504*	4 (105x24) [21.53 (105x.51)]	.060	1.52	.399	10.14	250†	76.2	52.0	23.6	10
31502*	2 (163x24) [33.43 (163x.51)]	.060	1.52	.454	11.53	250†	76.2	71.0	32.3	10
UL AWM Style 3049††										
31501*	1 (210x24) [43.07 (210x.51)]	.080	2.03	.557	14.15	250†	76.2	98.5	44.8	10
31590*	1/0 (262x24) [53.73 (262x.51)]	.080	2.03	.607	15.42	250†	76.2	116.8	53.1	10
31500*	2/0 (504x26) [67.85 (504x.41)]	.080	2.03	.668	16.97	250†	76.2	141.5	64.3	10

*Separator over conductor.
†Spools may contain more than one piece. Length may vary ±10% from length shown.
††CSA requires additional wall thickness in sizes 10 AWG and larger to meet CL903 requirements.

Silicone Rubber
Braidless

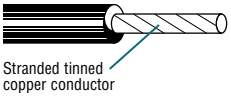
UL AWM Style 3212, 3213, 3214 600V, 150°C
(CSA Type AWM)

Product Description

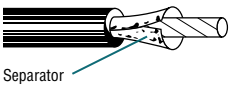
The 333 series of braidless Silicone 150°C lead wire features easy and clean stripping without the problems associated with glass braid wire. It has excellent physical and mechanical strength properties. Braidless Silicone lead wire is also recommended for consideration in applications requiring Class 155(F) or Class 180(H) materials. Recommended for high-temperature applications in motors, lighting fixtures, clothes dryers, stoves, therapeutic and electronic devices. It is recommended that varnish compatibility be checked before production. Some rigid varnishes may cause cracking when the wire is severely bent.

Recommended maximum baking cycles:
24 hours @ 410°F (210°C)

Stranded Conductor



Separator Over Conductor



Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
600V, 150°C (UL & CSA)										
UL AWM Style 3212 • CSA Type AWM										
33322	22 (7x30) [.36 (7x.25)]	.045	1.14	.125	3.18	*	*	*	*	Special Order*
33320	20 (10x30) [.51 (10x.25)]	.045	1.14	.132	3.53	*	*	*	*	Special Order*
33318	18 (16x30) [.81 (16x.25)]	.045	1.14	.142	3.61	500†	152.4	7.0	3.2	9, 10
33316	16 (26x30) [1.32 (26x.25)]	.045	1.14	.155	3.94	500†	152.4	9.5	4.3	9, 10
33314	14 (41x30) [2.08 (41x.25)]	.045	1.14	.170	4.32	500†	152.4	12.0	5.5	9, 10
33312	12 (65x30) [3.29 (65x.25)]	.045	1.14	.190	4.83	500†	152.4	20.0	9.1	9, 10
33310††	10 (65x28) [5.23 (65x.32)]	.045	1.14	.209	5.31	500†	152.4	24.0	10.9	10
UL AWM Style 3213 • CSA Type AWM										
33308††	8 (84x27) [8.60 (84x.36)]	.060	1.52	.283	7.19	500†	152.4	40.5	18.4	10
33306††	6 (84x25) [13.66 (84x.46)]	.060	1.52	.334	8.48	500†	152.4	68.0	30.9	10
33304††	4 (105x24) [21.53 (105x.51)]	.060	1.52	.390	9.91	250†	76.2	48.8	22.2	10
33302††	2 (163x24) [33.43 (163x.51)]	.060	1.52	.457	11.61	250†	76.2	68.8	31.3	10
UL AWM Style 3214 • CSA Type AWM										
33390††	1/0 (262x24) [53.73 (262x.51)]	.080	2.03	.594	15.09	250†	76.2	108.3	49.2	10

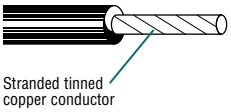
* Contact Belden's Customer Service Department for order requirements. **1-800-BELDEN-1**.
† Spools may contain more than one piece. Length may vary ±10% from length shown.
†† Separator over conductor.

UL AWM Style 3135 600V, 200°C

Product Description

The 334 Series is for use only in totally enclosed systems.

Recommended maximum baking cycles:
24 hours @ 410°F (210°C)



600V, 200°C (UL)										
UL AWM Style 3135										
33418	18 (7x26) [.94 (7x.41)]	.030	.76	.111	2.82	*	*	*	*	Special Order*
33416	16 (7x24) [1.44 (7x.51)]	.030	.76	.123	3.12	*	*	*	*	Special Order*
33414	14 (7x22) [2.27 (7x.64)]	.030	.76	.139	3.53	*	*	*	*	Special Order*

*Contact Belden's Customer Service Department for order requirements. **1-800-BELDEN-1**.

Silicone Rubber

Glass Braid

UL AWM Style 3071, 3074, 3075, 3125 and 3126
600V, 200°C
(CSA Type SEW-2)

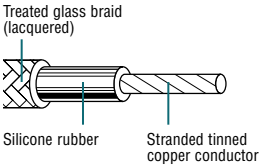
VW-1

Product Description

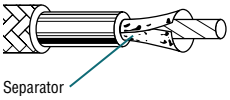
UL recognizes finer strands on the 150°C rated wire. The Silicone insulation strips clean and easy. The glass braid provides additional abrasion resistance and is treated to prevent fraying. Recommended for high-temperature applications in motors, lighting fixtures, clothes dryers, stoves, therapeutic and electronic devices. These wires can be used with Class 130(B), 155(F) or 180(H) insulation systems.

Recommended maximum baking cycles:
24 hours @ 410°F (210°C)

Stranded Conductor



Separator Over Conductor



Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
600V, 200°C (UL & CSA)										
UL AWM Style 3071 • CSA Type SEW-2										
32418	18 (7x26) [.94 (7x.41)]	.030	.76	.133	3.38	500†	152.4	7.5	3.4	9, 10
						6000†	1829.3	78.0	35.5	9, 10
32416	16 (7x24) [1.44 (7x.51)]	.030	.76	.145	3.68	500†	152.4	9.5	4.3	9, 10
						6000†	1829.3	108.0	49.1	9, 10
32414	14 (7x22) [2.27 (7x.64)]	.030	.76	.167	4.24	500†	152.4	12.0	5.5	9, 10
						4000†	1219.2	100.0	45.5	9, 10
UL AWM Style 3074 • CSA Type SEW-2										
32412	12 (19x24.5) [3.30 (19x.47)]	.030	.76	.190	4.83	500†	152.4	17.5	8.0	9, 10
UL AWM Style 3075 • CSA Type SEW-2										
32410	10 (19x22.5) [5.27 (19x.59)]	.045	1.14	.238	6.05	500†	152.4	28.0	12.7	9, 10
UL AWM Style 3125 • CSA Type SEW-2										
30808*	8 (54x25) [8.78 (54x.46)]	.060	1.52	.313	7.95	100†	30.5	9.8	4.5	9, 10
						500†	152.4	48.0	21.8	9, 10
						3000†	914.4	285.0	129.5	9, 10
30806†	6 (84x25) [13.66 (84x.46)]	.060	1.52	.368	9.35	100†	30.5	14.2	6.5	9, 10
						500†	152.4	71.0	32.3	9, 10
						2000†	609.6	284.0	129.1	9, 10
30804*	4 (105x24) [21.53 (105x.51)]	.060	1.52	.424	10.77	250†	76.2	52.3	23.8	9, 10
						2000†	609.6	398.0	180.9	9, 10
30802*	2 (163x24) [33.43 (163x.51)]	.060	1.52	.496	12.60	250†	76.2	74.5	33.9	9, 10
UL AWM Style 3126 • CSA Type SEW-2										
30801*	1 (210x24) [43.07 (210x.51)]	.080	2.03	.622	15.80	100†	30.5	42.2	19.2	9, 10
						250†	76.2	100.5	45.7	9, 10
30890*	1/0 (262x24) [53.73 (262x.51)]	.080	2.03	.670	17.02	100†	30.5	51.5	23.4	9, 10
						250†	76.2	123.5	56.1	9, 10
30800*	2/0 (504x26) [67.85 (504x.41)]	.080	2.03	.727	18.47	50†	15.2	31.1	14.1	9
						100†	30.5	60.5	27.5	9
						250†	76.2	146.0	66.4	9
30830*	3/0 (630x26) [84.81 (630x.41)]	.080	2.03	.795	20.19	250†	76.2	181.0	82.3	9
30840*	4/0 (266x21) [109.51 (266x.72)]	.080	2.03	.779	19.79	50†	15.2	47.9	21.8	9
						250†	76.2	220.8	100.3	9

*Separator over conductor.
†Spools may contain more than one piece. Length may vary ±10% from length shown.

Silicone Rubber

Glass Braid and Mercury Switch Wire

Glass Braid
UL AWM Style 3069, 3070, 3101
600V, 150°C

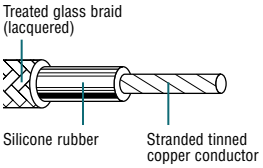
(CSA Type SEWF-2)

VW-1

Product Description

UL recognizes finer strands on the 150°C rated wire. The Silicone insulation strips clean and easy. The glass braid provides additional abrasion resistance and is treated to prevent fraying. Recommended for high-temperature applications in motors, lighting fixtures, clothes dryers, stoves, therapeutic and electronic devices. These wires can be used with Class 130(B), 155(F) or 180(H) insulation systems.

Recommended maximum baking cycles:
24 hours @ 410°F (210°C)



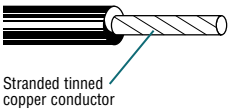
Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
600V, 150°C (UL & CSA)										
UL AWM Style 3069 • CSA Type SEWF-2										
30820	20 (10x30) [.51 (10x.25)]	.030	.76	.122	3.10	500†	152.4	6.0	2.7	9, 10
UL AWM Style 3070 • CSA Type SEWF-2										
30818	18 (16x30) [.81 (16x.25)]	.030	.76	.132	3.35	100†	30.5	2.0	.9	9, 10
						500†	152.4	7.0	3.2	9, 10
						6000†	1829.3	78.0	35.5	10
30816	16 (26x30) [1.32 (26x.25)]	.030	.76	.145	3.68	500†	152.4	9.0	4.1	9, 10
30814	14 (41x30) [2.08 (41x.25)]	.030	.76	.164	4.17	500†	152.4	12.0	5.5	9, 10
30812	12 (65x30) [3.29 (65x.25)]	.030	.76	.186	4.72	500†	152.4	17.0	7.7	9, 10
						3000†	914.4	102.0	46.4	10
UL AWM Style 3101 • CSA Type SEWF-2										
30810	10 (65x28) [5.23 (65x.32)]	.045	1.14	.239	6.07	100†	30.5	6.3	2.9	9, 10
						500†	152.4	27.0	12.3	9, 10

†Spools may contain more than one piece. Length may vary ±10% from length shown.

Mercury Switch
UL AWM Style 3123
600V, 150°C

Product Description

Suitable for mercury switches when protected against mechanical abuse. This wire has a tough, flexible Silicone insulation that remains flexible over a wide temperature range: +150°C to -55°C.



600V, 150°C (UL)										
UL AWM Style 3123										
34020	20 (105x40) [.52 (105x.08)]	.030	.76	.110	2.79	2000†	609.6	18.0	8.2	8
34017	17 (210x40) [1.03 (210x.08)]	.030	.76	.118	3.00	2000†	609.6	26.0	11.8	8

†Spools may contain more than one piece. Length may vary ±10% from length shown.

High-Voltage Leads

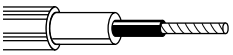
22 AWG Stranded Conductor (7x30)

Product Description

Tinned copper, conductive polyethylene (Korona-Guard) over inner conductor provides uniform distribution of voltage stresses, polyethylene insulated. PVC jacket in Red (8868) or Black (8869).

Suggested Working Voltage: 24,000 DC (8868)
17,000 DC (8869)

Breakdown Voltage: 48,000 DC (8868)
35,000 DC (8869)



Part No.	Insulation Thickness		Jacket Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
	Inch	mm	Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
22 AWG Stranded Conductor (7x30)											
80°C											
8868	.044	1.12	.015	.38	.150	3.81	100	30.5	1.9	.9	2
							U-500	U-152.4	6.0	2.7	2
							500	152.4	6.0	2.7	2
8869	.027	.69	.015	.38	.120	3.05	100	30.5	2.2	1.0	10
							500	152.4	4.5	2.0	10

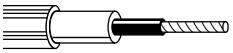
20 AWG Stranded Conductor (7x28)
UL AWM Style 3239 (80°C)
VW-1

Product Description

Tinned copper, conductive polyethylene (Korona-Guard) over inner conductor provides uniform distribution of voltage stresses, polyethylene insulated. Red PVC jacket.

Suggested Working Voltage: 30,000 DC

Breakdown Voltage: 60,000 DC



20 AWG Stranded Conductor (7x28)											
UL AWM Style 3239 • 80°C											
9867	.046	1.17	.028	.71	.191	4.85	100	30.5	2.8	1.3	2
							500	152.4	10.5	4.8	2

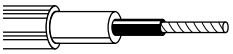
18 AWG Stranded Conductor (16x30)

Product Description

Tinned copper, conductive polyethylene (Korona-Guard) over inner conductor provides uniform distribution of voltage stresses, polyethylene insulated. Red PVC jacket.

Suggested Working Voltage: 40,000 DC

Breakdown Voltage: 80,000 DC



18 AWG Stranded Conductor (16x30)											
80°C											
8866	.057	1.45	.015	.38	.208	5.28	100	30.5	3.0	1.4	2
							U-500	U-152.4	11.5	5.2	2
							500	152.4	11.5	5.2	2

Test Prod Wire

18 AWG Rubber Insulated
5000V, 90°C

Product Description

Tinned copper, rubber insulated.

Suggested Working Voltage: 5000V

Breakdown Voltage: 20,000V

Part No.	AWG (stranding)	Insulation Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors (See Color Codes Chart on Page 3.29)
		Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
18 AWG Rubber Insulated										
5000V, 90°C										
8899	18 (65x36)	.045	1.14	.144	3.66	10	3.0	.2	.1	2, 10
						14	4.3	.5	.2	2, 10
						25	7.6	.6	.3	2, 4, 5, 6, 8, 9, 10
						100	30.5	2.3	1.0	2, 4, 5, 6, 8, 9, 10
						U-500	U-152.4	8.0	3.6	2, 10
						500	152.4	8.5	3.9	2, 4, 5, 6, 8, 9, 10
						U-1000	U-304.8	16.0	7.3	2, 10
						1000	304.8	17.0	7.7	2, 10

18 AWG PVC Insulated
UL AWM Style 1855 (5000V, 80°C)

Product Description

Tinned copper, PVC insulated. Use test probe leads for electrical and electronic measuring for test equipment.

Suggested Working Voltage: 5000V

18 AWG PVC Insulated (UL)										
UL AWM Style 1855 • 5000V, 80°C										
9899	18 (65x36)	.048	1.22	.144	3.66	100	30.5	2.2	1.0	2, 10
						500	152.4	7.5	3.4	2, 5, 9, 10
						1000	304.8	15.0	6.8	2, 10

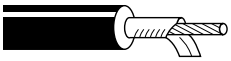
18 AWG Rubber Insulated
5000V, 80°C

Product Description

Tinned copper, separator, rubber insulated. Manufactured for MIL-W-13169B.

Suggested Working Voltage: 5000V

Breakdown Voltage: 20,000V



18 AWG Rubber Insulated										
5000V, 80°C										
8897	18 (65x36)	.045	1.14	.144	3.66	U-500	U-152.4	8.5	3.9	2, 10
						500	152.4	8.5	3.9	2, 10

Test Prod Wire and Gas Tube Sign and Ignition Cable

18 AWG Rubber Insulated
10,000V, 90°C

Product Description

Tinned copper, rubber insulated.

Suggested Working Voltage: 10,000V

Breakdown Voltage: 29,000V

Part No.	AWG (stranding)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
18 AWG Rubber Insulated										
10,000V, 90°C										
8898	18 (65x36)	.088	2.24	.229	5.82	25	7.6	1.7	.8	2, 10
						100	30.5	4.4	2.0	2, 10
						500	152.4	20.0	9.1	2, 10

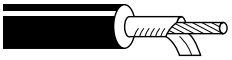
24 AWG Rubber Insulated
1000V, 90°C • Miniature

Product Description

Tinned copper, separator, rubber insulated.

Suggested Working Voltage: 1000V

Breakdown Voltage: 10,000V



24 AWG Rubber Insulated										
1000V, 90°C • Miniature										
8890	24 (45x40)	.019	.48	.066	1.68	25	7.6	.1	.05	2, 10
						100	30.5	.4	.20	2, 10
						500	152.4	2.5	1.10	2, 10

Gas Tube Sign and Ignition UL GTO-10 — 10kV, 105°C
(CSA Type GTO-10 — 10kV)

Product Description

GTO cables are single conductors for use with gas-tube systems for signs, outline lighting or interior lights and for use with oil-burning equipment in accordance with the National Electrical Code. GTO-10 lead wire has an 18 AWG stranded tinned copper conductor and is insulated with a chemically cross-linked ethylene-propylene diene elastomer. Unshielded, it is available with either a flat black (color code 10) or dark gray (color code 876) exterior.

Part No.	AWG (stranding) [sq.mm] (stranding in mm)	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Stock Colors (See Color Codes Chart on Page 3.29)
10kV, 105°C (UL) • **10kV** (CSA)										
UL and CSA Type GTO-10										
39018	18 (19x30) [.96 (19x.25)]	.100	2.54	.247	6.27	500*	152.4	18.0	8.2	10, 876
						1000*	304.8	37.0	16.8	10, 876
						1500*	457.3	54.0	24.5	10, 876

*Spools may contain more than one piece. Length may vary ±10% from length shown.

Magnet Wire

Heavy-Armored Poly-thermaleze®
One Pound Spool

Product Description

Belden® high-temperature, heavy-armored Poly-thermaleze is a dual coated magnet wire. Its base coat is a cross-linked, modified polyester. Its top coat is an amide-imide polymer. Rated for 180°C usage, Belden heavy-armored Poly-thermaleze has exceptional ability to resist solvents and abuse in difficult windings.

Part No.	AWG	Approximate Length		Standard Unit Weight		Turns per Linear Inch	Turns per Square Inch
		Ft.	m	Lbs.	kg		
Heavy-Armored Poly-thermaleze							
J-W-1177/14 • MW 35-C (Heavy)							
8073	14	80	24.4	1.1	.5	14.9	222
8074	16	126	38.4	1.1	.5	18.6	346
8075	18	199	60.7	1.1	.5	23.2	538
8076	20	315	96.0	1.1	.5	28.9	835
8077	22	501	152.7	1.1	.5	36.0	1296
8078	24	793	241.7	1.1	.5	44.7	1998
8079	26	1260	384.1	1.1	.5	55.7	3102
8080	28	1990	606.6	1.1	.5	69.4	4816
8081	30	3140	957.1	1.1	.5	86.2	7430
8083	34	7860	2395.8	1.1	.5	133.1	17716
8085	38	19300	5882.7	1.1	.5	206.0	42436

Single Beldsol™ Solderable
Half Pound Spool

Product Description

Beldsol Magnet Wire is a dual insulated Magnet Wire that combines the excellent dielectric characteristics of polyurethane and the known toughness and solvent resistance of a nylon overcoat. This wire is rated by IEEE tests for 270°F usage and will solder without insulation removal at 750°F.

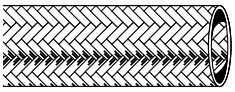
Single Beldsol Solderable							
J-W-1177/9 • MW 28-C (Single)							
8049	18	100	30.5	.5	.2	23.9	571
8050	20	160	48.8	.5	.2	29.9	894
8051	22	254	77.4	.5	.2	37.5	1406
8052	24	404	123.1	.5	.2	46.9	2200
8053	26	645	196.6	.5	.2	59.0	3481
8054	28	1020	310.9	.5	.2	73.8	5446
8055	30	1615	492.3	.5	.2	91.7	8409
8056	32	2515	766.6	.5	.2	114.0	12996
8057	34	4060	1237.5	.5	.2	144.0	20736
8058	36	6400	1950.7	.5	.2	180.0	32400

Poly-thermaleze is a Phelps Dodge trademark.

Shielding and Bonding Cable and Direct Burial Cable

Roadway Loop Cables

Braided Wire



Part No.	Approx. AWG (stranding)	Standard Lengths		Standard Unit Weight		Recommended Current (Amps)	Approximate Circular Area		Nominal ID Tubular	
		Ft.	m	Lbs.	kg		CMA	mm²	Inch	mm
Braided Wire										
8660	14.3 (96x34) tinned	50	15.2	.7	.3	27.0	3800	1.92	.125	3.18
		250	76.2	3.8	1.7					
8668	13.3 (120x34) tinned	50	15.2	1.1	.5	36.0	4800	2.43	.172	4.37
		250	76.2	5.5	2.5					
8663	11.9 (168x34) tinned	50	15.2	2.1	.9	38.0	6700	3.40	.219	5.56
		250	76.2	7.5	3.4					
8661	11.3 (192x34) tinned	50	15.2	2.2	1.0	46.0	7600	3.85	.203	5.16
		250	76.2	8.0	3.6					
8669	8.9 (336x34) tinned	50	15.2	3.4	1.5	62.0	13300	6.74	.500	12.70
		250	76.2	13.5	6.1					
8662	6.6 (576x34) tinned	50	15.2	4.7	2.1	80.0	22900	11.60	.781	19.84
		250	76.2	20.0	9.1					
8670	3.4 (480x30) tinned	10	3.0	1.9	.9	145.0	48000	24.32	.750 (Flat Width)	19.05
		50	15.2	9.7	4.4					
		250	76.2	43.0	19.5					

Note: Dimensions shown are approximate, due to pliable nature of braided cables.

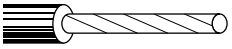
Direct Burial

14 AWG Stranded Conductor (104x34)

Product Description

Tinned copper conductor. Black high-density polyethylene insulation.

Suggested Working Voltage: 600V



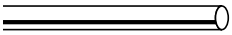
Part No.	Insulation Thickness		Jacket Thickness		Nominal OD		Standard Lengths		Standard Unit Weight		Stock Colors
	Inch	mm	Inch	mm	Inch	mm	Ft.	m	Lbs.	kg	
14 AWG Stranded Conductor (104x34)											
80°C											
9438	.032	.81	—	—	.139	3.53	1000	304.8	22.0	10.0	Black

Bus Bar, Antenna and Aluminum Ground Wire

Bus Bar Wire

Product Description

Made in accordance with the performance requirements of Federal Spec. QQ-W-343G. Solid tinned copper. Belden® can certify upon special request compliance to the performance requirements of QQ-W-343S_S1T.



Part No.	AWG	Standard Lengths		Standard Unit Weight		Nominal OD		Circular Area	
		Ft.	m	Lbs.	kg	Inch	mm	CMA	mm²
Bus Bar Wire									
8025	30	100	30.5	.1	.05	.010	.26	102	.05
		1000	304.8	1.0	.50				
8024	28	100	30.5	.1	.05	.013	.33	164	.08
		1000	304.8	1.0	.50				
8023	26	100	30.5	.1	.05	.016	.41	262	.13
		1000	304.8	1.0	.50				
8022	24	100	30.5	.2	.10	.021	.52	424	.22
		1000	304.8	1.0	.50				
8021	22	100	30.5	.2	.10	.026	.65	650	.33
		1000	304.8	2.0	.90				
8020	20	100	30.5	.4	.20	.033	.83	1056	.54
		1000	304.8	3.0	1.40				
8019	18	100	30.5	.5	.20	.041	1.03	1648	.84
		1000	304.8	6.0	2.70				
8013	16	100	30.5	.8	.40	.052	1.31	2673	1.35
		1000	304.8	9.0	4.10				
8012	14	100	30.5	1.5	.70	.065	1.66	4251	2.15
		1000	304.8	14.0	6.40				
8011	12	100	30.5	2.3	1.00	.083	2.11	6872	3.48

Antenna Wire

Product Description

Stranded bare copper-covered steel.

Part No.	AWG	Standard Package Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
Antenna Wire							
8002	16 (7x24)	100	30.5	.8	.4	.060	1.52
8000	14 (7x22)	100	30.5	1.3	.6	.076	1.93
		1000	304.8	13.3	6.1		

Aluminum Ground Wire

Product Description

8 AWG solid, soft annealed aluminum. Packaged in ten 50-foot connected coils or spools of 500 feet. Spools are marked every 100 feet for easy measuring.

Aluminum Ground Wire							
8018	8 (solid)	50	15.2	.9	.4	.128	3.25
		500	152.4	8.5	3.9		

Technical Information

Conductor and Insulation Materials

The technical information provided in this section has been expanded to include additional graphs and supplementary data as an aid in specifying the hook-up and lead wire best suited to the needs of a particular application. If you require additional technical information, contact Belden Technical Support at **1-800-BELDEN-1**.

The tables on the following pages are offered as a guide to assist users in selecting the correct lead wire for their application.

Conductors

Uni-Strand®

Uni-Strand tinned copper conductor. In this type of construction, the bare copper wires are stranded, then tinned to coat the strands and also to fill in the interstices between strands. This allows for easier wire stripping with no re-twisting operation.

Insulation Materials

PVC

Vinyl plastic insulation is fast stripping, resists oil, solvents, and ozone. The colors are bright and remain distinct after processing. Applications include motors, transformers, fluorescent ballasts and fixtures, switch-boards, panels, controls, rectifiers and electronic circuits. Meets VW-1 Vertical Wire Flame Test in many cases.

Teflon®

Teflon is a fluorinated thermoplastic with outstanding thermal, physical, and electrical properties. Teflon is generally restricted to applications requiring its special characteristics because its basic resin and processing costs are relatively high.

Belden Teflon wire products are highly recommended for miniature cable applications because of their superior thermal and electrical properties. Teflon is especially suitable for internal wiring-soldering applications where insulation melt back is a specific problem. Belden wiring products insulated with Teflon are outstanding in their resistance to oil, oxidation, heat, sunlight and flame; and also in their ability to remain flexible at low temperatures. They have excellent resistance to ozone, water, alcohol, gasoline, acids, alkalis, aromatic hydrocarbons and solvents.

EPDM

EPDM (ethylene-propylene diene elastomer) is a chemically cross-linked elastomer with excellent flexibility at high and low temperatures (+150°C to -60°C). It has good insulation and dielectric strength, as well as excellent abrasion resistance and mechanical properties. EPDM also has better cut-through resistance than Silicone rubber, which it replaces in some applications.

EPDM is compatible with most varnishes. After the dip and bake cycle, however, the varnish tends to adhere to the insulation because EPDM, unlike some rubber insulations, does not exude oils or waxes. As the lead wires are pulled apart for termination or flexed, the varnish cracks, sometimes tearing the insulation.

To help this problem, a stearic solution is applied to the lead wire during the manufacturing process. However, many varnishes may still bond to the insulation unless other special coatings are applied. (Other slip coats are available at additional cost.) **Because most cleaning processes will remove these coatings from the EPDM lead wire, cleaning EPDM lead wire before using in the process is not recommended.**

Due to the above, it is recommended that the compatibility between the individual lead wire size, the bake/varnish process and varnish used always be checked; and if possible, do not allow any varnish to extend beyond a point where the lead wire will be flexed or bent.

XL-Dur®

XL-Dur is a lead wire insulation utilizing thermoset, chemically cross-linked poly-ethylene. Because of its excellent physical and electrical properties, XL-Dur is highly desirable for a wide variety of applications.

Hypalon®

This insulation is chlorosulfonated polyethylene. Hypalon insulation has excellent heat resistance, color stability and electrical properties.

Neoprene

Neoprene insulation has good heat aging characteristics and is an excellent low-cost motor lead wire. It may be considered for use in hazardous locations and is being used in explosion-proof motors recognized by UL.

Silicone Rubber

Braidless Silicone lead wire features easy and clean stripping without the problems associated with glass braid lead wire. It has excellent physical and mechanical strength properties.

Recommended for high-temperature applications in motors, lighting fixtures, clothes dryers, stoves, therapeutic, and electronic devices. It is recommended that varnish compatibility be checked before production. Some rigid varnishes may cause cracking when the wire is severely bent.

Silicone Rubber — Glass Braid

The Silicone insulation strips clean and easy. The glass braid provides additional abrasion resistance and is treated to prevent fraying.

Recommended for high-temperature applications in motors, lighting fixtures, clothes dryers, stoves, therapeutic and electronic devices.

Hypalon and Teflon are DuPont trademarks.

Technical Information

Insulation Characteristics and Color Codes

Table 1: Insulation Characteristics

Insulation	Temperature Rating	UL Voltage Rating (Volts)	Oil Resistance	Ozone Resistance	Abrasion	Flame Resistance
Neoprene	90°C	300/600	Good	Good	Good	Good
PVC	80°C	300	Good–Excellent	Good–Excellent	Good	Excellent
	105°C	600	Good–Excellent	Good–Excellent	Good	Excellent
Hypalon®	105°C	300/600	Good	Excellent	Good	Good
XL-Dur® Cross-Linked Polyethylene	105°C	300	Good	Good	Excellent	Fair-Good
	125°C	600	Good	Good	Excellent	Fair-Good
	150°C	600	Good	Good	Excellent	Fair-Good
EPDM	125°C	600	Fair–Poor	Good	Good	Fair
	150°C	600	Fair–Poor	Good	Good	Fair
Silicone Rubber	150°C	300	Fair	Good	Poor	Good
	200°C	600	Fair	Good	Poor	Good
Silicone Rubber Glass Braid	150°C	600	Fair	Excellent	Excellent	Good
	200°C	600	Fair	Excellent	Excellent	Good
Teflon®	150°C	300	Excellent	Excellent	Excellent	Excellent
	200°C	300	Excellent	Excellent	Excellent	Excellent
	260°C	300	Excellent	Excellent	Excellent	Excellent

Table 2: Lead Wire Color Code Chart

Color No.	Color Combination	Color No.	Color Combination	Color No.	Color Combination
1	Brown	**13**	Dark Blue	**25**	White/Black/Yellow
2	Red	**14**	White/Black	**26**	White/Black/Blue
3	Orange	**15**	White/Red	**27**	White/Black/Brown
4	Yellow	**16**	White/Green	**28**	White/Black/Orange
5	Green	**17**	White/Yellow	**29**	White/Black/Gray
6	Light Blue	**18**	White/Blue	**30**	White/Black/Violet
7	Violet	**19**	White/Brown	**189**	Green/Yellow
8	Gray (Slate)	**20**	White/Orange	**620**	Green/min. 30% Yellow
9	White	**21**	White/Gray	**876**	Nickel Gray
10	Black	**22**	White/Violet	**B02**	Purple
11	Tan	**23**	White/Black/Red		
12	Pink	**24**	White/Black/Green		

Non-Stock Colors: Non-stock colors and stripes of catalog items are available in minimum quantities. Price and delivery information is available upon request. Orders must be in multiples of standard packages.

Hypalon and Teflon are DuPont trademarks.

Technical Information

Current Carrying Capacity

Table 3: Lead Wire Current Carrying Capacity

AWG	90°C Neoprene, SIS	105°C Vinyl, Hypalon®	125°C XL-Dur,® Hermetic	150°C EPDM, XL-Dur, Silicone	200°C Silicone
22	10	11	12	14	16
20	13	14	15	18	21
18	18	20	22	24	28
16	24	26	28	31	35
14	35	39	42	46	54
12	40	51	55	60	68
10	55	67	72	80	90
8	80	90	97	106	124
6	105	121	131	155	165
4	140	160	172	109	220
3	165	180	194	214	252
2	190	215	232	255	293
1	220	247	266	293	344
1/0	260	286	309	339	399
2/0	300	329	355	390	467
3/0	350	380	410	451	546
4/0	405	446	481	529	629

Values (amperes) shown in this table are maximum for a single conductor in free air with an assumed ambient room temperature of 30°C (86°F).

Table 4: Current Carrying Capacity of 2 or 3 Conductors

AWG	90°C Neoprene, SIS	105°C Vinyl, Hypalon	125°C XL-Dur, Hermetic	150°C EPDM, XL-Dur, Silicone	200°C Silicone
22	6	7	8	9	10
20	8	9	10	13	15
18	14	15	16	17	20
16	18	19	20	22	25
14	25	29	31	34	36
12	30	36	39	43	45
10	40	46	50	55	60
8	55	64	69	76	83
6	75	81	87	96	110
4	95	109	118	120	125
3	110	129	139	143	152
2	130	143	154	160	171
1	150	168	181	186	197
1/0	170	193	208	215	229
2/0	195	229	247	251	260
3/0	225	263	284	288	297
4/0	260	301	325	332	346

Current carrying capacity of not more than three (3) conductors in a raceway, conduit or cable. The values (amperes) shown in this table are maximum at an assumed ambient room temperature of 30°C (86°F).

Hypalon is a trademark of DuPont.

How to Use

The choice of an appropriate conductor, with respect to current carrying capacity, usually depends on one or more factors which vary according to application. These factors include the temperature in which the lead wire operates, temperature rise of equipment, limitations of insulation, voltage drop, and location of wires as in free air or enclosed, such as formed by a compartment, tubing, or a bundle of wires.

For these reasons it is not practical to provide a general chart showing the current carrying capacity of Lead Wire for all conditions. Accordingly, the values shown in Table 3 are MAXIMUM for a single conductor in free air, based on ambient temperature of 30°C. For actual use temperatures above an ambient temperature of 30°C, reduce the maximum ampacity by use of correction factor in Table 5 to correct the values in Table 3 and Table 4.

Table 5: Correction Factors for Tables 3 & 4

Ambient Temperature (°C)	Insulation Temperature Rating				
	90°C	105°C	125°C	150°C	200°C
31 – 35	.96	1.00	1.00	1.00	1.00
36 – 40	.91	1.00	1.00	1.00	1.00
41 – 45	.87	.93	.94	.95	.97
46 – 50	.82	.93	.94	.95	.97
51 – 55	.76	.85	.87	.90	.94
56 – 60	.71	.85	.87	.90	.94
61 – 70	.58	.76	.80	.85	.90
71 – 80	.41	.65	.73	.80	.87
81 – 90	—	.53	.64	.74	.83
91 – 100	—	.38	.54	.67	.79
101 – 120	—	—	.24	.52	.71
121 – 140	—	—	—	.30	.61
141 – 160	—	—	—	—	.50
161 – 180	—	—	—	—	.35

For ambient temperatures over 30°C, multiply the ampacities shown in Table 3 or Table 4 by the appropriate correction factor to determine the maximum allowable load current.

Correction Factors for Table 4

Number of Conductors	Reduction Percentage
4 thru 6	80%
7 thru 9	70%
10 thru 20	50%
21 thru 30	45%
31 thru 40	40%
41 and above	35%

If more than three (3) conductors are in a raceway, conduit or cable; the values given in Table 4 must be reduced using the above percentages.

(Example: The ampacity for 7 through 9 conductors = 70% of the the value(s) shown in Table 4.)

Technical Information

Temperature Ranges and Classifications
Conductor Configurations

Table 6: Nominal Temperature Operating Ranges (°C)

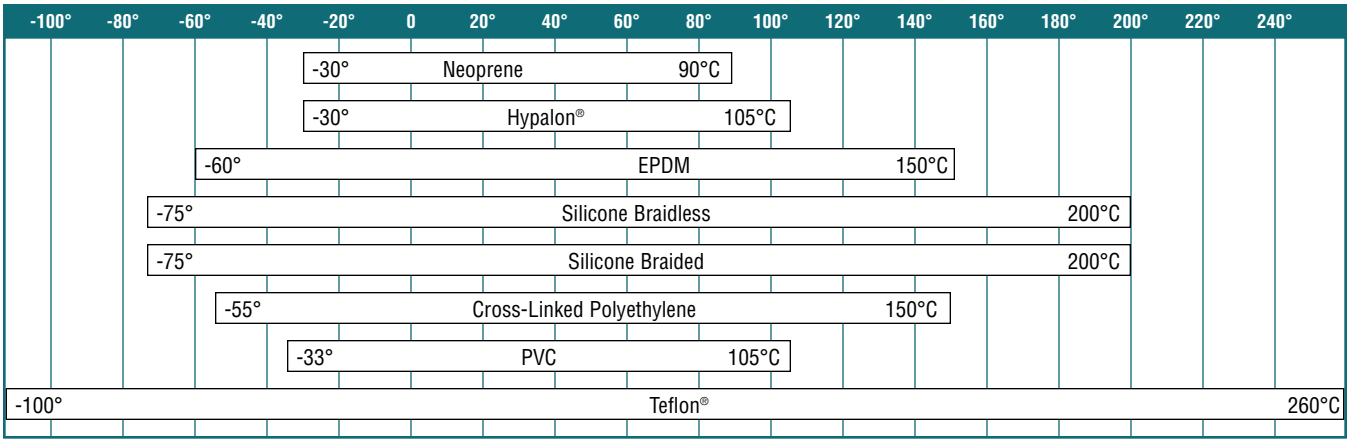


Table 7: Temperature Classification

Insulation System Class	Minimum Acceptable Lead Wire Temperature Rating	
	C°	F°
130(B)	90	194
155(F)	125	257
180(H)	150	302
220(R)	200	392

Systems of Insulating Materials — UL Standard 1446

This is a guide intended for UL approved insulation systems connected to branch circuits of 600V or less. Approval required by Underwriters Laboratories when using lead wire with a temperature rating more than 5°C under the system temperature rating.

Table 8: Conductor Configurations

Typical Application	American Wire Gage							
	12	14	16	18	20	22	24	26
Fixed Services Hook-Up Wire Cable in Raceway	19x25	solid or 19x27	solid or 19x29	solid or 7x26 or 16x30	solid or 7x28 or 10x30	solid or 7x30	solid or 7x32	solid or 7x34
Moderate Flexing Frequently Disturbed For Maintenance	65x30	19x27 or 41x30	19x29 or 26x30	16x30 or 41x34	7x28, 10x30, 19x32, or 26x34	7x30 or 19x34	7x34 or 10x34	7x34
Severe Flexing Microphone Test Prods	165x34	104x34	65x34 or 104x36	41x34 or 65x36	26x34 or 42x36	19x34 or 26x36	19x36 or 45x40	7x34 or 10x36
Most Severe Duty Mercury Switches	259x36 (7x37 Rope Lay)*	168x36 (7x24 Rope Lay)*	105x36 (7x15 Rope Lay)*	63x36 (7x9 Rope Lay)*	105x40 (3x35 Rope Lay)*	(Consider Braid or Tinsel)		

Note: For a given AWG wire size (based on equal cross-sectional area of conductor), limpness and flex life are increased by use of a large number of fine strands. The finer stranding does result in higher costs.

*Rope Lay is several stranded groups cabled together. For example: #12 AWG, 259x36 is 7 cords each consisting of 37 strands of #36 AWG

Hypalon and Teflon are DuPont trademarks.

Technical Information
Packaging

Drums

Conductor is available in three drum pack sizes:

- The #15 Beldpak® is 15″ high and 23″ in diameter.
- The #31 Beldpak is 30½″ high and 23″ in diameter.
- The #42 Beldpak (pictured) is 42″ high and 23″ in diameter.

Price and delivery information is available upon request.

OD of Wire		#15 Beldpak		#31 Beldpak		#42 Beldpak	
Inch	mm	1000′	km	1000′	km	1000′	km
.070	1.78	35	10.7	70	21.3	85	25.9
.080	2.03	27	8.2	55	16.8	70	21.3
.090	2.29	21	6.4	43	13.1	55	16.8
.100	2.54	17	5.2	35	10.7	48	14.6
.110	2.79	12	3.7	25	7.6	40	12.2
.120	3.05	10	3.0	20	6.1	34	10.4
.130	3.30	9	2.7	18	5.5	30	9.1
.140	3.56	8	2.4	15	4.6	20	6.1
.150	3.81	7	2.1	14	4.3	18	5.5
.160	4.06	6	1.8	12	3.7	16	4.9
.170	4.32	5	1.5	10	3.0	14	4.3

Reels

Reel dimensions will vary by size, determined by AWG of wire.

OD of Wire		Quantity		Crate Reels*	Head Diameter		Barrel Diameter		Height Transverse	
Inch	mm	1000′	km		Inch	mm	Inch	mm	Inch	mm
.080	2.03	10.0	3.05	1748	15¾	400	8	203	8	203
.090	2.29	8.0	2.44	1748	15¾	400	8	203	8	203
.100	2.54	6.5	1.98	1748	15¾	400	8	203	8	203
.110	2.79	5.0	1.52	1748	15¾	400	8	203	8	203
.120	3.05	6.0	1.83	1747	15¾	400	8	203	10½	267
.130	3.30	5.0	1.52	1747	15¾	400	8	203	10½	267
.140	3.56	6.0	1.83	1746	17¾	451	8	203	10½	267
.150	3.81	5.0	1.52	1746	17¾	451	8	203	10½	267
.160	4.06	4.5	1.37	1746	17¾	451	8	203	10½	267
.170	4.32	7.0	2.13	1744	22	559	10	254	14¼	362
.180	4.57	6.0	1.83	1744	22	559	10	254	14¼	362
.190	4.83	5.5	1.68	1744	22	559	10	254	14¼	362
.200	5.08	5.0	1.52	1744	22	559	10	254	14¼	362
.250	6.35	5.0	1.52	1743	26	660	10	254	14¼	362
.300	7.62	3.5	1.07	1743	26	660	10	254	14¼	362
.350	8.89	2.5	.76	1743	26	660	10	254	14¼	362
.400	10.16	2.0	.61	1743	26	660	10	254	14¼	362
.450	11.43	1.5	.46	1743	26	660	10	254	14¼	362
.500	12.70	1.2	.37	1743	26	660	10	254	14¼	362
.550	13.97	1.0	.31	1743	26	660	10	254	14¼	362
.600	15.24	1.2	.37	1733	30	762	10	254	14¼	362

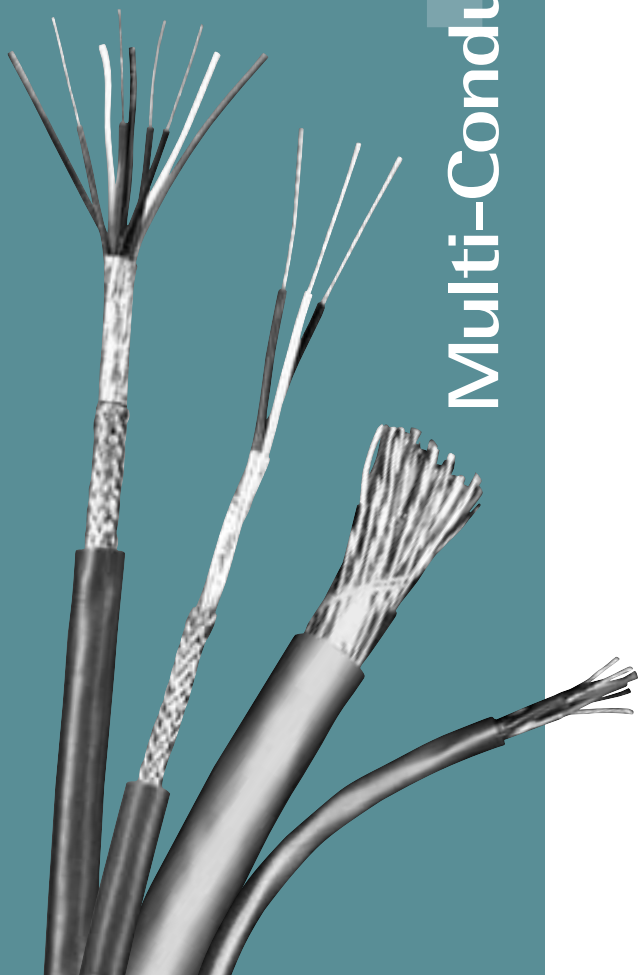
*Crate Reel numbers are Belden's internal numbers. They are representative only to the extent of the dimensions shown. Weight of the wire may require another reel with dimensions identical to those shown.

Special Orders

Orders for special packages must be placed for footage mentioned or for multiples for these quantities per color.

Belden

4 Multi-Conductor



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Please refer to "Terms of Use of Master Catalog" on page 16.30.

Introduction

Belden® multi-conductor cables are manufactured in a wide variety of gage sizes, dimensions, insulation materials, shielding configurations, and jacketing materials including Plenum and High-Temperature versions. These cables meet the technical requirements of many different types of systems. In fact, Belden offers one of the broadest lines of UL Listed, NEC and CEC multi-conductor cables available from any single source.

Applications for multi-conductor cables include computers, communications, instrumentation, sound, control, audio, and data transmission. Each of these cables is designed to protect signal integrity under critical conditions by reducing hum, noise, and crosstalk.

To assist you in selecting the proper cable for your application, both the suggested working voltages and the maximum temperature ratings are indicated for each applicable product in this section.

Most of our multi-conductor cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a multi-conductor cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Multi-Conductor Cables Packaging

Belden's unique UnReel® cable dispenser is available for many of the multi-conductor products listed in this section. The letter "U" before the specified put-up length denotes UnReel packaging.

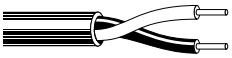
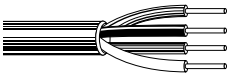
Shielded Multi-Conductor Computer Cables for RS-232 Applications

Specifications		Cable Series* 9925	9608	9533	9939
Conductor Size: (AWG)	28				
	24	✓	✓	✓	
	22				✓
	20				
	18				
	Page No.	4.18	4.17	4.11	4.19
Insulation:	S-R PVC		✓	✓	✓
	Polyethylene				
	Polypropylene				
	Datalene®†	✓			
Shield:	Overall Foil			✓	
	Drain Wire	✓		✓	
	Overall Foil/Braid	✓	✓		✓
	Braid Coverage	65%	65%		65%
Drain Wire Overall:		Yes	No	Yes	No
No. of Cond. Available:	1				
	2				
	3	✓	✓	✓	✓
	4	✓	✓	✓	✓
	5	✓	✓	✓	✓
	6	✓	✓	✓	✓
	7	✓	✓	✓	✓
	8	✓	✓	✓	✓
	9	✓	✓	✓	✓
	10	✓	✓	✓	✓
	11				
	12				
	13				
	15	✓	✓	✓	✓
	17				
	18				
	19				
	20			✓	
	25	✓	✓	✓	✓
	27				
	30			✓	
	31				
	37	✓	✓		✓
	40			✓	
	50		✓	✓	✓
Capacitance ** (pF/ft.)		12.0	30.0	30.0	35.0

*All cables are UL-listed.
**Capacitance may vary on some cables.
†Foam high density polyethylene.

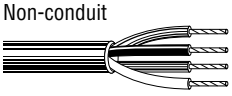
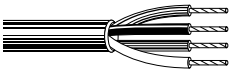
Unshielded

Audio, Control and Instrumentation Cables
Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
22 AWG Solid Conductors • Bare Copper • Conductors Cabled														
Polyethylene Insulation • Rose Gray PVC Jacket														
UL AWM Style 2092 (300V 60°C) 	**8795**	NEC: CM CEC: CM	2	Red, Green	U-500 U-1000 1000	U-152.4 U-304.8 304.8	10.0 19.0 21.0	4.5 8.6 9.5	.018	.46	.022	.56	.168	4.27
UL AWM Style 2093 (300V 60°C)	**8794**	NEC: CM	3	Green, Red, Yellow	U-1000 1000	U-304.8 304.8	22.0 23.0	10.0 10.5	.018	.46	.022	.56	.178	4.52
UL AWM Style 2094 (300V 60°C) 	**9794**	NEC: MP, CM	4	Green, Red, Yellow, Black	U-500 U-1000 1000	U-152.4 U-304.8 304.8	14.0 27.0 27.0	6.4 12.3 12.3	.018	.46	.025	.64	.200	5.08
22 AWG Stranded Conductors (7x30) • Tinned Copper • Conductors Cabled														
PVC Insulation • Chrome PVC Jacket														
	8442	NEC: CMG CEC: CMG FT4	2	Black, Red	100 U-500 500 U-1000 1000 10000	30.5 U-152.4 152.4 U-304.8 304.8 3048.0	2.4 7.5 7.5 15.0 15.0 150.0	1.1 3.4 3.4 6.8 6.8 68.2	.015	.38	.025	.64	.170	4.32
										For Plenum versions of 8442, see 88442 or 82442.				
UL AWM Style 2576 (150V 80°C)	**8443**	NEC: CMG CEC: CMG FT4	3	Black, Red, Green	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	2.8 9.5 9.5 18.0 18.0	1.3 4.3 4.3 8.2 8.2	.010	.25	.032	.81	.172	4.37
	8444	NEC: CMG CEC: CMG FT4	4	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.2 11.5 11.5 22.0 23.0	1.5 5.2 5.2 10.0 10.5	.010	.25	.032	.81	.185	4.70
										For Plenum versions of 8444, see 88444 or 82444.				
	8445	NEC: CMG CEC: CMG FT4	5	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.5 13.5 13.5 26.0 26.0	1.6 6.1 6.1 11.8 11.8	.010	.25	.032	.81	.194	4.93
	9430	NEC: CMG CEC: CMG FT4	7	See Chart 1 (Tech Info Section)	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	16.5 17.0 33.0 33.0	7.5 7.7 15.0 15.0	.010	.25	.032	.81	.214	5.44
	9421	NEC: CMG CEC: CMG FT4	8	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.7 18.5 19.0 37.0 37.0	2.1 8.4 8.6 16.8 16.8	.010	.25	.032	.81	.229	5.82
	9423	NEC: CMG CEC: CMG FT4	9	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	5.2 21.5 21.5 42.0 42.0	2.4 9.8 9.8 19.1 19.1	.010	.25	.032	.81	.244	6.20
	8456	NEC: CMG CEC: CMG FT4	10	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	5.7 22.5 23.0 45.0 46.0	2.6 10.2 10.5 20.5 20.9	.010	.25	.032	.81	.264	6.71

Unshielded

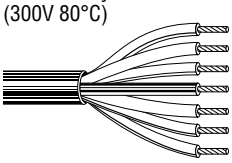
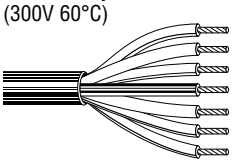
Audio, Control and Instrumentation Cables
Plenum-Rated and Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
22 AWG Stranded Conductors (7x30) • Tinned Copper • Conductors Cabled *(continued)*														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2576 (150V 80°C)	**8457**	NEC: CMG CEC: CMG FT4	12	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	6.3 26.0 26.0 51.0 52.0	2.9 11.8 11.8 23.2 23.6	.010	.25	.032	.81	.272	6.91
	8458	NEC: CMG CEC: CMG FT4	15	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.3 34.5 72.0	3.3 15.7 32.7	.010	.25	.040	1.02	.315	8.00
	9431	NEC: CMG CEC: CMG FT4	20	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	9.1 48.5 87.0	4.1 22.0 39.5	.010	.25	.040	1.02	.345	8.76
	8459	NEC: CMG CEC: CMG FT4	25	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	11.1 55.0 109.0	5.0 25.0 49.5	.010	.25	.040	1.02	.387	9.83
	9432	NEC: CMG CEC: CMG FT4	30	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	12.5 62.5 124.0	5.7 28.4 56.4	.010	.25	.040	1.02	.400	10.16
	9433	NEC: CMG CEC: CMG FT4	40	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	16.7 83.0 161.0	7.6 37.7 73.2	.010	.25	.040	1.02	.455	11.56
	9434	NEC: CMG CEC: CMG FT4	50	See Chart 2R (Tech Info Section)	500 1000	152.4 304.8	100.5 206.0	45.7 93.6	.010	.25	.045	1.14	.500	12.70
Plenum • FEP Insulation • Red FEP Jacket														
300V RMS, Non-conduit	**88442***	NEC: CMP CEC: CMP FT6	2	Black, Red	100 500 † 1000 †	30.5 152.4 304.8	2.3 5.5 10.0	1.0 2.5 4.5	.006	.15	.012	.30	.102	2.59
Non-conduit  Suitable for Outdoor and Direct Burial applications.	**88444**	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	100 500 † 1000 †	30.5 152.4 304.8	3.0 9.0 16.0	1.4 4.1 7.3	.006	.15	.010	.25	.121	3.07
Plenum • FEP Insulation • Natural Flamarrest® Jacket														
300V RMS, Non-conduit	**82442*** new	NEC: CMP CEC: CMP FT6	2	Black, Red	U-1000 † 1000 †	U-304.8 304.8	83.0 84.0	37.7 38.2	.006	.15	.014	.36	.112	2.84
Non-conduit 	**82444**	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	U-500 † U-1000 † 1000 †	U-152.4 U-304.8 304.8	8.5 17.0 17.0	3.9 7.7 7.7	.006	.15	.015	.38	.134	3.40

* Twisted Pair
† Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

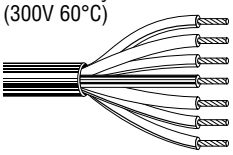
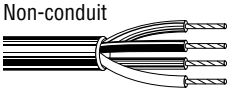
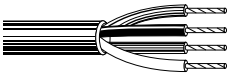
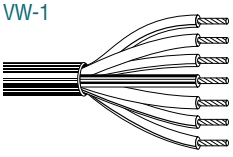
Unshielded

Audio, Control and Instrumentation Cables
Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
20 AWG Stranded Conductors (7x28) • Tinned Copper • Conductors Cabled														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2464 (300V 80°C) 	**9444**	NEC: CMG CEC: CMG FT4	4	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.0 16.5 16.5 32.0 32.0	1.8 7.5 7.5 14.5 14.5	.013	.33	.032	.81	.217	5.51
	9445	NEC: CMG CEC: CMG FT4	5	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.9 19.5 20.0 39.0 40.0	2.2 8.9 9.1 17.7 18.2	.013	.33	.032	.81	.239	6.07
	9439	NEC: CMG CEC: CMG FT4	7	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	6.2 26.5 27.0 52.0 53.0	2.8 12.0 12.3 23.6 24.1	.013	.33	.032	.81	.260	6.60
	9455	NEC: CMG CEC: CMG FT4	9	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.1 35.0 67.0	3.2 15.9 30.5	.013	.33	.035	.89	.317	8.05
	9457	NEC: CMG CEC: CMG FT4	12	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	8.9 43.5 85.0	4.0 19.8 38.6	.013	.33	.035	.89	.338	8.58
	9458	NEC: CMG CEC: CMG FT4	15	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	12.0 57.0 111.0	5.5 25.9 50.5	.013	.33	.040	1.02	.389	9.88
18 AWG Stranded Conductors (19x30) • Tinned Copper • Conductors Cabled														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2598 (300V 60°C) 	**8489**	NEC: CMG CEC: CMG FT4	4	See Chart 1 (Tech Info Section)	100 250 U-500 500 U-1000 1000	30.5 76.2 U-152.4 152.4 U-304.8 304.8	5.6 12.0 23.5 24.0 47.0 48.0	2.5 5.5 10.7 10.9 21.4 21.8	.017	.43	.032	.81	.257	6.53
											For Plenum versions of 8489, see 88489 or 82489.			
	8465	NEC: CMG CEC: CMG FT4	5	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	7.1 30.0 30.0 59.0 60.0	3.2 13.6 13.6 26.8 27.3	.017	.43	.033	.84	.282	7.16
	8467	NEC: CMG CEC: CMG FT4	7	See Chart 1 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	8.3 20.3 39.5 79.0	3.8 9.2 18.0 35.9	.017	.43	.037	.94	.314	7.98
	8469	NEC: CMG CEC: CMG FT4	9	See Chart 1 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	10.5 26.0 51.0 105.0	4.8 11.8 23.2 47.7	.017	.43	.037	.94	.364	9.25
	8466	NEC: CMG CEC: CMG FT4	12	See Chart 2R (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	13.2 32.5 66.0 131.0	6.0 14.8 30.1 59.5	.017	.43	.040	1.02	.412	10.46
	8468	NEC: CMG CEC: CMG FT4	15	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	18.1 89.5 175.0	8.2 40.7 79.5	.017	.43	.045	1.14	.500	12.70

Unshielded

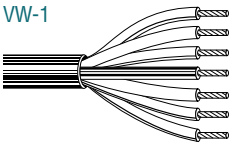
Audio, Control and Instrumentation Cables
Plenum-Rated and Non-Plenum

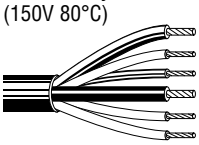
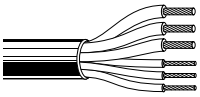
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
18 AWG Stranded Conductors (19x30) • Tinned Copper • Conductors Cabled *(continued)*														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2598 (300V 60°C) 	**8619**	NEC: CMG CEC: CMG FT4	19	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	20.4 101.0 198.0	9.3 45.9 90.0	.017	.43	.045	1.14	.490	12.45
	9626	NEC: CMG CEC: CMG FT4	25	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	28.1 139.5 277.0	12.8 63.4 125.9	.017	.43	.060	1.52	.612	15.54
Plenum • FEP Insulation • Red FEP Jacket														
Non-conduit  Suitable for Outdoor and Direct Burial applications.	**88489**	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	500† 1000†	152.4 304.8	16.5 31.0	7.5 14.1	.007	.18	.009	.23	.161	4.09
Plenum • FEP Insulation • Natural Flamarrest® Jacket														
Non-conduit 	**82489**	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	U-1000† 1000†	U-304.8 304.8	31.0 31.0	14.1 14.1	.007	.18	.014	.36	.170	4.32
16 AWG Stranded Conductors (19x29) • Tinned Copper • Conductors Cabled														
PVC Insulation • Cabled Wire (No Jacket)														
UL AWM Style 1007 (300V 80°C) VW-1	**9498**		3	Orange, Black, Orange w/ Black Stripe	1000	304.8	42.0	19.1	.027	.69	—	—	.243	6.17
PVC Insulation • Chrome PVC Jacket														
600V RMS 80°C VW-1 	**8620**		4	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	8.9 44.0 88.0	4.0 20.0 40.0	.031	.79	.042	1.07	.376	9.55
	9620		5	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	11.0 53.5 109.0	5.0 24.3 49.5	.031	.79	.042	1.07	.411	10.44
	8621		7	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	14.9 73.5 143.0	6.8 33.4 65.0	.031	.79	.045	1.14	.458	11.63
	9721		8	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	27.5 136.5 269.0	12.5 62.0 122.3	.031	.79	.045	1.14	.496	12.60
	9621		9	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	19.0 93.5 180.0	8.7 42.5 81.8	.031	.79	.045	1.14	.533	13.54
	8622		12	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	27.0 126.0 251.0	12.3 57.3 114.1	.031	.79	.060	1.52	.627	15.93
	8623		15	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	32.4 155.0 314.0	14.7 70.5 142.7	.031	.79	.060	1.52	.694	17.63
	8624		19	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	38.5 178.5 361.0	17.5 81.1 164.1	.031	.79	.065	1.65	.740	18.80
	9622		25	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	49.0 236.0 480.0	22.3 107.3 218.2	.031	.79	.065	1.65	.879	22.33

†Spools and/or UnReel® cartons are one piece, but length may vary ± 10% for spools and ± 5% for UnReel from length shown.

Unshielded

Audio, Control, Communication and Instrumentation Cables
Non-Plenum and Special Non-Plenum

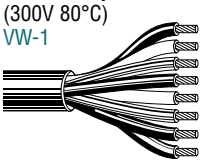
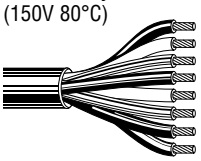
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
14 AWG Stranded Conductors (19x27) • Tinned Copper • Conductors Cabled														
PVC Insulation • Chrome PVC Jacket														
600V RMS 80°C VW-1 	**8627**		4	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	15.5 75.0 145.0	7.1 34.1 65.9	.045	1.14	.045	1.14	.490	12.45
	9623		5	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	19.6 96.5 192.0	8.9 43.9 87.3	.045	1.14	.060	1.52	.573	14.55
	8628		7	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	25.8 128.0 254.0	11.7 58.2 115.5	.045	1.14	.060	1.52	.623	15.82
	8629		12	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	46.3 222.0 454.0	21.0 100.9 206.4	.045	1.14	.065	1.65	.824	20.93

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 and 18 AWG Stranded Conductors (7x30 and 16x30) • Tinned Copper • Conductors Cabled																		
PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2576 (150V 80°C) 	**8446**	NEC: CMG CEC: CMG FT4	6: 4 Unshld 22 (7x30)	Red, Green, Brown, Blue	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	5.2 21.0 21.5 42.0 42.0	2.4 9.5 9.8 19.1 19.1	.010 .019	.25 .48	.032	.081	.236	5.99	30	98	54	177
			2 Unshld 18 (16x30)	Black, White														
20 and 16 AWG Stranded Conductors (7x28 and 19x28) • Tinned Copper • Conductors Cabled																		
PVC Insulation • Chrome PVC Jacket																		
NEC Article 800 (90°C) 	**9686**	NEC: CM	6: 3 Unshld 20 (7x28)	Green, Blue, Purple	U-500	U-152.4	33.0	15.0	.012	.30	.032	.81	.295	7.49	20	66	36	118
			3 Unshld 16 (19x28)	Black, Red, Yellow					.013	.33					30	98	54	177

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to ground.

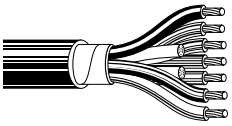
Unshielded

Antenna Rotor Control Cables and Duplex Primary Wire

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	AWG (stranding)	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm
Antenna Rotor Cables Stranded Conductors • Tinned Copper • Conductors Cabled															
PVC Insulation • Chrome PVC Jacket															
UL AWM Style 2464 (300V 80°C) VW-1 	**9405**	NEC: CM	8	Black, White	2@16 (19x28)	500 1000	152.4 304.8	47.0 92.0	21.4 41.8	.019	.48	.032	.81	.345	8.76
				Brown, Red Yellow, Blue, Orange, Green	6@18 (16x30)					.018	.46				
UL AWM Style 2576 (150V 80°C) 	**8448**	NEC: CMG CEC: CMG FT4	8	Black, White	2@18 (16x30)	U-500 500	U-152.4 152.4	25.0 25.5	11.4 11.6	.019	.48	.032	.81	.259	6.58
				Red, Green, Brown, Blue, Yellow, Orange	6@22 (7x30)	U-1000 1000	U-304.8 304.8	49.0 50.0	22.3 22.7	.010	.25				
Duplex Primary Wire Stranded Conductors • Bare Copper • Conductors Parallel															
PVC Insulation • Chrome PVC Jacket															
300V RMS 75°C VW-1	**8677**		2	Brown, Red	16 (19x29)	500	152.4	18.5	8.4	.024	.61	.022	.56	.149 x .254	3.78 x 6.45
	8675		2	Brown, Red	14 (19x27)	500	152.4	24.0	10.9	.023	.58	.023	.58	.168 x .290	4.27 x 7.37
	8673		2	Brown, Red	12 (19x25)	500	152.4	32.5	14.8	.026	.65	.022	.56	.186 x .328	4.72 x 8.33
	8678		2	Brown, Red	10 (19x23)	500	152.4	50.5	23.0	.031	.77	.025	.64	.225 x .400	5.72 x 10.16

Unshielded

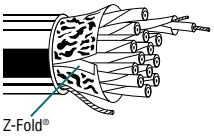
Power and Control Cables
Rubber and Oil Resistant Rubber SO Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
16 AWG Stranded Conductors (65x34) • Bare Copper • Conductors Cabled with Fillers • Paper Tape Separator														
Rubber Insulation • Black Oil-resistant Rubber Jacket														
600V RMS 60°C 	**9420**	UL: SO CSA: SO	5	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	14.9 73.5 143.0	6.8 33.4 65.0	.033	.838	.084	2.13	.506	12.85
	9422	UL: SO CSA: SO	7	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	20.3 101.0 201.0	9.2 45.9 91.4	.033	.838	.083	2.11	.581	14.76
	9424	UL: SO CSA: SO	9	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	28.6 150.5 288.0	13.0 68.4 130.9	.033	.838	.100	2.54	.720	18.29
	9425	UL: SO CSA: SO	12	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	31.6 165.5 318.0	14.4 75.2 144.5	.033	.838	.100	2.54	.720	18.29
	9427	UL: SO CSA: SO	16	See Chart 2 (Tech Info Section)	100 1000	30.5 304.8	41.2 428.0	18.7 194.5	.033	.838	.100	2.54	.787	19.99
	9429	UL: SO CSA: SO	20	See Chart 2 (Tech Info Section)	100 500	30.5 152.4	48.4 233.0	22.0 105.9	.033	.838	.100	2.54	.862	21.89

Overall Beldfoil® Shield

Computer Cables for Synchronous EIA Interface

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths		Standard Unit Weight		Nominal OD		Nominal DCR		Nom. Imped. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance			
				Ft.	m	Lbs.	kg	Inch	mm	Cond.	Shield			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
28 AWG Stranded (7x36) • Tinned Copper • Individually and Overall Beldfoil Shielded • 28 AWG Stranded TC Drain Wires																	
Datalene® Insulation • Gray PVC Jacket																	
UL AWM Style 2384 (30V 60°C)	**9868**	NEC: CM	14	1000	304.8	71.0	32.4	.394	10.01	64.9Ω/M′ 212.9Ω/km	Individual: 44.0Ω/M′ 144.4Ω/km Overall: 18.2Ω/M′ 59.7Ω/km	65	78%	—	—	20.5	67.3



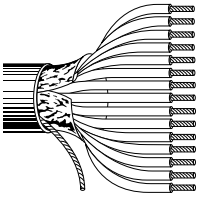
Individually Beldfoil shielded conductors are isolated from adjacent shields and each has a 28 AWG stranded drain wire.

DCR = DC Resistance • TC = Tinned Copper

Datalene insulation features include a low dielectric constant and a low dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Overall Beldfoil® Shield

Computer Cables for EIA RS-232 Applications

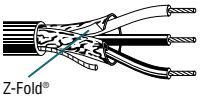
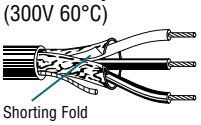
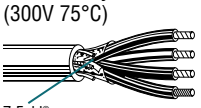
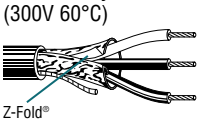
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (7x32) • Tinned Copper • Conductors Cabled • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wire																		
Semi-rigid PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C) 	**9533**	NEC: CMG CEC: CMG FT4	3	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	2.7 9.0 9.0 17.0 18.0	1.2 4.1 4.1 7.7 8.2	.010	.25	.032	.81	.162	4.11	33	108	65	213
	9534	NEC: CMG CEC: CMG FT4	4	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.0 11.0 11.5 21.0 22.0	1.4 5.0 5.2 9.5 10.0	.010	.25	.032	.81	.184	4.67	33	108	65	213
	9535	NEC: CMG CEC: CMG FT4	5	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.2 12.0 12.5 23.0 24.0	1.5 5.5 5.7 10.5 10.9	.010	.25	.032	.81	.189	4.80	33	108	65	213
	9536	NEC: CMG CEC: CMG FT4	6	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.6 14.5 14.5 28.0 28.0	1.6 6.6 6.6 12.7 12.7	.010	.25	.032	.81	.209	5.31	33	108	65	213
	9537	NEC: CMG CEC: CMG FT4	7	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.8 15.0 15.5 30.0 30.0	1.7 6.8 7.0 13.6 13.6	.010	.25	.032	.81	.209	5.31	33	108	65	213
	9538	NEC: CMG CEC: CMG FT4	8	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.3 17.0 17.0 33.0 33.0	2.0 7.7 7.7 15.0 15.0	.010	.25	.032	.81	.224	5.69	33	108	65	213
	9539	NEC: CMG CEC: CMG FT4	9	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	5.0 20.0 20.5 40.0 40.0	2.3 9.1 9.3 18.2 18.2	.010	.25	.032	.81	.244	6.20	30	98	55	180
	9540	NEC: CMG CEC: CMG FT4	10	See Chart 1 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.9 19.5 20.0 39.0 42.0	2.2 8.9 9.1 17.7 19.1	.010	.25	.032	.81	.244	6.19	30	98	55	180
	9541	NEC: CMG CEC: CMG FT4	15	See Chart 2R (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	6.4 27.0 27.0 53.0 53.0	2.9 12.3 12.3 24.1 24.1	.010	.25	.032	.81	.284	7.21	30	98	55	180
	9542	NEC: CMG CEC: CMG FT4	20	See Chart 2R (Tech Info Section)	100 U-500 500 1000	30.5 U-152.4 152.4 304.8	7.2 34.5 34.0 69.0	3.3 15.7 15.5 31.4	.010	.25	.032	.81	.314	7.98	30	98	55	180
	9543	NEC: CMG CEC: CMG FT4	25	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	8.7 44.0 86.0	4.0 20.0 39.1	.010	.25	.032	.81	.339	8.61	30	98	55	180
	9544	NEC: CMG CEC: CMG FT4	30	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	10.3 51.5 102.0	4.7 23.4 46.4	.010	.25	.040	1.02	.380	9.65	30	98	55	180
	9545	NEC: CMG CEC: CMG FT4	40	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	13.6 65.0 130.0	6.2 29.5 59.1	.010	.25	.040	1.02	.430	10.92	30	98	55	180
	9546	NEC: CMG CEC: CMG FT4	50	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	16.5 81.5 168.0	7.5 37.0 76.4	.010	.25	.045	1.14	.490	12.45	30	98	55	180

TC = Tinned Copper

*Capacitance between conductors. **Capacitance between one conductor and other conductors connected to shield.

Overall Beldfoil® Shield

Audio, Control and Instrumentation Cables
Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Stranded (7x30) • Tinned Copper • Conductors Cabled • Overall 100% Beldfoil Shield • 22 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • Brown PVC Jacket																		
300V RMS  Z-Fold®	**9770**	NEC:	3	Black,	U-500	U-152.4	9.0	4.1	.008	.20	.020	.51	.145	3.68	32	105	60	197
		CM		Red,	500	152.4	9.0	4.1										
		CEC:		White	U-1000	U-304.8	17.0	7.7										
		CM			1000	304.8	17.0	7.7										
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2093 (300V 60°C)  Shorting Fold	**8771**	NEC:	3	Black,	250	76.2	6.3	2.8	.016	.41	.033	.84	.199	5.05	23	75	41	134
		CM		Red,	U-500	U-152.4	12.0	5.5										
		CEC:		Clear	500	152.4	12.0	5.5										
		CM			U-1000	U-304.8	24.0	10.9										
					1000	304.8	24.0	10.9										
					10000	3048.0	240.0	109.1										
22 AWG Stranded (19x34) • Tinned Copper • Conductors Cabled • Overall 100% Beldfoil Shield • 23 and 25 AWG Drain Wires†																		
Polyethylene Insulation • White PVC Jacket																		
UL AWM Style 2094 (300V 75°C)  Z-Fold®	**8729**	NEC:	4	Black,	U-500	U-152.4	23.5	10.7	.016	.41	.051	1.30	.257	6.53	22	72	42	138
		CM, CL3		Red,	500	152.4	23.5	10.7										
		CEC:		Green,	U-1000	U-304.8	46.0	20.9										
		CM		Clear	1000	304.8	47.0	21.4										
20 AWG Stranded (7x28) • Tinned Copper • Conductors Cabled • Overall 100% Beldfoil Shield • 20 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2093 (300V 60°C)  Z-Fold®	**8772**	NEC:	3	Black,	U-500	U-152.4	16.0	7.3	.016	.41	.033	.84	.218	5.54	27	89	51	167
		CM		Red,	500	152.4	16.0	7.3										
		CEC:		Clear	U-1000	U-304.8	31.0	14.1										
		CM			1000	304.8	31.0	14.1										

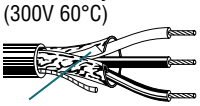
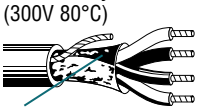
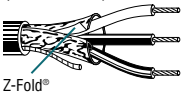
†8729 has three 23 AWG solid and one 25 AWG stranded tinned copper-coated steel drain wires.

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to ground.

Overall Beldfoil® Shield

Audio, Control and Instrumentation Cables
Plenum-Rated and Non-Plenum

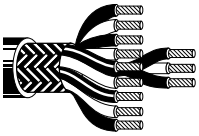
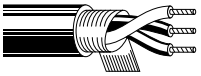
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
18 AWG Stranded (16x30) • Tinned Copper • Conductors Cabled • Overall 100% Beldfoil Shield • 20 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2093 (300V 60°C)  Shorting Fold	**8770**	NEC: CM CEC: CM	3	Black, Red, Clear	U-500 500 U-1000 1000 10000	U-152.4 152.4 U-304.8 304.8 3048.0	20.0 20.5 39.0 40.0 430.0	9.1 9.3 17.7 18.2 195.5	.018	.46	.033	.84	.246	6.25	24	79	48	157
											For Plenum version of 8770, see 88770.							
18 AWG Stranded (19x30) • Tinned Copper • Conductors Cabled • Overall 100% Beldfoil Shield • 20 AWG Stranded TC Drain Wire																		
Semi-rigid PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C)  Z-Fold®	**9418**	NEC: CMG CEC: CMG FT4	4	Red, Green, Black, White	100 U-500 500 U-1000 1000 10000	30.5 U-152.4 152.4 U-304.8 304.8 3048.0	5.9 25.0 25.5 50.0 50.0 530.0	2.7 11.4 11.6 22.7 22.7 240.9	.010	.25	.035	.89	.245	6.22	70	230	120	394
											For Plenum versions of 9418, see 89418 or 82418.							
Plenum • FEP Insulation • Red FEP Jacket																		
Non-conduit Suitable for Outdoor and Direct Burial applications.	**88770** new	NEC: CMP CEC: CMP FT6	3	Black, White, Red	500† 1000†	152.4 304.8	18.0 34.0	8.2 15.5	.007	.18	.014	.36	.161	4.09	54	177	96	315
Non-conduit Suitable for Outdoor and Direct Burial applications.	**89418**	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	100 500† 1000†	30.5 152.4 304.8	5.5 20.0 41.0	2.5 9.1 18.6	.007	.18	.014	.36	.177	4.50	30	98	57	187
Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
Non-conduit	**82418**	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	U-1000† 1000†	U-304.8 304.8	35.0 39.0	15.9 17.7	.007	.18	.014	.36	.176	4.47	35	115	63	207
16 AWG Stranded (19x29) • Tinned Copper • Conductors Cabled • Overall 100% Beldfoil Shield • 18 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2107 (600V 60°C)  Z-Fold®	**8618**	NEC: CL3	3	Black, Red, Clear	U-500 500 1000	U-152.4 152.4 304.8	32.0 32.0 67.0	14.5 14.5 30.5	.031	.73	.031	.79	.327	8.3	26	85	50	164

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ± 10% for spools and ± 5% for UnReel from length shown.

Overall Braid and Special Shielding

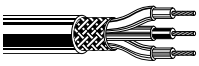
Audio, Control and Instrumentation Cables
Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
30 AWG Stranded Conductors (7x38) • Tinned Copper • Conductors Cabled • Paper Separator • 95% Tinned Copper Braid Shield																		
Polypropylene Insulation • Chrome PVC Jacket																		
200V RMS 105°C	**8643**		3	Black, Red, White	100 250	30.5 76.2	1.1 3.0	.5 1.4	.006	.15	.014	.36	.096	2.44	25	82	43	141
Conductors cabled around textile strength member.																		
22 AWG Stranded Conductors (7x30) • Tinned Copper • Conductors Cabled • 70% Tinned Copper Braid Shield																		
PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2095 (300V 80°C)	**8735**	NEC: CMG CEC: CMG FT4	3	Black, Red, White	500 U-1000 1000	152.4 U-304.8 304.8	14.5 27.0 27.0	6.6 12.3 12.3	.015	.38	.025	.64	.202	5.13	34	112	60	197
20 AWG Stranded Conductors (7x28) • Tinned Copper • 85% Tinned Copper Braid Shield																		
PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C) 	**9260**	NEC: CMG CEC: CMG FT4	6	See Chart 2 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.3 34.5 69.0	3.3 15.7 31.4	.016	.41	.032	.81	.305	7.75	26	85	50	164
	9261	NEC: CMG CEC: CMG FT4	12	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	12.0 60.0 119.0	5.5 27.3 54.1	.016	.41	.040	1.02	.396	10.06	26	85	57	187
Combination Shielded/Unshielded • 22 AWG Stranded (7x30) • Tinned Copper • Conductors Cabled • 80% Tinned Copper Braid Shield†																		
PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2785 (300V 80°C)	**8734**	NEC: CM	3: 1 Shld 2 Unshld	Black, Red, White	U-1000 1000	U-304.8 304.8	23.0 23.0	10.5 10.5	.015	.38	.025	.64	.194	4.93	—	—	79	259
†Tinned copper braid shield over one conductor (80% coverage).																		
Overall Spiral Shield • 18 AWG Stranded (7x26) • Tinned Copper • Conductors Cabled • Tinned Copper Spiral Wrap (80% Coverage)																		
PVC Insulation • Chrome PVC Jacket																		
450V RMS 80°C VW-1 	**8791**		3	Black, Red, White	500 U-1000 1000	152.4 U-304.8 304.8	23.0 45.0 46.0	10.5 20.5 20.9	.022	.56	.028	.71	.260	6.60	47	154	84	276

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to ground.

Overall Braid Shield

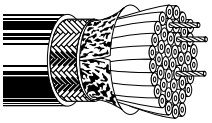
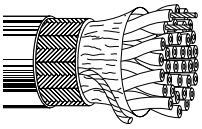
MIL-W-16878 (Type B) Conductors, Shielded and Jacketed†
Communication and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Stranded Conductors (19x34) • .003″ (.76mm) Clear Nylon Skin over Insulation • 90% Tinned Copper Braid Shield																		
PVC Insulation • White PVC Jacket																		
600V RMS 105°C VW-1 	**9965**		1	White	1000	304.8	10.0	4.5	.010	.25	.010	.25	.100	2.54	—	—	100	328
	9966		2	White, Black	100 500 1000	30.5 152.4 304.8	2.8 10.5 21.0	1.3 4.8 9.6	.010	.25	.020	.51	.176	4.47	52	171	87	285
	9967		3††	White, Black, Red	100 500 1000	30.5 152.4 304.8	3.5 13.0 26.0	1.6 5.9 11.8	.010	.25	.020	.51	.184	4.67	45	148	88	289
	9968		4††	White, Black, Red, Green	100 500 1000	30.5 152.4 304.8	3.9 16.0 31.0	1.8 7.3 14.1	.010	.25	.020	.51	.200	5.08	42	138	69	226
20 AWG Stranded Conductors (19x32) • Tinned Copper • .004″ (.10mm) Clear Nylon Skin over Insulation • 90% Tinned Copper Braid Shield																		
PVC Insulation • White PVC Jacket																		
600V RMS 105°C VW-1	**9961**		1	White	500 1000	152.4 304.8	5.0 9.0	2.3 4.1	.011	.27	.010	.25	.109	2.77	—	—	103	338
	9962		2††	White, Black	100 500 1000	30.5 152.4 304.8	3.3 12.5 24.0	1.5 5.7 10.9	.011	.27	.020	.51	.192	4.88	53	174	91	299
	9963		3††	White, Black, Red	100 500 1000	30.5 152.4 304.8	3.9 16.0 31.0	1.8 7.3 14.1	.011	.27	.025	.64	.210	5.33	49	161	84	276
	9964		4	White, Black, Red, Green	100 500 1000	30.5 152.4 304.8	4.6 19.5 38.0	2.1 8.9 17.3	.011	.27	.025	.64	.226	5.74	45	148	76	249
16 AWG Stranded Conductors (19x29) • Tinned Copper • .004″ (.10mm) Clear Nylon Skin over Insulation • 90% Tinned Copper Braid Shield																		
PVC Insulation • White PVC Jacket																		
600V RMS 105°C VW-1	**9951**		1	White	1000	304.8	22.0	10.0	.012	.30	.016	.41	.143	3.63	—	—	138	453
	9952		2††	White, Black	100 500 1000	30.5 152.4 304.8	5.1 20.5 42.0	2.3 9.3 19.1	.012	.30	.025	.64	.250	6.35	57	187	95	312
	9953		3††	White, Black, Red	100 500 1000	30.5 152.4 304.8	6.5 28.0 56.0	3.0 12.7 25.5	.012	.30	.025	.64	.264	6.71	58	190	101	331
	9954		4††	White, Black, Red, Green	100 500 1000	30.5 152.4 304.8	7.9 34.5 68.0	3.6 15.7 30.9	.012	.30	.027	.69	.291	7.39	49	161	94	308

* Capacitance between conductors.
** Capacitance between one conductor and other conductors connected to shield.
† Manufactured to Government specifications: MIL-W-16878 Rev. D.
†† Conductors cabled.

Overall Foil/Braid Shield

Computer Cables for EIA RS-232 Applications and IEEE 488 Interface,
Low-Capacitance Computer Cables for EIA RS-232 and EIA RS-423 Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Nominal OD		Nominal DCR		Nom. Vel. of Prop.	Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Cond.	Shield		* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
28 AWG Stranded Conductors (7x36) • Tinned Copper • Overall Beldfoil® + 65% Tinned Copper Braid Shield																	
Semi-rigid PVC Insulation • Chrome PVC Jacket																	
UL AWM Style 2464 (300V 80°C) CSA AWM I B FT4 	**9637**	NEC: CL2	25	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.2 29.0 59.0	2.8 13.2 26.8	.305	7.75	64.9Ω/M′ 212.9Ω/km	4.5Ω/M′ 14.8Ω/km	—	30	98	50	164
Low Capacitance • 28 AWG Stranded (7x36) • Tinned Copper • Overall Beldfoil + 65% TC Braid Shield • 28 AWG Stranded TC Drain Wire																	
Datalene® Insulation • Chrome PVC Jacket																	
UL AWM Style 2919 (30V 80°C)	**9791**	NEC: CL2	6	See Chart 1 (Tech Info Section)	500 1000	152.4 304.8	16.0 27.0	7.3 12.3	.225	5.72	64.9Ω/M′ 212.9Ω/km	6.15Ω/M′ 20.2Ω/km	78%	12	39.4	22	72.2
IEEE 488 • 26 AWG and 24 AWG Stranded Conductors (7x34 and 7x32) • Tinned Copper • Overall Foil + 90% TC Braid Shield • Drain Wire																	
Semi-rigid PVC Insulation • Gray PVC Jacket																	
UL AWM Style 2464 (300V 80°C) CSA AWM I A 	**9641**	NEC: CMG CEC: CMG FT4	23 (6) 26 AWG Pairs (10) 26 AWG Cond. (1) 24 AWG Cond.	See Chart 1 (Tech Info Section)	1000	304.8	82.0	37.4	.350	8.89	26 AWG: 37.3Ω/M′ 122.4Ω/km 24 AWG: 23.3Ω/M′ 76.4Ω/km	2.6Ω/M′ 8.5Ω/km	—	—	—	—	—

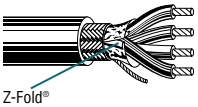
TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to ground.

Datalene insulation features include a low dielectric constant and a low dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Overall Foil/Braid Shield

Computer Cables for EIA RS-232 Applications

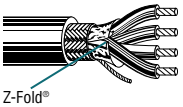
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Nominal OD		Nominal DCR		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Cond.	Shield	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded Conductors (7x32) • Tinned Copper • Overall 100% Beldfoil® + 65% TC Braid Shield • 24 AWG Stranded TC Drain Wire																
Semi-rigid PVC Insulation • Chrome PVC Jacket																
UL AWM Style 2464 (300V 80°C)  Z-Fold®	**9608**	NEC: CMG CEC: CMG FT4	3	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	3.2 12.0 23.0	1.5 5.5 10.5	.190	4.83	24.0Ω/M′ 78.7Ω/km	8.6Ω/M′ 28.2Ω/km	35	115	65	213
	9609	NEC: CMG CEC: CMG FT4	4	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	3.5 14.0 26.0	1.6 6.4 11.8	.200	5.08	24.0Ω/M′ 78.7Ω/km	9.8Ω/M′ 32.2Ω/km	35	115	65	213
	9610	NEC: CMG CEC: CMG FT4	5	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.0 16.0 32.0	1.8 7.3 14.5	.215	5.46	24.0Ω/M′ 78.7Ω/km	6.5Ω/M′ 21.3Ω/km	35	115	65	213
	9611	NEC: CMG CEC: CMG FT4	6	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.7 17.5 34.0	2.1 8.0 15.5	.225	5.72	24.0Ω/M′ 78.7Ω/km	7.0Ω/M′ 23.0Ω/km	30	98.4	55	180
	9612	NEC: CMG CEC: CMG FT4	7	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.7 19.0 38.0	2.1 8.6 17.3	.225	5.72	24.0Ω/M′ 78.7Ω/km	6.9Ω/M′ 22.6Ω/km	30	98.4	55	180
	9613	NEC: CMG CEC: CMG FT4	8	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.0 21.0 41.0	2.3 9.6 18.6	.240	6.10	24.0Ω/M′ 78.7Ω/km	7.3Ω/M′ 23.9Ω/km	30	98.4	55	180
	9614	NEC: CMG CEC: CMG FT4	9	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.3 22.0 44.0	2.4 10.0 20.0	.253	6.42	24.0Ω/M′ 78.7Ω/km	7.5Ω/M′ 24.6Ω/km	30	98.4	55	180
	9615	NEC: CMG CEC: CMG FT4	10	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.1 25.0 50.0	2.8 11.4 22.7	.270	6.86	24.0Ω/M′ 78.7Ω/km	6.9Ω/M′ 22.6Ω/km	30	98.4	55	180
	9616	NEC: CMG CEC: CMG FT4	15	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.6 31.5 63.0	3.0 14.3 28.6	.300	7.62	24.0Ω/M′ 78.7Ω/km	6.0Ω/M′ 19.7Ω/km	30	98.4	55	180
	9617	NEC: CMG CEC: CMG FT4	25	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	10.1 51.0 100.0	4.6 23.2 45.5	.370	9.40	24.0Ω/M′ 78.7Ω/km	5.1Ω/M′ 16.7Ω/km	30	98.4	55	180
	9618	NEC: CMG CEC: CMG FT4	37	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	13.3 66.5 132.0	6.0 30.2 60.0	.411	10.43	24.0Ω/M′ 78.7Ω/km	4.4Ω/M′ 14.4Ω/km	30	98.4	55	180
	9619	NEC: CMG CEC: CMG FT4	50	See Chart 2R (Tech Info Section	100 500 1000	30.5 152.4 304.8	18.8 93.0 182.0	8.6 42.4 83.0	.485	12.32	24.0Ω/M′ 78.7Ω/km	4.3Ω/M′ 14.1Ω/km	30	98.4	55	180

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to ground.

Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232 and EIA RS-423 Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nominal OD Inch	Nominal OD mm	Nominal DCR Cond.	Nominal DCR Shield	Nom. Vel. of Prop.	Nominal Capacitance * pF/Ft.	Nominal Capacitance * pF/m	Nominal Capacitance ** pF/Ft.	Nominal Capacitance ** pF/m
24 AWG Stranded Conductors (7x32) • Tinned Copper • Overall 100% Beldfoil® + 65% TC Braid Shield • 24 AWG Stranded TC Drain Wire																	
Datalene® Insulation • Chrome PVC Jacket																	
UL AWM Style 2919 (30V 80°C)  Z-Fold®	**9925**	NEC: CM CEC: CM	3	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	3.5 16.0 26.0	1.6 7.3 11.8	.215	5.46	24.0Ω/M′ 78.7Ω/km	5.2Ω/M′ 17.0Ω/km	78%	12	39.4	22	72.2
	9927	NEC: CM CEC: CM	4	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.1 15.5 31.0	1.9 7.0 14.1	.230	5.84	24.0Ω/M′ 78.7Ω/km	5.3Ω/M′ 17.4Ω/km	78%	12	39.4	22	72.2
	9929	NEC: CM CEC: CM	5	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.5 18.0 36.0	2.0 8.2 16.4	.246	6.25	24.0Ω/M′ 78.7Ω/km′	4.2Ω/M′ 13.9Ω/km	78%	12	39.4	22	72.2
	9931	NEC: CM CEC: CM	6	See Chart 1 (Tech Info Section)	100 500 1000 10000	30.5 152.4 304.8 3048.0	4.9 19.5 39.0 410.0	2.2 8.9 17.7 186.4	.265	6.73	24.0Ω/M′ 78.7Ω/km	4.4Ω/M′ 14.4Ω/km	78%	12	39.4	22	72.2
	9932	NEC: CM CEC: CM	7	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.2 20.5 41.0	2.4 9.3 18.6	.265	6.73	24.0Ω/M′ 78.7Ω/km	4.4Ω/M′ 14.4Ω/km	78%	12	39.4	22	72.2
	9933	NEC: CM CEC: CM	8	See Chart 1 (Tech Info Section)	100 500 1000 10000	30.5 152.4 304.8 3048.0	5.6 23.0 46.0 480.0	2.5 10.5 20.9 218.2	.280	7.11	24.0Ω/M′ 78.7Ω/km	4.4Ω/M′ 14.4Ω/km	78%	12	39.4	22	72.2
	9934	NEC: CM CEC: CM	9	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.9 24.0 48.0	2.7 10.9 21.8	.300	7.62	24.0Ω/M′ 78.7Ω/km	3.9Ω/M′ 12.6Ω/km	78%	12	39.4	22	72.2
	9935	NEC: CM CEC: CM	10	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.7 27.0 53.0	2.6 12.3 24.1	.306	7.77	24.0Ω/M′ 78.7Ω/km	3.2Ω/M′ 10.4Ω/km	78%	12	39.4	22	72.2
	9936	NEC: CM CEC: CM	15	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.2 35.0 68.0	3.3 15.9 30.9	.350	8.89	24.0Ω/M′ 78.7Ω/km	3.6Ω/M′ 11.7Ω/km	78%	12	39.4	22	72.2
	9937	NEC: CM CEC: CM	25	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	13.6 54.5 108.0	6.2 24.8 49.1	.445	11.30	24.0Ω/M′ 78.7Ω/km	2.8Ω/M′ 9.1Ω/km	78%	12	39.4	22	72.2
	9938	NEC: CM CEC: CM	37	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	16.8 71.5 139.0	7.6 32.5 63.2	.515	13.08	24.0Ω/M′ 78.7Ω/km	2.4Ω/M′ 7.8Ω/km	78%	12	39.4	22	72.2

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to ground.

Datalene insulation features include a low dielectric constant and a low dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

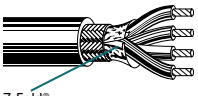
Overall Foil/Braid Shield

Computer Cables for EIA RS-232 Applications

22 AWG Stranded Conductors (7x30) • Tinned Copper • Overall 100% Beldfoil® + 65% Tinned Copper Braid Shield

Semi-rigid PVC Insulation • Chrome PVC Jacket

UL AWM Style 2464 (300V 80°C)



Z-Fold®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nominal OD Inch	Nominal OD mm	Nominal DCR Cond.	Nominal DCR Shield	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
	9939	NEC: CMG CEC: CMG FT4	3	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	3.6 14.0 27.0	1.6 6.4 12.3	.202	5.13	14.7Ω/M′ 48.2Ω/km	6.2Ω/M′ 20.3Ω/km	37	121	67	220
	9940	NEC: CMG CEC: CMG FT4	4	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.0 16.5 32.0	1.8 7.5 14.5	.215	5.46	14.7Ω/M′ 48.2Ω/km	5.0Ω/M′ 16.4Ω/km	37	121	67	220
	9941	NEC: CMG CEC: CMG FT4	5	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.7 19.0 38.0	2.1 8.6 17.3	.230	5.84	14.7Ω/M′ 48.2Ω/km	7.1Ω/M′ 23.3Ω/km	37	121	67	220
	9942	NEC: CMG CEC: CMG FT4	6	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.2 22.0 43.0	2.4 10.0 19.5	.245	6.22	14.7Ω/M′ 48.2Ω/km	7.9Ω/M′ 25.9Ω/km	35	115	63	207
	9943	NEC: CMG CEC: CMG FT4	7	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.5 23.0 46.0	2.5 10.5 20.9	.245	6.22	14.7Ω/M′ 48.2Ω/km	7.0Ω/M′ 23.0Ω/km	35	115	63	207
	9944	NEC: CMG CEC: CMG FT4	8	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.2 26.0 51.0	2.8 11.8 23.2	.260	6.60	14.7Ω/M′ 48.2Ω/km	6.0Ω/M′ 19.7Ω/km	35	115	63	207
	9945	NEC: CMG CEC: CMG FT4	9	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.8 28.5 57.0	3.1 13.0 25.9	.280	7.11	14.7Ω/M′ 48.2Ω/km	5.1Ω/M′ 16.7Ω/km	35	115	63	207
	9946	NEC: CMG CEC: CMG FT4	10	See Chart 1 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.3 31.5 62.0	3.3 14.3 28.2	.300	7.62	14.7Ω/M′ 48.2Ω/km	4.6Ω/M′ 15.1Ω/km	35	115	63	207
	9947	NEC: CMG CEC: CMG FT4	15	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	8.7 42.5 83.0	4.0 19.3 37.7	.340	8.64	14.7Ω/M′ 48.2Ω/km	4.1Ω/M′ 13.5Ω/km	35	115	63	207
	9948	NEC: CMG CEC: CMG FT4	25	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	13.1 65.5 130.0	6.0 29.8 59.1	.410	10.41	14.7Ω/M′ 48.2Ω/km	3.1Ω/M′ 10.2Ω/km	35	115	63	207
	9949	NEC: CMG CEC: CMG FT4	37	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	17.7 87.5 180.0	8.0 39.8 81.8	.460	11.68	14.7Ω/M′ 48.2Ω/km	2.7Ω/M′ 8.9Ω/km	35	115	63	207
	9950	NEC: CMG CEC: CMG FT4	50	See Chart 2R (Tech Info Section)	100 500 1000	30.5 152.4 304.8	23.9 118.0 238.0	10.9 53.6 108.2	.555	14.10	14.7Ω/M′ 48.2Ω/km	2.3Ω/M′ 7.5Ω/km	35	115	63	207

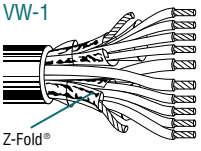
DCR = DC Resistance

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to ground.

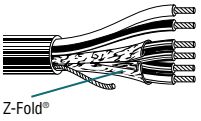
Overall Shield

Special Audio, Communication and Instrumentation Cables

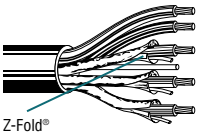
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
24 and 22 AWG Stranded Conductors (7x32 and 7x30) • Tinned Copper • Cabled in Quads† • 24 AWG Stranded Tinned Copper Drain Wire																		
PVC Insulation (22 AWG) **/ Polyethylene Insulation** (24 AWG) **• Chrome PVC Jacket**																		
350V RMS 80°C VW-1	**8787**		10: 4 Shld 24 (7x32)	Gray, White, Blue, Green	U-500 500	U-152.4 152.4	24.5 24.5	11.1 11.1	.012	.30	.030	.76	.290	7.37	—	—	—	—
			4 Shld 24 (7x32)	Brown, Red, Yellow, Orange					.012	.30								
			2 Unshld 22 (7x30)	White, Blue					.015	.38								
24 and 22 AWG Stranded Conductors (7x32 and 7x30) • Tinned Copper • (4) Conductors Cabled†† • 22 AWG Stranded Tinned Copper Drain Wire																		
PVC Insulation • Chrome PVC Jacket																		
300V 90°C NEC Article 800	**8786**	NEC: CM CEC: CM	6: 4 Shld 24 (7x32)	Black, Green, Red, Yellow	U-500 500	U-152.4 152.4	16.5 17.0	7.5 7.7	.015	.38	.028	.71	.236	5.99	—	—	—	—
			2 Unshld 22 (7x30)	Blue, White														
22 AWG Stranded Conductors (7x30) • Tinned Copper • (3) Conductors Cabled and Separately Beldfoil Shielded (100%) with Drain Wires▲																		
PVC Insulation • Chrome PVC Jacket																		
300V RMS 60°C	**8788**	NEC: CM	5: 3 Shld	Black, Red, Green	500	152.4	17.5	8.0	.015	.38	.028	.71	.236	5.99	34	112	—	—
			2 Unshld◆	Yellow, Blue														
22 AWG Triads Stranded Conductors (7x30) • Tinned Copper • Cabled in Triads▶ • 22 AWG Stranded Tinned Copper Drain Wire																		
Polypropylene Insulation • Overall Chrome PVC Jacket																		
300V RMS 80°C VW-1	**9772**		36 (12 triads)	Black, Red, Green, Triads w/Color Coded Jackets	500	152.4	139.0	63.2	.008	.20	.060	1.52	.725	18.42	34	112	67	220



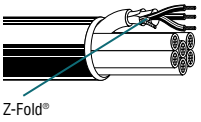
†Each quad wrapped in transparent polyester tape. Red Beldfoil® shield over one quad, Green Beldfoil shield over the other. (2) quads and (2) unshielded conductors cabled.



††(4) conductors cabled under 100% Beldfoil shield; (2) conductors unshielded.



◆(2) Unshielded conductors cabled around a non-hygroscopic filler.
▲Drain wire for each conductor is tinned cadmium bronze ribbon under 100% Beldfoil shield coverage.

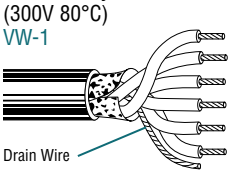


▶Each triad shielded with 100% Beldfoil shield and drain wire, encased in a .020″ white PVC jacket with color coded stripes.

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to ground.

Overall Shield

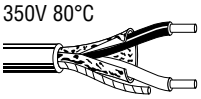
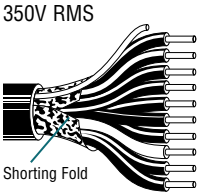
Data Cables for Molex SEMMCONN and AMP® SDL Connectors
Computers, Instrumentation and Medical Electronics Interconnect Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
26 AWG Stranded Conductors (7x34) • Tinned Copper • 100% Duofoil® Shield • 26 AWG Stranded Tinned Copper Drain Wire														
PVC Insulation • Black PVC Jacket														
UL AWM Style 2464 (300V 80°C) VW-1 	**1211A**	NEC: CL2X	4	White, Yellow, Orange, Green	500 1000	152.4 304.8	12.0 23.0	5.5 10.5	.015	.37	.035	.89	.193	4.90
	1212A	NEC: CL2X	6	Red, Blue, Green, Orange, Yellow, White	500 1000	152.4 304.8	15.0 29.0	6.8 13.2	.015	.37	.035	.89	.217	5.51
	1213A	NEC: CL2X	8	Black, Purple, Red, Blue, Green, Orange, Yellow, White	500 1000	152.4 304.8	12.0 23.0	5.5 10.5	.015	.37	.036	.91	.234	5.94
	1214A	NEC: CL2X	16	White & Red, White & Brown, White & Black, Black, Red, Brown, Purple, Blue, Green, Gray, Aqua, Tan, Pink, Orange, White, Yellow	1000	304.8	57.0	25.9	.015	.37	.035	.89	.301	7.65

AMP is a registered trademark of AMP, Inc.

Overall Shield

Direct Burial Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
20 AWG Solid Conductors • Tinned Copper • Conductors Cabled • Overall 100% Beldfoil® Shield • 22 AWG Solid TC Drain Wire																		
Polypropylene Insulation • Black HDPE Jacket																		
350V 80°C 	**9802**		2	White, Black	500 1000	152.4 304.8	12.5 20.0	5.7 9.1	.013	.33	.035	.89	.190	4.83	23	75	42	138
Polypropylene Insulation • Black HDPE Jacket																		
350V RMS 	**9803**		3	White, Red, Black	1000	304.8	25.0	11.4	.013	.33	.035	.89	.205	5.21	23	75	42	138
	9890		10	See Chart 1 (Tech Info Section)	500 1000	152.4 304.8	32.0 65.0	14.5 29.5	.013	.33	.040	1.02	.310	7.87	23	75	42	138
	9894		15	See Chart 2 (Tech Info Section)	1000	304.8	96.0	43.6	.013	.33	.045	1.14	.390	9.91	23	75	42	138

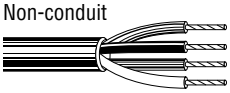
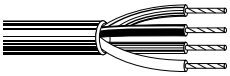
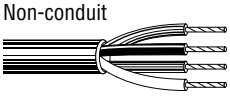
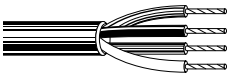
HDPE = High-density Polyethylene • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to ground.

Plenum-Rated

Unshielded

Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
22 AWG Stranded Conductors (7x30) • Tinned Copper • Conductors Cabled														
Plenum • FEP Insulation • Red FEP Jacket														
Non-conduit 	**88444**	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	100 500† 1000†	30.5 152.4 304.8	3.0 9.0 16.0	1.4 4.1 7.3	.006	.15	.010	.25	.121	3.07
Suitable for Outdoor and Direct Burial applications.														
Plenum • FEP Insulation • Natural Flamarrest® Jacket														
Non-conduit 	**82444**	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	U-500† U-1000† 1000†	U-152.4 U-304.8 304.8	8.5 17.0 17.0	3.9 7.7 7.7	.006	.15	.015	.38	.134	3.40
22 AWG Stranded Conductors (7x30) • Tinned Copper • Twisted Pairs														
Plenum • FEP Insulation • Red FEP Jacket														
300V RMS, Non-conduit	**88442**	NEC: CMP CEC: CMP FT6	2	Black, Red	100 500† 1000†	30.5 152.4 304.8	2.3 5.5 10.0	1.0 2.5 4.5	.006	.15	.012	.30	.102	2.59
Suitable for Outdoor and Direct Burial applications.														
Plenum • FEP Insulation • Natural Flamarrest Jacket														
300V RMS, Non-conduit	**82442** new	NEC: CMP CEC: CMP FT6	2	Black, Red	U-1000† 1000†	U-304.8 304.8	83.0 84.0	37.7 38.2	.006	.15	.014	.36	.112	2.84
18 AWG Stranded Conductors (19x30) • Tinned Copper • Conductors Cabled														
Plenum • FEP Insulation • Red FEP Jacket														
Non-conduit 	**88489**	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	500† 1000†	152.4 304.8	16.5 31.0	7.5 14.1	.007	.18	.009	.23	.161	4.09
Suitable for Outdoor and Direct Burial applications.														
Plenum • FEP Insulation • Natural Flamarrest Jacket														
Non-conduit 	**82489**	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	U-1000† 1000†	U-304.8 304.8	31.0 31.0	14.1 14.1	.007	.18	.014	.36	.170	4.32

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Plenum-Rated

Overall Beldfoil® Shield
Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
18 AWG Stranded Conductors (19x30) • Tinned Copper • Conductors Cabled • Overall 100% Beldfoil Shield • 20 AWG Stranded TC Drain Wire																		
Plenum • FEP Insulation • Red FEP Jacket																		
Non-conduit	**88770** new	NEC: CMP CEC: CMP FT6	3	Black, White, Red	500† 1000†	152.4 304.8	18.0 34.0	8.2 15.5	.007	.18	.014	.36	.161	4.09	54	177	96	315
	89418	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	100 500† 1000†	30.5 152.4 304.8	5.5 20.0 41.0	2.5 9.1 18.6	.007	.18	.014	.36	.177	4.50	30	98	57	187
Suitable for Outdoor and Direct Burial applications.																		
Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
Non-conduit	**82418**	NEC: CMP CEC: CMP FT6	4	Black, White, Red, Green	U-1000† 1000†	U-304.8 304.8	35.0 39.0	15.9 17.7	.007	.18	.014	.36	.176	4.47	35	115	63	207

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Plenum-Rated

Overall Foil/Braid Shield
Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded Conductors (7x32) • Tinned Copper • Conductors Cabled • 100% Beldfoil® + 85% Tinned Copper Braid Shield																		
Plenum • FEP Insulation • Red FEP Jacket																		
Non-conduit	**83503**	NEC: CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	500† 1000†	152.4 304.8	9.5 18.0	4.3 8.2	.006	.15	.014	.36	.135	3.43	20	66	36	118
	83504	NEC: CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	3.5 11.5 22.0	1.6 5.2 10.0	.006	.15	.014	.36	.144	3.66	20	66	36	118
	83506	NEC: CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	500† 1000†	152.4 304.8	15.0 28.0	6.8 12.7	.006	.15	.014	.36	.165	4.19	20	66	36	118
	83509	NEC: CMP CEC: CMP FT6	9	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	5.3 19.0 39.0	2.4 8.6 17.7	.006	.15	.014	.36	.188	4.78	20	66	36	118
	83512	NEC: CMP CEC: CMP FT6	12	See Chart 2 (Tech Info Section)	500† 1000†	152.4 304.8	23.0 47.0	10.5 21.4	.006	.15	.014	.36	.207	5.26	20	66	36	118
	83515	NEC: CMP CEC: CMP FT6	15	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	7.2 27.0 53.0	3.3 12.3 24.1	.006	.15	.014	.36	.227	5.77	20	66	36	118

Suitable for Outdoor and Direct Burial applications.

22 AWG Stranded Conductors (7x30) • Tinned Copper • Conductors Cabled • 100% Beldfoil + 85% Tinned Copper Braid Shield																		
Plenum • FEP Insulation • Red FEP Jacket																		
Non-conduit	**83552**	NEC: CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	500† 1000†	152.4 304.8	10.0 18.0	4.5 8.2	.006	.15	.014	.36	.141	3.58	23	75	40	131
	83553	NEC: CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	3.5 12.0 22.0	1.6 5.5 10.0	.006	.15	.014	.36	.144	3.76	23	75	40	131
	83554	NEC: CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	4.0 14.0 27.0	1.8 6.4 12.3	.006	.15	.014	.36	.159	4.04	23	75	40	131
	83556	NEC: CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	5.2 18.0 38.0	2.4 8.2 17.3	.006	.15	.014	.36	.183	4.65	23	75	40	131
	83559	NEC: CMP CEC: CMP FT6	9	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	6.8 25.0 50.0	3.1 11.4 22.7	.006	.15	.014	.36	.209	5.31	23	75	40	131
	83562	NEC: CMP CEC: CMP FT6	12	See Chart 2 (Tech Info Section)	500† 1000†	152.4 304.8	30.5 60.0	13.9 27.3	.006	.15	.015	.38	.234	5.94	23	75	40	131
	83569	NEC: CMP CEC: CMP FT6	19	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	9.6 45.5 85.0	4.4 20.7 38.6	.006	.15	.015	.38	.269	6.83	23	75	40	131

Suitable for Outdoor and Direct Burial applications.

*Capacitance between conductors. **Capacitance between one conductor and other conductors connected to shield.
†Spools are one piece, but length may vary ±10% from length shown.

Plenum-Rated

Overall Foil/Braid Shield
Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
20 AWG Stranded Conductors (7x28) • Tinned Copper • Conductors Cabled • 100% Beldfoil® + 85% Tinned Copper Braid Shield																		
Plenum • FEP Insulation • Red FEP Jacket																		
Non-conduit	**83602**	NEC: CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	500† 1000†	152.4 304.8	13.0 24.0	5.9 10.9	.006	.15	.014	.36	.152	3.86	26	85	51	167
	83604	NEC: CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	5.1 18.0 34.0	2.3 8.2 15.5	.006	.15	.014	.36	.178	4.52	26	85	51	167
	83606	NEC: CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	6.2 23.5 48.0	2.8 10.7 21.8	.006	.15	.014	.36	.207	5.26	26	85	51	167
	83609	NEC: CMP CEC: CMP FT6	9	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	8.2 32.0 63.0	3.7 14.5 28.6	.006	.15	.014	.36	.238	6.05	26	85	51	167
	83612	NEC: CMP CEC: CMP FT6	12	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	7.8 36.5 67.0	3.5 16.6 30.5	.006	.15	.014	.36	.265	6.73	26	85	51	167
18 AWG Stranded Conductors (19x30) • Tinned Copper • Conductors Cabled • 100% Beldfoil + 85% Tinned Copper Braid Shield																		
Plenum • FEP Insulation • Red FEP Jacket																		
Non-conduit	**83652**	NEC: CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	4.6 15.0 29.0	2.1 6.8 13.2	.007	.18	.014	.36	.175	4.45	33	108	60	197
	83653	NEC: CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	5.4 19.5 40.0	2.5 8.9 18.2	.007	.18	.014	.36	.184	4.67	33	108	60	197
	83654	NEC: CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	6.2 23.5 48.0	2.8 10.7 21.8	.007	.18	.014	.36	.199	5.05	33	108	60	197
	83656	NEC: CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	8.1 31.5 62.0	3.7 14.3 28.2	.007	.18	.014	.36	.234	5.94	33	108	60	197
	83659	NEC: CMP CEC: CMP FT6	9	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	9.8 46.5 88.0	4.5 21.1 40.0	.007	.18	.015	.36	.293	7.44	33	108	60	197
	83662	NEC: CMP CEC: CMP FT6	12	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	11.9 55.5 109.0	5.4 25.2 49.5	.007	.18	.015	.36	.308	7.82	33	108	60	197

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary ±10% from length shown.

Plenum-Rated

Overall Foil/Braid Shield
Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
16 AWG Stranded Conductors (19x29) • Tinned Copper • Conductors Cabled • 100% Beldfoil® + 85% Tinned Copper Braid Shield																		
Plenum • FEP Insulation • Red FEP Jacket																		
Non-conduit	**83702**	NEC: CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	5.1 20.0 41.0	2.3 9.1 18.6	.007	.18	.014	.36	.196	4.72	35	115	63	207
	83703	NEC: CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	500† 1000†	152.4 304.8	25.0 51.0	11.4 23.2	.007	.18	.014	.36	.206	5.23	35	115	63	207
	83704	NEC: CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	8.0 31.0 61.0	3.6 14.1 27.7	.007	.18	.014	.36	.223	5.66	35	115	63	207
	83706	NEC: CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	9.6 45.5 86.0	4.4 20.7 39.2	.007	.18	.014	.36	.265	6.73	35	115	63	207
	83709	NEC: CMP CEC: CMP FT6	9	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	13.1 61.5 118.0	6.0 28.0 53.6	.007	.18	.014	.36	.307	7.80	35	115	63	207
	83712	NEC: CMP CEC: CMP FT6	12	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	16.4 77.0 151.0	7.5 35.0 68.6	.007	.18	.014	.36	.344	8.74	35	115	63	207
	83715	NEC: CMP CEC: CMP FT6	15	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	19.6 93.5 187.0	8.9 42.5 85.0	.007	.18	.014	.36	.407	10.34	35	115	63	207
	83719	NEC: CMP CEC: CMP FT6	19	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	23.5 113.0 226.0	10.7 51.4 102.7	.007	.18	.014	.36	.403	10.24	35	115	63	207

* Capacitance between conductors.
** Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary ±10% from length shown.

High-Temperature

Unshielded
Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
20 AWG Stranded Conductors (7x28) • Tinned Copper • Conductors Cabled														
Tefzel® Insulation • Clear Tefzel Jacket														
300V RMS 150°C VW-1	**85220**		2	Black, Red	100 1000 †	30.5 304.8	3.8 24.0	1.7 10.9	.015	.38	.020	.51	.185	4.70
16 AWG Stranded Conductors (19x29) • Tinned Copper • Conductors Cabled														
Tefzel Insulation • Clear Tefzel Jacket														
300V RMS 150°C VW-1	**85221** new		2	Black, Red	500 † 1000 †	152.4 304.8	17.0 35.0	7.7 15.9	.015	.38	.019	.48	.211	5.36
	85102		2	See Chart 2 (Tech Info Section)	500 † 1000 †	152.4 304.8	16.0 33.0	7.3 15.0	.015	.38	.019	.48	.211	5.36
	85103		3	See Chart 2 (Tech Info Section)	500 † 1000 †	152.4 304.8	22.0 43.0	10.0 19.5	.015	.38	.019	.48	.223	5.76
	85105		5	See Chart 2 (Tech Info Section)	500 † 1000 †	152.4 304.8	36.5 68.0	16.6 30.9	.015	.38	.019	.48	.268	6.81
	85107		7	See Chart 2 (Tech Info Section)	100 1000 †	30.5 304.8	11.5 105.0	5.2 47.7	.015	.38	.024	.61	.303	7.70
	85109		9	See Chart 2 (Tech Info Section)	500 † 1000 †	152.4 304.8	59.0 116.0	26.8 52.7	.015	.38	.024	.61	.354	8.99

† Spools are one piece, but length may vary ±10% from length shown.

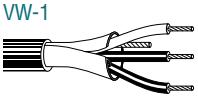
Tefzel insulated and jacketed cables are particularly well suited for harsh environments due to outstanding mechanical toughness of the material, as well as its high-temperature and radiation resistant characteristics.

Tefzel cables are used extensively in chemical plants, nuclear plants, and fossil fuel power plants. Typical applications are data recording, communication, telemetering, and monitoring pressure or material flow.

Tefzel is a DuPont trademark.

High-Temperature

Overall Beldfoil® Shield
Control and Instrumentation Cables

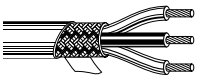
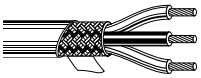
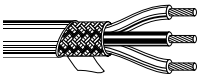
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Stranded (7x30) • Tinned Copper • Conductors Cabled • 22 AWG (7x30) Stranded TC Drain Wire • 100% Special Beldfoil Shield																		
FEP Insulation • Red Silicone Rubber Jacket • Noise Reducing Tape																		
Jacket working voltage 2000V DC, shield to ground VW-1 70°C (min.) to 150°C (max.) operating temperature.	**83394**		2	Black, White	100 U-500† 500†	30.5 U-152.4 152.4	3.6 14.5 16.5	1.6 6.6 7.5	.015	.38	.030	.76	.199	5.05	22	72	40	131
Jacket working voltage 2000V DC, shield to ground VW-1 70°C (min.) to 150°C (max.) operating temperature.	**83395**		3	Black, Red, White	100 500†	30.5 152.4	3.9 18.0	1.8 8.2	.015	.38	.031	.79	.208	5.28	22	72	40	131
	83396		4	Black, White, Red, Green	100 500†	30.5 152.4	4.4 19.5	2.0 8.9	.015	.38	.030	.76	.217	5.51	22	72	40	131
20 AWG Stranded (7x28) • Tinned Copper • Twisted Pair • 20 AWG (7x28) Stranded TC Drain Wire • 100% Special Beldfoil Shield																		
FEP Insulation • Yellow Silicone Rubber Jacket • Noise Reducing Tape																		
Jacket working voltage 2000V DC, shield to ground VW-1 70°C (min.) to 150°C (max.) operating temperature.	**83393**		2	Black, Red	100† U-500 500†	30.5 U-152.4 152.4	4.6 18.5 19.0	2.1 8.4 8.6	.020	.51	.030	.76	.242	6.15	22	72	40	131
20 AWG Stranded Conductors (7x28) • Tinned Copper • Conductors Cabled • Drain Wire • Overall 100% Beldfoil Aluminum-Kapton® Shield																		
Tefzel® Insulation • Clear Tefzel Jacket																		
300V RMS 150°C VW-1	**85230**		2	Black, Red	500† 1000†	152.4 304.8	14.5 30.0	6.6 13.6	.015	.38	.020	.51	.182	4.62	—	—	—	—
300V RMS 150°C VW-1	**85240**		3	Black, Red, Green	100 1000†	30.5 304.8	4.6 32.0	2.1 14.5	.015	.38	.020	.51	.193	4.90	—	—	—	—
16 AWG Stranded Conductors (19x29) • Tinned Copper • Conductors Cabled • Drain Wire • Overall 100% Beldfoil Aluminum-Kapton Shield																		
Tefzel Insulation • Clear Tefzel Jacket																		
300V RMS 150°C VW-1	**85231**		2	Black, Red	100 500† 1000†	30.5 152.4 304.8	5.6 19.0 39.0	2.5 8.6 17.7	.020	.51	.020	.51	.210	5.33	—	—	—	—
300V RMS 150°C VW-1 	**85241**		3	Black, Red, Green	500† 1000†	152.4 304.8	24.5 49.0	11.1 22.3	.020	.51	.020	.51	.223	5.66	—	—	—	—

*Capacitance between conductors. **Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Tefzel and Kapton are DuPont trademarks.

High-Temperature

Overall Braid Shield — Control and Instrumentation Cables
MIL-W-16878/4 (Type E) — Individual Conductors

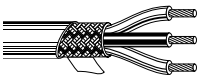
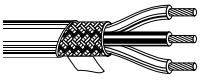
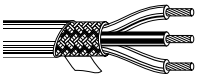
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
26 AWG Stranded Conductors (7x34) • Silver-plated Copper • Cabled and Color-coded • 90% Silver-plated Copper Braid Shield																		
Extruded TFE Teflon® Insulation • White TFE Teflon Tape-wrapped Jacket																		
600V RMS -65°C to 200°C VW-1	**83303**		1	White	500† 1000†	152.4 304.8	4.0 8.0	1.8 3.6	.009	.23	.010	.25	.075	1.91	—	—	44.6	146
	**83317**		2	White, Black	100† 500† 1000†	30.5 152.4 304.8	2.0 7.5 13.0	0.9 3.4 5.9	.009	.23	.010	.25	.108	2.74	20.8	68	35.5	116
	83332		3	White, Black, Red	100† 1000†	30.5 304.8	2.4 17.0	1.1 7.7	.009	.23	.010	.25	.122	3.10	18.8	62	31.4	103
	83347		4	White, Black, Red, Green	100† 500† 1000†	30.5 152.4 304.8	2.6 9.5 19.0	1.2 4.3 8.6	.009	.23	.010	.25	.131	3.33	18.5	61	30.5	100
MIL-Spec MIL-W-16878/4 (Type E).																		
24 AWG Stranded Conductors (19x36) • Silver-plated Copper • Cabled and Color-coded • 90% Silver-plated Copper Braid Shield																		
Extruded TFE Teflon Insulation • White TFE Teflon Tape-wrapped Jacket																		
600V RMS -65°C to 200°C VW-1	**83304**		1	White	500† 1000†	152.4 304.8	4.5 8.0	2.0 3.6	.010	.25	.010	.25	.082	2.08	—	—	46	151
	**83318**		2	White, Black	100† 500† 1000†	30.5 152.4 304.8	2.3 7.5 16.0	1.0 3.4 7.3	.010	.25	.010	.25	.128	3.25	26.5	87	42.4	139
	83333		3	White, Black, Red	100† 500† 1000†	30.5 304.8 304.8	2.7 152.4 20.0	1.2 4.5 9.1	.010	.25	.010	.25	.134	3.40	21.9	72	36.8	121
	83348		4	White, Black, Red, Green	100† 500† 1000†	30.5 152.4 304.8	3.1 12.0 24.0	1.4 5.5 10.9	.010	.25	.010	.25	.146	3.70	21.9	72	36.8	121
Complies with MIL-W-16878/4 (Type E) except stranding.																		
22 AWG Stranded Conductors (19x34) • Silver-plated Copper • Cabled and Color-coded • 90% Silver-plated Copper Braid Shield																		
Extruded TFE Teflon Insulation • White TFE Teflon Tape-wrapped Jacket																		
600V RMS -65°C to 200°C VW-1	**83305**		1	White	100† 500† 1000†	30.5 152.4 304.8	1.1 5.5 10.0	0.5 2.5 4.5	.010	.25	.010	.25	.087	2.21	—	—	57.9	190
	**83319**		2	White, Black	100† 500† 1000†	30.5 152.4 304.8	2.6 9.5 19.0	1.2 4.3 8.6	.010	.25	.010	.25	.140	3.56	29.9	98	49.2	161
	83334		3	White, Black, Red	100† 500† 1000†	30.5 152.4 304.8	2.5 12.0 25.0	1.1 5.5 11.4	.010	.25	.010	.25	.147	3.73	27.4	90	45.7	150
	83349		4	White, Black, Red, Green	100† 500† 1000†	30.5 152.4 304.8	3.6 14.5 29.0	1.6 6.6 13.2	.010	.25	.010	.25	.160	4.06	27.4	90	45.7	150
Complies with MIL-W-16878/4 (Type E) except stranding.																		

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools may contain more than one piece. Length may vary ±10% from length shown.

Teflon is a DuPont trademark.

High-Temperature

Overall Braid Shield — Control and Instrumentation Cables
MIL-W-16878/4 (Type E) — Individual Conductors

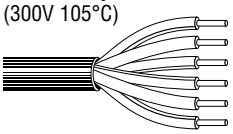
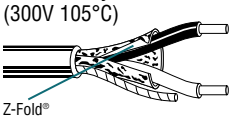
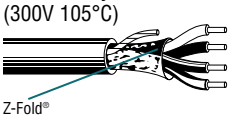
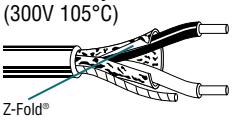
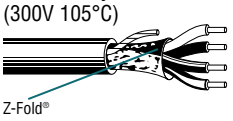
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
20 AWG Stranded Conductors (19x32) • Silver-plated Copper • Cabled and Color-coded • 90% Silver-plated Copper Braid Shield																		
Extruded TFE Teflon® Insulation • White TFE Teflon Tape-wrapped Jacket																		
600V RMS -65°C to 200°C VW-1	**83306**		1	White	100† 1000†	30.5 304.8	1.3 10.0	0.6 4.5	.010	.25	.010	.25	.096	2.44	—	—	69	226
	**83320**		2	White, Black	100† 500† 1000†	30.5 152.4 304.8	3.1 12.0 24.0	1.4 5.5 10.9	.010	.25	.010	.25	.158	4.01	31.7	104	51	167
	83335		3	White, Black, Red	100† 500† 1000†	30.5 152.4 304.8	3.0 16.5 31.0	1.4 7.5 14.1	.010	.25	.010	.25	.167	4.24	31.7	104	51	167
	83350		4	White, Black, Red, Green	100† 500† 1000†	30.5 152.4 304.8	4.7 20.0 38.0	2.1 9.1 17.3	.010	.25	.010	.25	.182	4.62	31.7	104	51	167
MIL-Spec MIL-W-16878/4 (Type E) except stranding.																		
18 AWG Stranded Conductors (19x30) • Silver-plated Copper • Cabled and Color-coded • 90% Silver-plated Copper Braid Shield																		
Extruded TFE Teflon Insulation • White TFE Teflon Tape-wrapped Jacket																		
600V RMS -65°C to 200°C VW-1	**83307**		1	White	1000†	304.8	17.0	7.7	.011	.28	.010	.25	.110	2.79	—	—	71.5	235
	**83321**		2	White, Black	100† 500† 1000†	30.5 152.4 304.8	3.9 16.0 31.0	1.8 7.3 14.1	.011	.28	.010	.25	.183	4.65	31	102	52.8	174
	83336		3	White, Black, Red	100† 500† 1000†	30.5 152.4 304.8	4.9 21.0 44.0	2.2 9.5 20.0	.011	.28	.010	.25	.188	4.78	31	102	52.8	174
	83351		4	White, Black, Red, Green	100† 500† 1000†	30.5 152.4 304.8	5.9 26.5 54.0	2.7 12.0 24.5	.011	.28	.010	.25	.206	5.23	31	102	52.8	174
Complies with MIL-W-16878/4 (Type E) except stranding.																		
16 AWG Stranded Conductors (19x29) • Silver-plated Copper • Cabled and Color-coded • 90% Silver-plated Copper Braid Shield																		
Extruded TFE Teflon Insulation • White TFE Teflon Tape-wrapped Jacket																		
600V RMS -65°C to 200°C VW-1	**83308**		1	White	500† 1000†	152.4 304.8	11.0 21.0	5.0 9.5	.012	.30	.010	.25	.117	2.97	—	—	72.5	238
	**83322**		2	White, Black	100† 500† 1000†	30.5 152.4 304.8	4.3 18.0 35.0	2.0 8.2 15.9	.012	.30	.010	.25	.192	4.62	36	118	60	197
	83337		3	White, Black, Red	100† 500† 1000†	30.5 152.4 304.8	6.8 25.0 51.0	3.1 11.4 23.2	.012	.30	.010	.25	.203	5.16	30.7	101	53	174
	83352		4	White, Black, Red, Green	100† 500† 1000†	30.5 152.4 304.8	7.3 31.0 61.0	3.3 14.1 27.7	.012	.30	.010	.25	.223	5.66	30.2	99	50.8	167
Complies with MIL-W-16878/4 (Type E) except stranding.																		

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools may contain more than one piece. Length may vary ±10% from length shown.

Teflon is a DuPont trademark.

Fire Alarm

Power-Limited Fire Protective Signaling Circuit Cables
Subject 1424 (NEC Article 760, Type FPLR)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
22 AWG Solid Conductors • Tinned Copper • Conductors Cabled														
PVC Insulation • Black PVC Jacket														
UL AWM Style 2464 (300V 105°C) 	**9576**	NEC: MPR, FPLR CEC: FAS 105 FT4	6	See Chart 1 (Tech Info Section)	U-500 U-1000	U-152.4 U-304.8	18.0 36.0	8.2 16.4	.013	.33	.039	.99	.234	5.94
18 AWG Solid Conductors • Bare Copper														
PVC Insulation • Red PVC Jacket														
UL AWM Style 2464 (300V 105°C)	**9571**	NEC: MPR, FPLR CEC: FAS 105 FT4	2	Black, Red	U-500 U-1000	U-152.4 U-304.8	14.5 28.0	6.6 12.8	.017	.43	.037	.94	.228	5.79
18 AWG Solid Conductors • Bare Copper • Conductors Cabled • Overall 100% Beldfoil® Shield • 22 AWG Stranded Tinned Copper Drain Wire														
PVC Insulation • Red PVC Jacket														
UL AWM Style 2464 (300V 105°C)  Z-Fold®	**9574**	NEC: MPR, FPLR CEC: FAS 105 FT4	2	Black, Red	U-500 U-1000	U-152.4 U-304.8	16.5 32.0	7.5 14.6	.017	.43	.037	.94	.231	5.87
UL AWM Style 2464 (300V 105°C)  Z-Fold®	**9578**	NEC: MPR, FPLR CEC: FAS 105 FT4	4	Black, Red, Yellow, Light Blue	U-500 1000	U-152.4 304.8	25.5 51.0	11.6 23.2	.017	.43	.037	.94	.263	6.68
16 AWG Solid Conductors • Bare Copper • Conductors Cabled														
PVC Insulation • Red PVC Jacket														
UL AWM Style 2464 (300V 105°C)	**9572**	NEC: MPR, FPLR CEC: FAS 105 FT4	2	Black, Red	U-500 U-1000	U-152.4 U-304.8	18.5 36.0	8.4 16.4	.018	.46	.037	.94	.250	6.35
16 AWG Solid Conductors • Bare Copper • Conductors Cabled • Overall 100% Beldfoil Shield • 22 AWG Stranded Tinned Copper Drain Wire														
PVC Insulation • Red PVC Jacket														
UL AWM Style 2464 (300V 105°C)  Z-Fold®	**9575**	NEC: MPR, FPLR CEC: FAS 105 FT4	2	Black, Red	U-500 U-1000	U-152.4 U-304.8	20.5 41.0	9.3 18.7	.018	.46	.037	.94	.253	6.43
UL AWM Style 2464 (300V 105°C)  Z-Fold®	**9579**	NEC: MPR, FPLR CEC: FAS 105 FT4	4	Black, Red, Yellow, Light Blue	U-500 1000	U-152.4 304.8	36.0 72.0	16.4 32.8	.018	.46	.042	1.07	.301	7.65

All cables on this page pass the UL 70,000 BTU Flame Test (comparable to IEEE 383 Flame Test) and are listed by the California State Fire Marshall. Component Recognized UL2464, 300V 80°C.

Fire Alarm

Power-Limited Fire Protective Signaling Circuit Cables
Subject 1424 (NEC Article 760, Type FPLR)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
14 AWG Solid Conductors • Bare Copper														
PVC Insulation • Red PVC Jacket														
300V 105°C	**9580**	NEC: FPLR CEC: FAS 105 FT4	2	Black, Red	U-500 1000	U-152.4 304.8	28.0 56.0	12.7 25.5	.022	.56	.042	1.07	.306	7.77
14 AWG Solid Conductors • Bare Copper • Conductors Cabled • 100% Beldfoil® Shield • 16 AWG Stranded Tinned Copper Drain Wire														
PVC Insulation • Red PVC Jacket														
300V 105°C	**9581**	NEC: FPLR CEC: FAS 105 FT4	2	Black, Red	U-500 1000	U-152.4 304.8	33.0 65.0	15.0 29.6	.022	.56	.042	1.07	.309	7.85
12 AWG Solid Conductors • Bare Copper														
PVC Insulation • Red PVC Jacket														
300V 105°C	**9582**	NEC: FPLR CEC: FAS 105 FT4	2	Black, Red	1000	304.8	75.0	34.2	.022	.56	.042	1.07	.340	8.64
12 AWG Solid Conductors • Bare Copper • Conductors Cabled • 100% Beldfoil Shield • 16 AWG Stranded Tinned Copper Drain Wire														
PVC Insulation • Red PVC Jacket														
300V 105°C Z-Fold®	**9583**	NEC: FPLR CEC: FAS 105 FT4	2	Black, Red	1000	304.8	85.0	38.7	.022	.56	.042	1.07	.343	8.71

All cables on this page pass the UL 70,000 BTU Flame Test (comparable to IEEE 383 Flame Test) and are listed by the California State Fire Marshall. Component Recognized UL2464, 300V 80°C.

Plenum-Rated Fire Alarm

Power-Limited Fire Protective, Control and Instrumentation Cables
Subject 1424 (NEC Article 760, Type FPLP)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
14 AWG Stranded Conductors (7x22) • Tinned Copper • Conductors Cabled • 100% Beldfoil® + 85% Tinned Copper Braid Shield																		
Plenum • FEP Insulation • Red FEP Jacket																		
200°C, Non-conduit	**83752**	NEC: FPLP, CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	7.1 33.0 60.0	3.2 15.0 27.4	.016	.41	.015	.38	.267	6.78	30	98	52	171
	83753	NEC: FPLP, CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	500† 1000†	152.4 304.8	44.0 82.0	20.1 37.4	.016	.41	.015	.38	.284	7.21	30	98	52	171
	83754	NEC: FPLP, CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	11.6 54.0 102.0	5.3 24.6 46.5	.016	.41	.015	.38	.311	7.90	30	98	52	171
	83756	NEC: FPLP, CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	15.9 74.5 150.0	7.2 34.0 68.4	.016	.41	.017	.43	.376	9.55	30	98	52	171
12 AWG Stranded Conductors (7x20) • Tinned Copper • Conductors Cabled • 100% Beldfoil + 85% Tinned Copper Braid Shield																		
Plenum • FEP Insulation • Red FEP Jacket																		
200°C, Non-conduit	**83802**	NEC: FPLP, CMP CEC: CMP FT6	2	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	9.3 42.5 80.0	4.3 19.4 36.5	.016	.41	.015	.38	.303	7.70	32	105	55	180
	83803	NEC: FPLP, CMP CEC: CMP FT6	3	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	12.4 56.5 111.0	5.7 25.8 50.6	.016	.41	.015	.38	.323	8.20	32	105	55	180
	83804	NEC: FPLP, CMP CEC: CMP FT6	4	See Chart 2 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	15.6 73.0 147.0	7.1 33.3 66.8	.016	.41	.017	.43	.359	9.12	32	105	55	180
	83806	NEC: FPLP, CMP CEC: CMP FT6	6	See Chart 2 (Tech Info Section)	100 1000†	30.5 304.8	21.7 213.0	9.9 96.8	.016	.41	.017	.43	.430	10.92	32	105	55	180

All cables on this page pass the UL 70,000 BTU Flame Test (comparable to IEEE 383 Flame Test) and are listed by the California State Fire Marshall. Component Recognized UL2464, 300V 80°C.

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools are one piece, but length may vary ±10% from length shown.

Belden

5 Paired Cables

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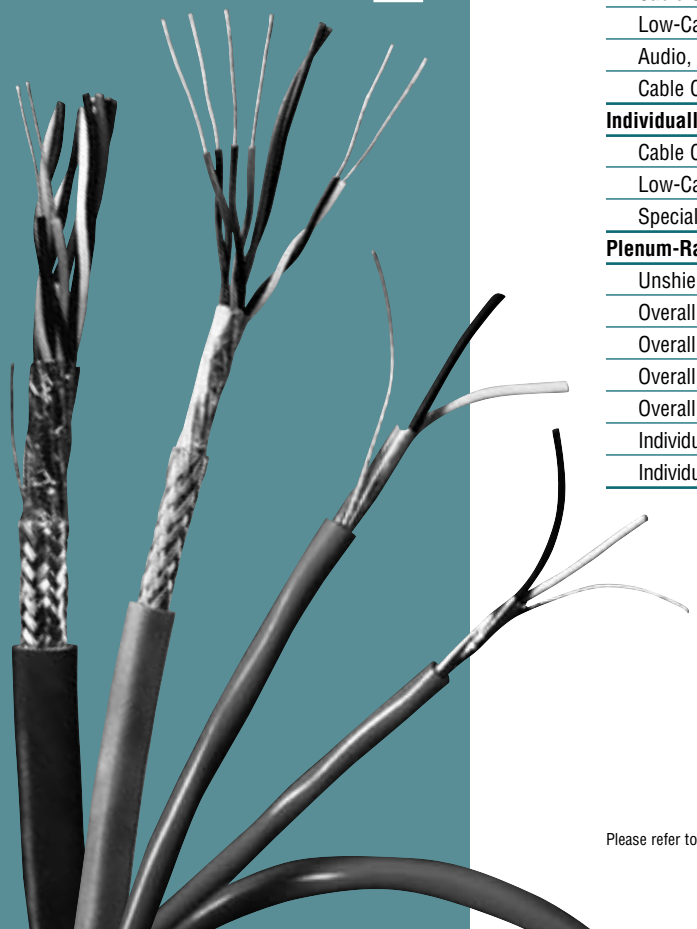


Please refer to "Terms of Use of Master Catalog" on page 16.30.

Introduction

Belden® paired cable products are manufactured in a variety of gage sizes, dimensions, insulation materials, shielding configurations, and jacketing materials including Plenum and High-Temperature versions to meet the technical requirements of many different types of systems.

Paired cables allow balanced signal transmission, which results in lower crosstalk through common mode rejection. Due to the improved noise immunity of twisted pairs, they generally permit higher data speeds than multi-conductor cables.

As an aid to proper cable selection, both the suggested working voltages and the maximum temperature ratings are indicated for each applicable paired cable selection.

Most of our paired cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a paired cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Paired Cables Packaging

Belden's unique UnReel® cable dispenser is available for many of the paired cable products listed in this section. The letter "U" before the specified put-up length denotes UnReel packaging.

Selection Guide

Shielded Multi-Pair Computer Cables
RS-232, RS-422, and RS-485 Applications*

Specifications		Cable Series**															
		9804	8132	9829	8332	9501	8102	9729	8162	9990	9841	9680	9302◆	8302	8777	9873	9773
Conductor Size: (AWG)	28	✓	✓														
	24			✓	✓	✓	✓	✓	✓	✓	✓	✓					
	22												✓	✓	✓		
	20															✓	
	18																✓
	Page No.	5.26	5.27	5.30	5.29	5.11	5.31	5.35	5.44	5.37	5.28	5.15	5.17	5.32	5.40	5.42	5.42
Insulation:	**S-R PVC**				✓	✓								✓			
	Polyethylene			✓						✓	✓	✓				✓	✓
	Polypropylene	✓													✓		
	Datalene®†		✓				✓	✓	✓								
Shield:	**Overall Foil**					✓						✓	✓				
	Individual Foil							✓	✓	✓					✓	✓	✓
	Overall Foil/Braid	✓	✓	✓	✓		✓		✓		✓			✓			
	Braid Coverage	90%	65%	65%	65%		65%		65%		90%			65%			
Drain Wire: (see key below)		●	●	●	✕	●	●	▲	▲	▲	●	●	●	✕	▲	▲	▲
No. of Pairs Available:	1					✓					✓						
	2	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓			
	3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓			
	5	✓	✓	✓	✓	✓	✓		✓					✓			
	6			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
	7	✓		✓	✓	✓	✓		✓					✓			
	8		✓			✓	✓		✓					✓			
	9	✓		✓		✓		✓		✓		✓	✓		✓	✓	✓
	10			✓	✓	✓	✓		✓					✓			
	11							✓							✓	✓	
	12	✓		✓				✓		✓					✓	✓	✓
	12.5		✓		✓		✓					✓		✓			
	13	✓															
	15				✓	✓	✓	✓	✓				✓	✓	✓	✓	✓
	17							✓							✓		
	18	✓	✓	✓	✓		✓		✓					✓			
	19					✓		✓					✓		✓		
	25	✓	✓	✓	✓	✓	✓		✓	✓				✓			
	27							✓					✓		✓		
	31	✓															
	37														✓		
	50					✓											
Capacitance†† (pF/ft.)		15.5	11.0	15.5	30.0	30.0	12.5	12.5	12.5	25.0	12.8	15.5	35.0	35.0	30.0	30.0	30.0

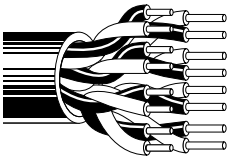
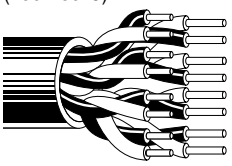
S-R = Semi-rigid

*Refer to specifications for recommendations.
**All cables are UL-listed.
†Foam high density polyethylene.
††Capacitance may vary on some cables.
◆Standard PVC Insulation, solid conductors.

Drain Wire Key:
● = Drain wire overall.
▲ = Drain wire each pair.
✕ = No drain wire.

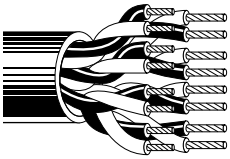
Unshielded

Telephone Cables
Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
24 AWG Solid Conductors • Tinned Copper • Twisted Pairs														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2576 (150V 80°C) 	**9562**	NEC: CMG CEC: CMG FT4	2	See Chart 4 (Tech Info Section)	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	10.0 11.0 20.0 21.0	4.5 5.0 9.1 9.5	.010	.25	.032	.81	.199	5.05
	9566	NEC: CMG CEC: CMG FT4	6	See Chart 4 (Tech Info Section)	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	22.0 22.5 43.0 45.0	10.0 10.2 19.5 20.5	.010	.25	.032	.81	.289	7.34
	9570	NEC: CMG CEC: CMG FT4	10	See Chart 4 (Tech Info Section)	500 1000	152.4 304.8	30.5 63.0	13.9 28.6	.010	.25	.035	.89	.310	7.87
	9585	NEC: CMG CEC: CMG FT4	25	See Chart 4 (Tech Info Section)	500 1000	152.4 304.8	74.0 144.0	33.6 65.5	.010	.25	.040	1.02	.480	12.19
22 AWG Solid Conductors • Tinned Copper • Twisted Pairs														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2576 (150V 80°C) 	**8740**	NEC: CMG CEC: CMG FT4	1	See Chart 3 (Tech Info Section)	U-500 U-1000	U-152.4 U-304.8	7.0 13.0	3.2 5.9	.010	.25	.032	.81	.156	3.96
	8741	NEC: MPG, CMG CEC: CMG FT4	2	See Chart 3 (Tech Info Section)	U-500 U-1000 1000	U-152.4 U-304.8 304.8	13.0 26.0 25.0	5.9 11.8 11.4	.010	.25	.032	.81	.230	5.84
										For stranded conductor Plenum versions of 8741, see 88741 or 82741.				
	8742	NEC: MPG, CMG CEC: CMG FT4	3	See Chart 3 (Tech Info Section)	500 U-1000 1000	152.4 U-304.8 304.8	17.0 32.0 32.0	7.7 14.5 14.5	.010	.25	.032	.81	.242	6.15
										For stranded conductor Plenum version of 8742, see 82742.				
	8757	NEC: MPG, CMG CEC: CMG FT4	4	See Chart 3 (Tech Info Section)	500 U-1000 1000	152.4 U-304.8 304.8	20.0 39.0 40.0	9.1 17.7 18.2	.010	.25	.032	.81	.264	6.71
										For stranded conductor Plenum versions of 8757, see 88757 or 82757.				
	8743	NEC: MPG, CMG CEC: CMG FT4	6	See Chart 3 (Tech Info Section)	U-500 U-1000 1000	U-152.4 U-304.8 304.8	27.0 52.0 53.0	12.3 23.6 24.1	.010	.25	.032	.81	.293	7.44
										For stranded conductor Plenum version of 8743, see 82743.				
	9160	NEC: MPG, CMG CEC: CMG FT4	8	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	34.5 71.0	15.7 32.3	.010	.25	.035	.89	.323	8.20
	8744	NEC: MPG, CMG CEC: CMG FT4	9	See Chart 3 (Tech Info Section)	1000	304.8	79.0	35.9	.010	.25	.035	.89	.350	8.89

Unshielded

Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
22 AWG Stranded Conductors (7x30) • Tinned Copper • Twisted Pairs														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2576 (150V 80°C) 	**9744**	NEC: CMG CEC: CMG FT4	2	See Chart 3 (Tech Info Section)	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	13.5 14.0 26.0 27.0	6.1 6.4 11.8 12.3	.010	.25	.032	.81	.244	6.20
	9745	NEC: CMG CEC: CMG FT4	3	See Chart 3 (Tech Info Section)	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	17.5 18.0 35.0 36.0	8.0 8.2 15.9 16.4	.010	.25	.032	.81	.257	6.53
	9746	NEC: CMG CEC: CMG FT4	4	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	21.5 42.0	9.8 19.1	.010	.25	.032	.81	.281	7.14
	8747	NEC: CMG CEC: CMG FT4	6	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.2 29.0 59.0	2.8 13.2 26.8	.010	.25	.035	.89	.320	8.13
	8748	NEC: CMG CEC: CMG FT4	9	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	8.6 43.5 84.0	3.9 19.8 38.2	.010	.25	.037	.94	.389	9.88
	9747	NEC: CMG CEC: CMG FT4	12	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	11.7 55.0 109.0	5.3 25.0 49.5	.010	.25	.040	1.02	.425	10.80
	8749	NEC: CMG CEC: CMG FT4	15	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	64.0 124.0	29.1 56.4	.010	.25	.040	1.02	.440	11.18
	9748	NEC: CMG CEC: CMG FT4	19	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	81.5 159.0	37.0 72.3	.010	.25	.040	1.02	.505	12.83
	8750	NEC: CMG CEC: CMG FT4	27	See Chart 3 (Tech Info Section)	500† 1000†	152.4 304.8	112.0 221.0	50.9 100.5	.010	.25	.045	1.14	.575	14.61

†Spools are one piece, but length may vary -0% to +20% from length shown.

Unshielded

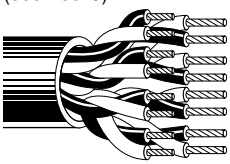
Audio, Control and Instrumentation Cables
Plenum-Rated

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
22 AWG Stranded Conductors (7x30) • Tinned Copper • Twisted Pairs														
Plenum • FEP Insulation • Red FEP Jacket														
300V RMS, Non-conduit	**88442**	NEC: CMP CEC: CMP FT6	1	Black & Red	100 500† 1000†	30.5 152.4 304.8	2.3 5.5 10.0	1.0 2.5 4.5	.006	.15	.012	.30	.102	2.59
	88741	NEC: CMP CEC: CMP FT6	2	Black & Red, Black & White	500† 1000†	152.4 304.8	9.5 21.0	4.3 9.5	.006	.15	.012	.30	.169	4.29
	88757	NEC: CMP CEC: CMP FT6	4	Black & Red, Black & White, Black & Green, Black & Blue	500† 1000†	152.4 304.8	16.0 33.0	7.3 15.0	.006	.15	.019	.23	.200	5.08
Plenum • FEP Insulation • Natural Flamarrest® Jacket														
300V RMS, Non-conduit	**82442** new	NEC: CMP CEC: CMP FT6	1	Black & Red	U-1000† 1000†	U-304.8 304.8	83.0 84.0	37.7 38.2	.006	.15	.014	.36	.112	2.84
	82741	NEC: CMP CEC: CMP FT6	2	Black & Red, Black & White	U-1000† 1000†	U-304.8 304.8	18.0 21.0	8.2 9.5	.006	.15	.014	.36	.179	4.55
	82742	NEC: CMP CEC: CMP FT6	3	Black & Red, Black & White, Black & Green	U-1000† 1000†	U-304.8 304.8	24.0 28.0	10.9 12.7	.006	.15	.014	.36	.191	4.85
	82757	NEC: CMP CEC: CMP FT6	4	Black & Red, Black & White, Black & Green, Black & Blue	U-1000 1000†	U-304.8 304.8	31.0 34.0	14.1 15.5	.006	.15	.014	.36	.210	5.33
	82743	NEC: CMP CEC: CMP FT6	6	Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown	U-1000† 1000†	U-304.8 304.8	44.0 45.0	20.0 20.5	.006	.15	.014	.36	.237	6.02

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

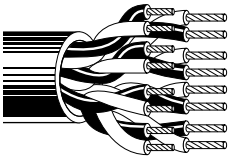
Unshielded

Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
20 AWG Stranded Conductors (7x28) • Tinned Copper • Twisted Pairs														
PVC Insulation • Chrome PVC Jacket														
300V RMS	**8205**	NEC: CMG CEC: CMG FT4	1	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	2.5 9.0 9.0 17.0 18.0	1.1 4.1 4.1 7.7 8.2	.013	.33	.025	.64	.180	4.57
UL AWM Style 2464 (300V 80°C) 	**9750**	NEC: CMG CEC: CMG FT4	3	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	25.5 50.0	11.6 22.7	.013	.33	.035	.89	.299	7.59
	9751	NEC: CMG CEC: CMG FT4	6	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	9.1 45.0 89.0	4.1 20.5 40.5	.013	.33	.035	.89	.366	9.30
	9752	NEC: CMG CEC: CMG FT4	9	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	13.2 65.5 125.0	6.0 29.8 56.8	.013	.33	.035	.89	.429	10.90
	9755	NEC: CMG CEC: CMG FT4	15	See Chart 3 (Tech Info Section)	100 1000	30.5 304.8	19.9 194.0	9.1 88.2	.013	.33	.040	1.02	.545	13.84
19 AWG Solid Conductors • Bare Copper • Twisted Pair														
PVC Insulation • Chrome PVC Jacket														
300V RMS	**8486**	NEC: CM CEC: CM	1	Brown, Tan	U-500 U-1000 1000	U-152.4 U-304.8 304.8	9.5 18.0 19.0	4.3 8.2 8.6	.015	.38	.025	.64	.182	4.62
18 AWG Stranded Conductors (7x26) • Tinned Copper • Twisted Pair														
PVC Insulation • Chrome PVC Jacket														
300V RMS	**8461**	NEC: CMG CEC: CMG FT4	1	Black, White	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.8 14.0 14.0 28.0 28.0	1.7 6.4 6.4 12.7 12.7	.022	.56	.028	.71	.234	5.94

Unshielded

Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
18 AWG Stranded Conductors (16x30) • Tinned Copper • Twisted Pairs														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2464 (300V 80°C) 	**9740**	NEC: CMG CEC: CMG FT4	1	See Chart 3 (Tech Info Section)	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	12.5 13.0 25.0 24.0	5.7 5.9 11.4 10.9	.014	.36	.032	.81	.210	5.33
											For Plenum versions of 9740, see 89740, 87740 or 82740.			
	9156	NEC: CMG CEC: CMG FT4	2	See Chart 3 (Tech Info Section)	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	26.0 26.0 51.0 51.0	11.8 11.8 23.2 23.2	.014	.36	.035	.89	.333	8.46
	8690	NEC: CMG CEC: CMG FT4	3	See Chart 3 (Tech Info Section)	100 U-500 500 1000	30.5 U-152.4 152.4 304.8	6.9 32.5 33.5 64.0	3.1 14.8 15.2 29.1	.014	.36	.032	.81	.347	8.81
	9157	NEC: CMG CEC: CMG FT4	4	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	8.4 43.0 83.0	3.8 19.5 37.7	.014	.36	.032	.81	.381	9.68
	9159	NEC: CMG CEC: CMG FT4	5	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	50.0 99.0	22.7 45.0	.014	.36	.032	.81	.391	9.93
	8691	NEC: CMG CEC: CMG FT4	6	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	58.0 115.0	26.4 52.3	.014	.36	.032	.81	.433	11.00
	9161	NEC: CMG CEC: CMG FT4	8	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	15.8 78.0 152.0	7.2 35.6 69.3	.014	.36	.037	.94	.475	12.07
	8692	NEC: CMG CEC: CMG FT4	9	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	87.0 170.0	39.5 77.3	.014	.36	.040	1.02	.524	13.31
	9741	NEC: CMG CEC: CMG FT4	12	See Chart 3 (Tech Info Section)	100 1000	30.5 304.8	25.7 223.0	11.7 101.4	.014	.36	.046	1.17	.600	15.24
	9742	NEC: CMG CEC: CMG FT4	15	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	30.9 148.5 294.0	14.0 67.5 133.6	.014	.36	.051	1.30	.677	17.20
	9743	NEC: CMG CEC: CMG FT4	19	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	37.0 179.0 355.0	16.8 81.4 161.4	.014	.36	.055	1.40	.721	18.31

Unshielded

Audio, Control and Instrumentation Cables
Plenum-Rated and Non-Plenum

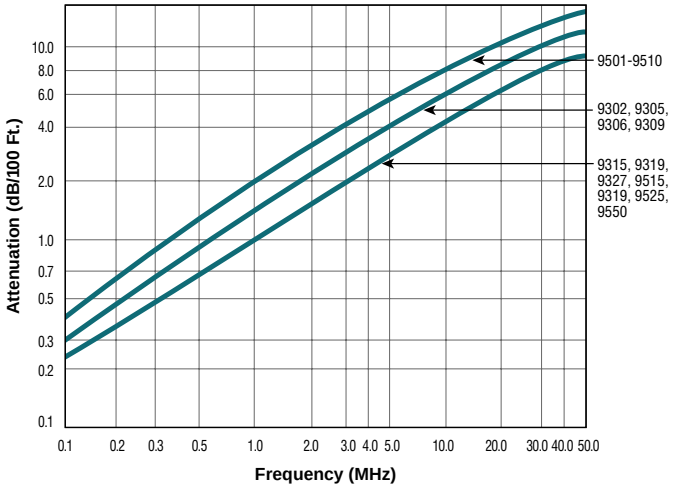
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
18 AWG Stranded Conductors (19x30) • Tinned Copper • Twisted Pair														
Plenum • FEP Insulation • Red FEP Jacket														
300V RMS, Non-conduit	**89740**	NEC: CMP CEC: CMP FT6	1	Black, Red	100 500† 1000†	30.5 152.4 304.8	3.0 9.0 17.0	1.4 4.1 7.7	.006	.17	.009	.23	.136	3.45
Plenum • FEP Insulation • Red Fluorocopolymer Jacket														
300V RMS, Non-conduit	**87740**	NEC: CMP CEC: CMP FT6	1	Black, Red	500† 1000†	152.4 304.8	9.0 17.0	4.1 7.7	.006	.17	.011	.28	.140	3.56
Plenum • FEP Insulation • Natural Flamarrest® Jacket														
300V RMS, Non-conduit	**82740**	NEC: CMP CEC: CMP FT6	1	Black, Red	U-1000 1000†	U-304.8 304.8	17.0 18.0	7.7 8.2	.006	.17	.014	.36	.146	3.71
16 AWG Stranded Conductors (19x29) • Tinned Copper • Twisted Pair														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2598 (300V 60°C)	**8471**	NEC: CMG CEC: CMG FT4	1	Black, White	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	20.0 20.0 39.0 40.0	9.1 9.1 17.7 18.2	.023	.58	.032	.81	.274	6.96
14 AWG Stranded Conductors (42x30) • Tinned Copper • Twisted Pair														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2587 (600V 90°C)	**8473**	NEC: CL3 CEC: FAS 90 FT4	1	Black, White	U-500 500 1000	U-152.4 152.4 304.8	29.5 30.5 58.0	13.4 13.9 26.4	.031	.79	.032	.81	.340	8.64
See NEC Guidelines for applicable CL3 voltage ratings.														
12 AWG Stranded Conductors (65x30) • Tinned Copper • Twisted Pair														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2587 (600V 90°C)	**8477**	NEC: CL3R	1	Black, White	U-500 500 1000	U-152.4 152.4 304.8	42.0 42.0 83.0	19.1 19.1 37.7	.032	.81	.035	.89	.386	9.80
See NEC Guidelines for applicable CL3 voltage ratings.														

†Spools are one piece, but length may vary ±10% from length shown.

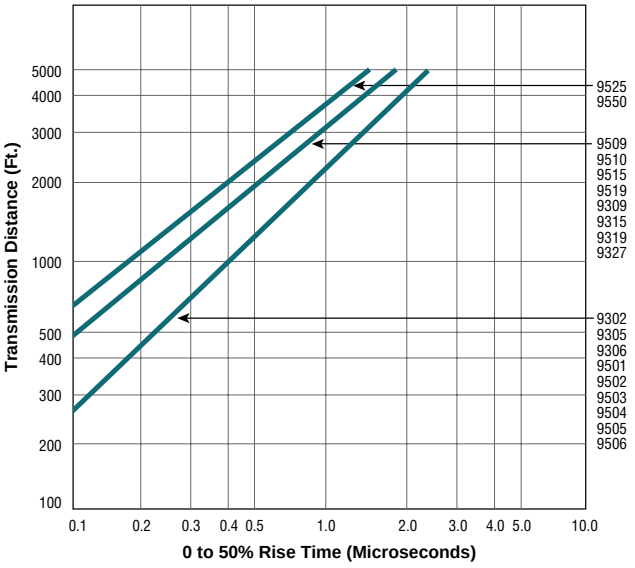
Overall Beldfoil® Shield

Cable Characteristics

Attenuation

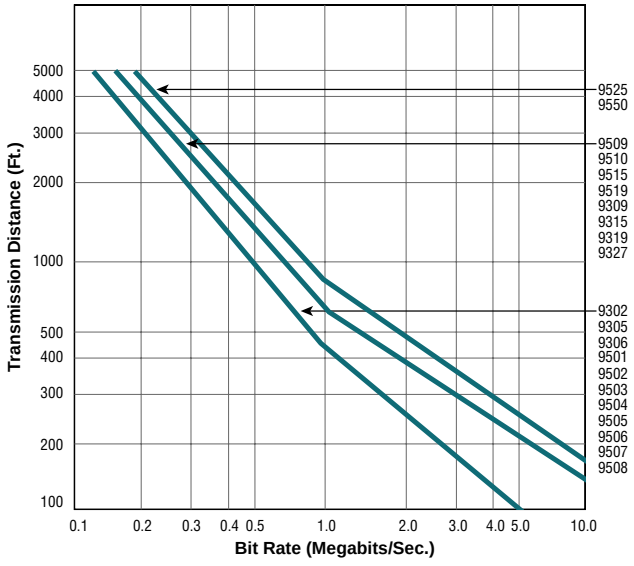


Rise Time



Cables are terminated in their characteristic impedance. Signal source electrical characteristics: 50 ohms and 10% to 90% rise time less than 5 nanoseconds.

Bit Rate



Charts assume 5% peak-to-peak time jitter as determined by eye pattern measurements of pseudorandom NRZ code.

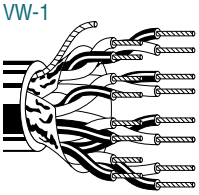
Overall Beldfoil® Shield

High-Temperature Control and Instrumentation Cables and Computer Cables for EIA RS-232 Applications

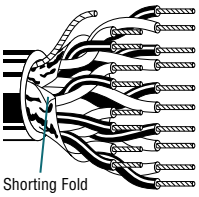
20 AWG Stranded Conductors (7x28) • Tinned Copper • Pairs Cabled Together • Overall 100% Beldfoil Aluminum-Kapton® Shield • Drain Wire

Tefzel® Insulation • Clear Tefzel Material Jacket

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
High-Temperature 300V RMS, 150°C VW-1	**85164**		4	Black & Red, Black & White, Black & Green, Black & Blue	100 500† 1000†	30.5 152.4 304.8	8.4 37.0 71.0	3.8 16.8 32.3	.015	.38	.025	.64	.344	8.74	23	75	40	131
	85168		8	Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown, Black & Orange, Red & White	100 500† 1000†	30.5 152.4 304.8	13.5 62.0 126.0	6.1 28.2 57.3	.015	.38	.025	.64	.439	11.15	23	75	40	131



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
24 AWG Stranded Conductors (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wire																		
Semi-rigid PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C) CSA AWM I A	**9501**	NEC: CMG CEC: CMG FT4	1	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	2.1 7.5 7.0 14.0 14.0	1.0 3.4 3.2 6.4 6.4	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.156	3.96	75	60%	40	131	74	243
	9502††	NEC: CMG CEC: CMG FT4 P-MSHA-SC-7K-182037	2	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000 10000	30.5 U-152.4 152.4 U-304.8 304.8 3048.0	3.7 14.5 15.0 28.0 29.0 290.0	1.7 6.6 6.8 12.7 13.2 131.8	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.222	5.64	75	60%	30	98	50	164
													For Plenum version of 9502, see 82502.					
	9503	NEC: CMG CEC: CMG FT4	3	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.9 14.5 15.0 29.0 29.0	1.8 6.6 6.8 13.2 13.2	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.232	5.89	75	60%	30	98	50	164
													For Plenum versions of 9503, see 89503 or 82503.					
	9504	NEC: CMG CEC: CMG FT4	4	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.5 17.5 18.0 35.0 35.0	2.0 8.0 8.2 15.9 15.9	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.265	6.73	75	60%	30	98	50	164
													For Plenum versions of 9504, see 89504 or 82504.					
	9505	NEC: CMG CEC: CMG FT4	5	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	5.5 22.0 22.5 43.0 44.0	2.5 10.0 10.2 19.5 20.0	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.289	7.34	75	60%	30	98	50	164
													For Plenum versions of 9505, see 89505 or 82505.					



DCR = DC Resistance • TC = Tinned Copper

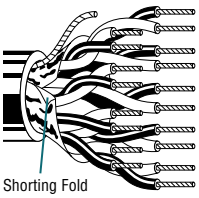
* Capacitance between conductors.
** Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary ±10% from length shown.
†† Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration certification. Request quotations of RG/U cables not listed.

See Attenuation, Rise Time and Bit Rate data for this series on page 5.10.

Tefzel and Kapton are DuPont trademarks.

Overall Beldfoil® Shield

Computer Cables for EIA RS-232 Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wire *(continued)*																		
Semi-rigid PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C) CSA AWM I A  Shorting Fold	**9506**	NEC: CMG CEC: CMG FT4	6	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	5.8 23.5 24.0 47.0 47.0	2.6 10.7 10.9 21.4 21.4	24.0Ω/M′ 78.7Ω/km	16.0Ω/M′ 52.5Ω/km	.289	7.34	75	60%	30	98	50	164
													For Plenum version of 9506, see 82506.					
	9507	NEC: CMG CEC: CMG FT4	7	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	6.3 26.0 26.5 51.0 52.0	2.9 11.8 12.0 23.2 23.6	24.0Ω/M′ 78.7Ω/km	16.5Ω/M′ 54.1Ω/km	.294	7.47	75	60%	30	98	50	164
	9508	NEC: CMG CEC: CMG FT4	8	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.4 30.0 61.0	2.9 13.6 27.7	24.0Ω/M′ 78.7Ω/km	16.5Ω/M′ 54.1Ω/km	.324	8.23	75	60%	30	98	50	164
	9509	NEC: CMG CEC: CMG FT4	9	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.0 33.0 69.0	3.2 15.0 31.4	24.0Ω/M′ 78.7Ω/km	16.5Ω/M′ 54.1Ω/km	.334	8.48	75	60%	30	98	50	164
													For Plenum version of 9509, see 82509.					
	9510	NEC: CMG CEC: CMG FT4	10	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.6 39.0 75.0	3.5 17.7 34.1	24.0Ω/M′ 78.7Ω/km	16.5Ω/M′ 54.1Ω/km	.368	9.34	75	60%	30	98	50	164
	9515	NEC: CMG CEC: CMG FT4	15	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	10.4 52.0 102.0	4.7 23.6 46.4	24.0Ω/M′ 78.7Ω/km	16.5Ω/M′ 54.1Ω/km	.417	10.6	75	60%	30	98	50	164
	9519	NEC: CMG CEC: CMG FT4	19	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	12.9 61.5 122.0	5.9 28.0 55.5	24.0Ω/M′ 78.7Ω/km	16.5Ω/M′ 54.1Ω/km	.448	11.4	75	60%	30	98	50	164
	9525	NEC: CMG CEC: CMG FT4	25	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	16.2 80.5 156.0	7.4 36.6 70.9	24.0Ω/M′ 78.7Ω/km	16.5Ω/M′ 54.1Ω/km	.503	12.8	75	60%	30	98	50	164
	9550	NEC: CMG CEC: CMG FT4	50	Request Technical Bulletin T/8-4	100 500† 1000†	30.5 152.4 304.8	30.9 153.5 311.0	14.0 69.8 141.4	24.0Ω/M′ 78.7Ω/km	15.2Ω/M′ 49.9Ω/km	.708	18.0	75	60%	30	98	50	164

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools are one piece, but length may vary -0% to +20% from length shown.

See Attenuation, Rise Time and Bit Rate data for this series on page 5.10.

Overall Beldfoil® Shield

Computer Cables for EIA RS-232 Applications
Plenum-Rated

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
24 AWG Stranded Conductors (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wire																		
Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit	**82641**	NEC: CMP CEC: CMP FT6	1	Black, Red	U-1000† 1000†	U-304.8 304.8	9.0 10.0	4.1 4.5	.006	.15	.014	.36	.106	2.69	31	102	59	194
	82502	NEC: CMP CEC: CMP FT6	2	Black & White, Black & Red	U-500† U-1000† 1000†	U-152.4 U-304.8 304.8	8.0 15.0 16.0	3.6 6.8 7.3	.006	.15	.014	.36	.162	4.11	25	82	45	148
	82503	NEC: CMP CEC: CMP FT6	3	Black & White, Black & Red, Black & Green	U-1000† 1000†	U-304.8 304.8	19.0 20.0	8.6 9.1	.006	.15	.014	.36	.169	4.29	25	82	45	148
	82504	NEC: CMP CEC: CMP FT6	4	Black & White, Black & Red, Black & Green, Black & Blue	U-1000† 1000†	U-304.8 304.8	24.0 27.0	10.9 12.3	.006	.15	.014	.36	.193	4.90	25	82	45	148
	82505	NEC: CMP CEC: CMP FT6	5	See Chart 3 (Tech Info Section)	U-1000† 1000†	U-304.8 304.8	30.0 33.0	13.6 15.0	.006	.15	.015	.38	.196	4.98	25	82	45	148
	82506	NEC: CMP CEC: CMP FT6	6	See Chart 3 (Tech Info Section)	U-500† U-1000† 1000†	U-152.4 U-304.8 304.8	17.5 34.0 37.0	8.0 15.5 16.8	.006	.15	.015	.38	.209	5.31	25	82	45	148
	82509	NEC: CMP CEC: CMP FT6	9	See Chart 3 (Tech Info Section)	1000†	304.8	49.0	22.3	.006	.15	.015	.38	.246	6.25	23	75	42	138
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit	**88641**	NEC: CMP CEC: CMP FT6	1	Black, Red	100 500† 1000†	30.5 152.4 304.8	2.4 6.0 11.0	1.1 2.7 5.0	.006	.15	.014	.36	.106	2.69	31	102	59	194
	89503	NEC: CMP CEC: CMP FT6	3	Black & White, Black & Red, Black & Green	100 500† 1000†	30.5 152.4 304.8	4.0 12.0 23.0	1.8 5.5 10.5	.006	.15	.014	.36	.175	4.45	21.0	69	40	131
	89504	NEC: CMP CEC: CMP FT6	4	Black & White, Black & Red, Black & Green, Black & Blue	500† 1000†	152.4 304.8	14.5 31.0	6.6 14.1	.006	.15	.014	.36	.192	4.88	21	69	40	131
	89505	NEC: CMP CEC: CMP FT6	5	Black & White, Black & Red, Black & Green, Black & Blue, Black & Yellow	100 1000†	30.5 304.8	4.9 35.0	2.2 15.9	.006	.15	.014	.36	.197	5.00	21	69	40	131

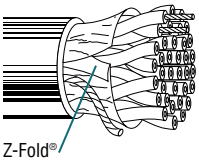
TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Overall Beldfoil® Shield

Low-Capacitance Computer Cables for EIA RS-232 and EIA RS-485 Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
28 AWG Stranded Conductors (7x36) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 28 AWG Stranded TC Drain Wire																		
Datalene® Insulation • Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C)	**8132F0** new	NEC: CL2	2	See Chart 5 (Tech Info) Section)	500 1000	152.4 304.8	10.5 20.0	4.8 9.1	65.0Ω/M′ 213.0Ω/km	23.1Ω/M′ 75.8Ω/km	.215	5.46	120	78%	11.0	36.1	20.0	65.6
	8133F0 new	NEC: CL2	3	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	13.0 26.0	5.9 11.8	65.0Ω/M′ 213.0Ω/km	23.1Ω/M′ 75.8Ω/km	.250	6.35	120	78%	11.0	36.1	20.0	65.6
	8134F0 new	NEC: CL2	4	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	16.5 31.0	7.5 14.1	65.0Ω/M′ 213.0Ω/km	20.0Ω/M′ 65.6Ω/km	.270	6.86	120	78%	11.0	36.1	20.0	65.6
	8135F0 new	NEC: CL2	5	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	17.0 32.0	7.7 14.5	65.0Ω/M′ 213.0Ω/km	20.0Ω/M′ 65.6Ω/km	.280	7.11	120	78%	11.0	36.1	20.0	65.6
	8138F0 new	NEC: CL2	8	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	22.0 42.0	10.0 19.1	65.0Ω/M′ 213.0Ω/km	17.7Ω/M′ 58.1Ω/km	.310	7.88	120	78%	11.0	36.1	20.0	65.6
	8142F0 new	NEC: CL2	12.5 (12 pairs + 1 single)	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	27.5 54.0	12.5 24.5	65.0Ω/M′ 213.0Ω/km	17.7Ω/M′ 58.1Ω/km	.385	9.78	120	78%	11.0	36.1	20.0	65.6
	8148F0 new	NEC: CL2	18	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	38.5 75.0	17.5 34.1	65.0Ω/M′ 213.0Ω/km	15.8Ω/M′ 51.8Ω/km	.445	11.31	120	78%	11.0	36.1	20.0	65.6
	8155F0 new	NEC: CL2	25	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	42.0 80.0	19.1 36.4	65.0Ω/M′ 213.0Ω/km	14.3Ω/M′ 4.7Ω/km	.545	13.85	120	78%	11.0	36.1	20.0	65.6



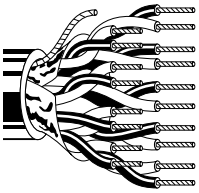
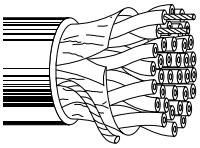
DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Overall Beldfoil® Shield

Low-Capacitance Computer Cables for EIA RS-232 and EIA RS-422 Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded Conductors (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C) 	**9680**	NEC: CM CEC: CM	3	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	19.0 38.0	8.6 17.3	24.0Ω/M′ 78.7Ω/km	14.4Ω/M′ 47.2Ω/km	.282	7.16	100	66%	15.5	50.8	27.5	90.2
	9681	NEC: CM CEC: CM	4	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	22.5 45.0	10.2 20.5	24.0Ω/M′ 78.7Ω/km	14.4Ω/M′ 47.2Ω/km	.307	7.80	100	66%	15.5	50.8	27.5	90.2
	9682	NEC: CM CEC: CM	6	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	29.5 56.0	13.4 25.5	24.0Ω/M′ 78.7Ω/km	13.1Ω/M′ 43.0Ω/km	.342	8.69	100	66%	15.5	50.8	27.5	90.2
	9683	NEC: CM CEC: CM	9	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	40.0 79.0	18.2 35.9	24.0Ω/M′ 78.7Ω/km	12.0Ω/M′ 39.4Ω/km	.397	10.10	100	66%	15.5	50.8	27.5	90.2
	9684	NEC: CM CEC: CM	12.5 (12 pairs + 1 single)	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	49.5 97.0	22.6 44.1	24.0Ω/M′ 78.7Ω/km	12.0Ω/M′ 39.4Ω/km	.445	11.30	100	66%	15.5	50.8	27.5	90.2
Datalene® Insulation • Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C) 	**1419A**	NEC: CM CEC: CM	2	See Chart 5 (Tech Info Section)	500 1000 10000	152.4 304.8 3048.0	15.5 30.0 310.0	7.0 13.6 140.9	24.0Ω/M′ 78.7Ω/km	15.1Ω/M′ 49.5Ω/km	.248	6.30	100	78%	13	42.7	22	72
	1420A	NEC: CM CEC: CM	3	See Chart 5 (Tech Info Section)	500 1000 10000	152.4 304.8 3048.0	17.0 34.0 340.0	7.7 15.5 154.5	24.0Ω/M′ 78.7Ω/km	15.1Ω/M′ 49.5Ω/km	.261	6.63	100	78%	13	42.7	22	72
	1421A	NEC: CM CEC: CM	4	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	18.5 37.0	8.4 16.8	24.0Ω/M′ 78.7Ω/km	14.4Ω/M′ 47.2Ω/km	.280	7.11	100	78%	13	42.7	22	72
	1422A	NEC: CM CEC: CM	5	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	23.0 43.0	10.5 19.5	24.0Ω/M′ 78.7Ω/km	14.4Ω/M′ 47.2Ω/km	.294	7.47	100	78%	13	42.7	22	72
	1423A	NEC: CM CEC: CM	6	See Chart 5 (Tech Info Section)	500 1000 10000	152.4 304.8 3048.0	25.0 48.0 500.0	11.4 21.8 227.3	24.0Ω/M′ 78.7Ω/km	13.0Ω/M′ 42.7Ω/km	.319	8.10	100	78%	13	42.7	22	72
	1424A	NEC: CM CEC: CM	12.5 (12 pairs + 1 single)	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	42.0 83.0	19.1 37.7	24.0Ω/M′ 78.7Ω/km	13.0Ω/M′ 42.7Ω/km	.418	10.62	100	78%	13	42.7	22	72
	1425A	NEC: CM CEC: CM	15	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	53.0 99.0	24.1 45.0	24.0Ω/M′ 78.7Ω/km	11.2Ω/M′ 36.7Ω/km	.473	12.01	100	78%	13	42.7	22	72

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Overall Beldfoil® Shield

Audio, Control and Instrumentation Cables
Plenum-Rated and Non-Plenum

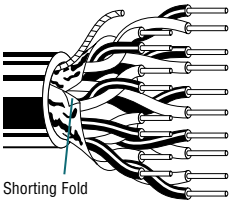
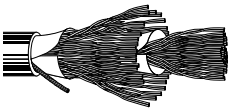
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded Conductors (7x32) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield▲ • 24 AWG Stranded TC Drain Wire																		
Polyolefin Insulation • Black Matte PVC Jacket																		
High-Flex 300V RMS	**1508A**		1	Black,	500	152.4	5.5	2.5	.008	.20	.024	.61	.131	3.33	31	102	58	190
				Red	1000	304.8	12.0	5.5										
Jacket and shield are bonded so both can be removed with automatic stripping equipment.																		
Polypropylene Insulation • Gray PVC Jacket																		
300V RMS Z-Fold®	**1883A**	NEC:	1	Black,	U-1000◆	U-304.8	12.0	5.5	.008	.20	.020	.51	.123	3.12	31	102	58	190
		CMR		Red	1000	304.8	12.0	5.5										
		CEC:																
		CMG FT4																
◆ U-1000 ft. put-up also available in Brown, Red, Orange, Yellow, Green, Blue, Violet, White or Black. Jacket and shield are bonded so both can be removed with automatic stripping equipment.																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2092 (300V 60°C)	**8641**	NEC:	1	Black,	100	30.5	2.1	1.0	.016	.41	.025	.64	.168	4.27	22	72	42	138
		CM		Clear	U-500	U-152.4	7.0	3.2										
		CEC:			500	152.4	7.0	3.2										
		CM			U-1000	U-304.8	13.0	5.9			For Plenum versions of 8641, see 88641 or 82641.							
					1000	304.8	14.0	6.4										
					2000	609.6	26.0	11.8										
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit	**88641**	NEC:	1	Black,	100	30.5	2.4	1.1	.006	.15	.014	.36	.106	2.69	31	102	59	194
		CMP		Red	500†	152.4	6.0	2.7										
		CEC:			1000†	304.8	11.0	5.0										
		CMP FT6																
Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit	**82641**	NEC:	1	Black,	U-1000†	U-304.8	9.0	4.1	.006	.15	.014	.36	.106	2.69	31	102	59	194
		CMP		Red	1000†	304.8	10.0	4.5										
		CEC:																
		CMP FT6																

TC = Tinned Copper

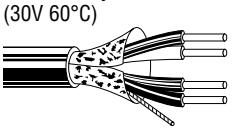
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.
▲Beldfoil provides high reliability with ease of termination.

Overall Beldfoil® Shield

Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
22 AWG Solid Conductors • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 22 AWG Stranded TC Drain Wire																		
PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80ºC)  Shorting Fold	**9302**	NEC: CMG CEC: CMG FT4	2	See Chart 3 (Tech Info Section)	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	15.0 15.5 30.0 30.0	6.8 7.0 13.6 13.6	.013	.33	.032	.81	.244	6.20	35	115	50	164
	9305	NEC: CMG CEC: CMG FT4	4	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	5.6 22.5 22.5 44.0 44.0	2.5 10.2 10.2 20.0 20.0	.013	.33	.032	.81	.265	6.73	35	115	50	164
	9306	NEC: CMG CEC: CMG FT4	6	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	30.5 62.0	13.9 28.2	.013	.33	.032	.81	.315	8.00	35	115	50	164
	9309	NEC: CMG CEC: CMG FT4	9	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	44.5 86.0	20.2 39.1	.013	.33	.033	.84	.363	9.22	35	115	50	164
	9315	NEC: CMG CEC: CMG FT4	15	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	67.0 133.0	30.5 60.5	.013	.33	.037	.94	.449	11.41	35	115	50	164
	9319	NEC: CMG CEC: CMG FT4	19	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	85.0 165.0	38.6 75.0	.013	.33	.040	1.02	.495	12.57	35	115	50	164
	9327	NEC: CMG CEC: CMG FT4	27	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	116.0 230.0	52.7 104.5	.013	.33	.045	1.14	.615	15.62	35	115	50	164
300V RMS, 60ºC 	**8751**	NEC: CMG CEC: CMG FT4	51	Request Technical Bulletin T/8-4	1000†	304.8	384.0	174.5	.010	.25	.050	1.27	.710	18.03	30	98	42.8	140

For 38-pair polypropylene version of 8751, see 8752.

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
22 AWG Solid Conductors • Tinned Copper • Twisted Pairs • 100% Duofoil® Shield • 22 AWG Stranded Tinned Copper Drain Wire																		
Datalene® Insulation • Black PVC Jacket																		
UL AWM Style 2668 (30V 60°C) 	**9184**	NEC: CM CEC: CM	2	Black & Yellow, Red & Blue	500 1000	152.4 304.8	30.5 59.0	13.9 26.8	16.5Ω/M′ 54.13Ω/km	8.0Ω/M′ 26.2Ω/km	.385	9.78	150	78%	8.7	28.5	14.1	46.3

DCR = DC Resistance • TC = Tinned Copper

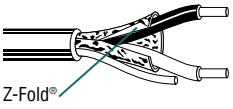
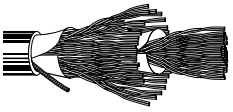
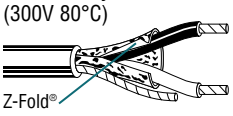
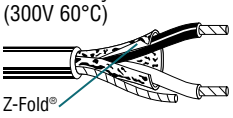
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary -0 to +20% from length shown.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

See Attenuation, Rise Time and Bit Rate data for this series on page 5.10.

Overall Beldfoil® Shield

Audio, Control and Instrumentation Cables

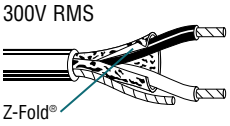
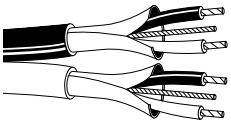
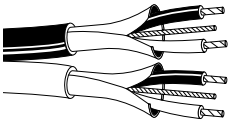
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Solid Conductors • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 22 AWG Solid TC Drain Wire◆																		
Polypropylene Insulation • Gray or Black PVC Jacket																		
300V RMS 105°C  Z-Fold®	**8450**	NEC: CM CEC: CM	1	Black, Red	U-500▲ U-1000▲ 1000	U-152.4 U-304.8 304.8	7.0 13.0 13.0	3.2 5.9 5.9	.007	.18	.018	.46	.118	3.00	40	131	76	249
▲U-500 ft. and U-1000 ft. put-ups available in Black only. Belden's Miniature Type Broadcast Audio and Instrumentation Cables occupy 1/2 to 2/3 less space than standard cables.																		
Polypropylene Insulation • Chrome PVC Jacket																		
200V RMS 80°C 	**8752**		38	Request Tech Bulletin T/8-4	250† 1000†	76.2 304.8	65.0 256.0	29.5 116.4	.008	.20	.045	1.14	.610	15.50	17	56	24.3	80
◆8752 has a stranded tinned copper drain wire.																		
22 AWG Stranded Conductors (7x30) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 22 AWG Stranded TC Drain Wire																		
Semi-rigid PVC Insulation • Pale Fawn Beige Jacket-Striated PVC																		
UL AWM Style 2464 (300V 80°C)	**9414**	NEC: CMG CEC: CMG FT4	1	White, Black	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	12.0 11.5 23.0 23.0	5.5 5.2 10.5 10.5	.010	.254	.035	.89	.180	4.60	50	164	95	312
PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C)  Z-Fold®	**9462**	NEC: CMG CEC: CMG FT4	1	Black, Red	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.0 11.0 10.5 21.0 21.0	1.4 5.0 4.8 9.5 9.5	.013	.33	.035	.89	.186	4.70	50	164	90	295
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2092 (300V 60°C)  Z-Fold®	**8761**	NEC: CM CEC: CM	1	Black, Clear	U-500 500 U-1000 1000 2000 5000 10000††	U-152.4 152.4 U-304.8 304.8 609.6 1524.0 3048.0	9.0 9.0 17.0 18.0 34.0 90.0 170.0	4.1 4.1 7.7 8.2 15.5 40.9 77.3	.016	.41	.025	.64	.175	4.45	24	79	47	154
											For Plenum versions of 8761, see 88761, 87761 or 82761.							
UL AWM Style 2092 (300V 60°C)	**9461**	NEC: CM CEC: CM	1	Black, Clear	U-500 U-1000	U-152.4 U-304.8	11.0 21.0	5.0 9.6	.016	.41	.026	.66	.180	4.57	24	79	47	154
The jacket and shield are bonded so both can be removed on automatic stripping equipment.																		

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools are one piece, but length may vary -0 to +20% from length shown.
††Length may vary -10% to +20% and may contain 2 pieces. Minimum length of any piece is 1500 ft.

Overall Beldfoil® Shield

Audio, Control and Instrumentation Cables

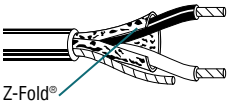
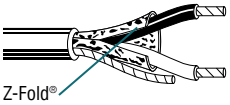
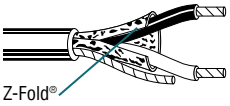
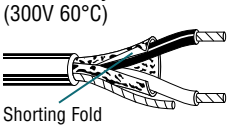
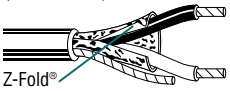
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
22 AWG Stranded (7x30) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 22 AWG Stranded TC Drain Wire *(continued)*																		
Polypropylene Insulation • Paper Wrap • Gray or Black PVC Jacket																		
300V RMS  Z-Fold®	**8451**	NEC:	1	Black,	100◆	30.5	2.7	1.2	.008	.20	.020	.51	.138	3.51	34	111	67	220
		CM		Red	U-500	U-152.4	7.5	3.4										
		CEC:			500	152.4	8.0	3.6										
		CM			U-1000	U-304.8	14.0	6.4										
					1000	304.8	15.0	6.8										
◆100 ft. put-up available in Black only.																		
Belden's Miniature Type Broadcast Audio and Instrumentation Cables occupy 1/2 to 2/3 less space than standard cables. Unique paper separator facilitates jacket stripping.																		
Polypropylene Insulation • PVC Jacket (Available in Black, Gray, Brown, Red, Orange, Yellow, Green, Blue, Violet or White)																		
300V RMS	**9451**	NEC:	1	Black,	U-500▲	U-152.4	8.0	3.6	.008	.20	.020	.51	.135	3.43	34	111	67	220
		CMR		Red	500▲	152.4	8.0	3.6										
		CEC:			T-1000▲	T-304.8	17.0	7.7										
		CMG FT4			U-1000	U-304.8	15.0	6.8										
					5000	1524.0	74.5	33.9										
▲U-500 ft., 500 ft. and T-1000 ft. put-ups available in Gray only.																		
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.																		
Polyolefin Insulation • PVC Jacket in Zip-Cord Construction (Red & Green, Red & Black, Red & Purple or Red & Gray)																		
300V 105°C 	**9451D** new	NEC:	2	Black,	U-1000	U-304.8	28.0	12.7	.008	.20	.020	.51	.135	3.43	34	112	67	220
		CMR		Red	2000●	620.8	60.0	27.3					x	x				
		CEC:											.270	6.86				
		CMG FT4																
●2000 ft. put-up available in Red & Green only.																		
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.																		
22 AWG Stranded Conductors (7x30) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • PVC Jacket (Available in Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White or Black)																		
300V RMS	**1266A**	NEC:	1	Black,	U-1000	U-304.8	15.0	6.8	.010	.25	.020	.51	.145	3.68	30	99	54	177
		CM		Red	1000†	304.8	15.0	6.8										
		CEC:																
		CM																
†1000 ft. put-up available in Black only.																		
Unique design features lower capacitance and greater flexibility than standard audio pair constructions.																		
PVC Insulation • PVC Jacket (Available in Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White or Black)																		
300V 90°C	**1503A**	NEC:	1	Black,	U-1000	U-304.8	16.0	7.3	.010	.25	.020	.51	.142	3.61	53	174	97	318
		CM		Red														
		CEC:																
		CM																
22 AWG Stranded Conductors (19x34) • Tinned Copper • Dual Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wire																		
PVC Insulation • PVC Jacket in Zip-Cord Construction (Red & Green, Red & Black, Red & Purple or Red & Gray)																		
Stereo Audio 150V RMS 	**1504A**	NEC:	2	Black,	U-1000	U-304.8	33.0	15.0	.010	.25	.020	.51	.143	3.63	57	187	100	328
		CM		Red	2000††	609.8	68.0	30.9					x	x				
		CEC:											.286	7.26				
		CM																
††2000 ft. put-up available in Red & Gray or Red & Green only.																		
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.																		

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Overall Beldfoil® Shield

Audio, Control and Instrumentation Cables
Plenum-Rated and Non-Plenum

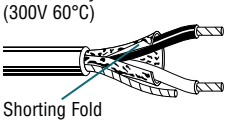
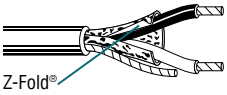
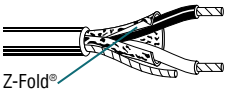
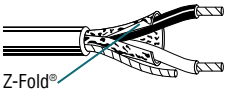
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Stranded Conductors (7x30) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 22 AWG Stranded TC Drain Wire																		
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit	**88761**	NEC:	1	Black,	100	30.5	2.7	1.2	.006	.15	.014	.36	.116	2.95	35	115	67	220
		CMP		Red	U-500	U-152.4	7.0	3.2										
Z-Fold®		CEC:			500†	152.4	7.5	3.4										
		CMP FT6			U-1000	U-304.8	13.0	5.9										
					1000†	304.8	14.0	6.4										
Plenum • FEP Insulation • Red Fluorocopolymer Jacket																		
300V RMS, Non-conduit	**87761**	NEC:	1	Black,	500†	152.4	7.0	3.2	.006	.15	.014	.36	.116	2.95	35	115	67	220
		CMP		Red	1000†	304.8	13.0	5.9										
Z-Fold®		CEC:																
		CMP FT6																
Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit	**82761**	NEC:	1	Black,	U-500†	U-152.4	6.5	3.0	.006	.15	.014	.36	.116	2.95	35	115	67	220
		CMP		Red	U-1000†	U-304.8	12.0	5.5										
Z-Fold®		CEC:			1000†	304.8	13.0	5.9										
		CMP FT6																
20 AWG Stranded Conductors (7x28) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 20 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2092	**8762**	NEC:	1	Black,	100	30.5	3.2	1.5	.016	.41	.028	.71	.204	5.18	27	89	49	161
(300V 60°C)		CM		Clear	250	76.2	6.3	2.8										
		CEC:			U-500	U-152.4	12.0	5.5										
		CM			500	152.4	12.0	5.5										
Shorting Fold					U-1000	U-304.8	23.0	10.5										
					1000	304.8	23.0	10.5										
					2000	609.6	46.0	20.9										
					10000	3048.0	240.0	109.1										
UL AWM Style 2092	**9464**	NEC:	1	Black,	U-500	U-152.4	16.5	7.5	.016	.41	.035	.89	.214	5.44	27	89	49	161
(300V 60°C)		CM		Clear	U-1000	U-304.8	33.0	15.0										
		CEC:																
		CM																
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is on the inside of foil shield.																		
PVC Insulation • Beige PVC Jacket																		
UL AWM Style 2464	**9154**	NEC:	1	Black,	U-500	U-152.4	11.5	5.2	.014	.36	.031	.79	.198	5.03	60	197	100	328
(300V 80°C)		CMG		Red	500	152.4	12.0	5.5										
		CEC:			U-1000	U-304.8	23.0	10.5										
		CMG FT4			1000	304.8	23.0	10.5										
Z-Fold®																		

9154 has 22 AWG stranded tinned copper drain wire.

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Overall Beldfoil® Shield

Audio, Control and Instrumentation Cables
Plenum-Rated and Non-Plenum

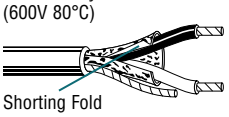
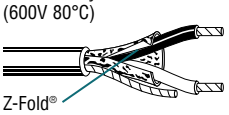
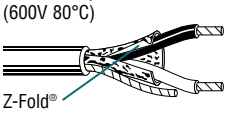
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
18 AWG Stranded Conductors (16x30) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 20 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2092 (300V 60°C)  Shorting Fold	**8760**	NEC: CM CEC: CM	1	Black, Clear	250 U-500 500 U-1000 1000 2000 5000 10000	76.2 U-152.4 152.4 U-304.8 304.8 609.6 1524.0 3048.0	6.8 13.0 13.0 26.0 25.0 50.0 135.0 260.0	3.1 5.9 5.9 11.8 11.4 22.7 61.4 118.2	.019	.48	.028	.71	.222	5.64	24	79	44	144
											For Plenum versions of 8760, see 88760, 87760 or 82760.							
	9460	NEC: CM CEC: CM	1	Black, Clear	U-500 U-1000	U-152.4 U-304.8	18.5 36.0	8.4 16.4	.019	.48	.030	.76	.230	5.84	24	79	44	144
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is on the inside of foil shield.																		
18 AWG Stranded Conductors (19x30) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 20 AWG Stranded TC Drain Wire																		
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit  Z-Fold®	**88760**	NEC: CMP CEC: CMP FT6	1	Black, Red	100 U-500 500† U-1000 1000†	30.5 U-152.4 152.4 U-304.8 304.8	3.7 12.5 13.0 24.0 24.0	1.7 5.7 5.9 10.9 10.9	.007	.18	.014	.36	.150	3.81	51	167	97	318
Plenum • FEP Insulation • Red Fluorocopolymer Jacket																		
300V RMS, Non-conduit  Z-Fold®	**87760**	NEC: CMP CEC: CMP FT6	1	Black, Red	U-500 500† 1000†	U-152.4 152.4 304.8	12.0 12.5 23.0	5.5 5.7 10.5	.007	.18	.014	.36	.150	3.81	51	167	97	318
Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit  Z-Fold®	**82760**	NEC: CMP CEC: CMP FT6	1	Black, Red	U-500† U-1000† 1000†	U-152.4 U-304.8 304.8	11.5 22.0 23.0	5.2 10.0 10.5	.007	.18	.014	.36	.150	3.81	51	167	97	318

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Overall Beldfoil® Shield

Audio, Control and Instrumentation Cables

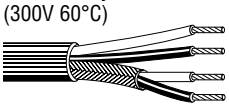
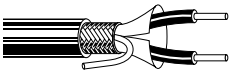
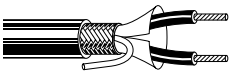
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
16 AWG Stranded Conductors (19x29) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 18 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 20253 (600V 80°C)  Shorting Fold	**8719**	NEC: CM, CL2 CEC: CM	1	Black, Clear	U-500	U-152.4	24.5	11.1	.032	.81	.032	.81	.313	7.95	23	75	44	144
					500	152.4	24.5	11.1										
					U-1000	U-304.8	47.0	21.4										
					1000	304.8	49.0	22.3										
					2000	609.6	100.0	45.5										
					5000	1524.0	245.0	111.4										
					10000	3048.0	430.0	195.5										
14 AWG Stranded Conductors (19x27) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 16 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 20253 (600V 80°C)  Z-Fold®	**8720**	NEC: CM, CL2 CEC: CM	1	Black, Clear	U-500	U-152.4	34.5	15.7	.032	.81	.035	.89	.355	9.02	24	79	47	154
					500	152.4	34.0	15.5										
					1000	304.8	71.0	32.3										
					2000	609.6	138.0	62.7										
12 AWG Stranded Conductors (19x25) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 14 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 20253 (600V 80°C)  Z-Fold®	**8718**	NEC CM, CL2 CEC: CM	1	Black, Clear	U-500	U-152.4	48.5	22.0	.037	.94	.040	1.02	.400	10.16	25	82	49	161
					500	152.4	51.0	23.2										
					1000	304.8	100.0	45.5										
					2000	609.6	198.0	90.0										

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Combination Unshielded and Braid Shield and Overall Braid Shield

Audio, Control and Instrumentation Cables

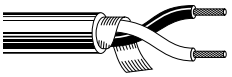
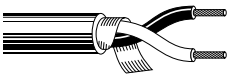
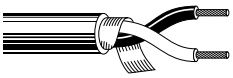
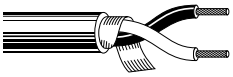
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
Combination • 22 AWG Stranded Conductors (7x30) • Tinned Copper • Conductors Cabled • 62% TC Braid Shield Over One Pair																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2094 (300V 60°C) 	**8732**	NEC: CM CEC: CM	2: 1 Shld	Black, Clear	500	152.4	19.5	8.9	.020	.51	.030	.76	.206 x .332	5.23 x 8.43	21	69	37	121
					U-1000	U-304.8	38.0	17.3										
					1000	304.8	39.0	17.7										
			1 Unshld	Black, Clear														
Overall Braid • 22 AWG Solid • Tinned Copper • Twisted Pair • Polyester Tape + 88% TC Braid Shield • 22 AWG Solid TC Drain Wire																		
PVC Insulation • Black PVC Jacket																		
UL AWM Style 2095 (300V 80°C) 	**8437**	NEC: CMG CEC: CMG FT4	1	Black, Red	1000	304.8	25.0	11.4	.015	.38	.025	.64	.200	5.08	48	157	85	279
Overall Braid • 22 AWG Stranded (7x30) • Tinned Copper • Twisted Pair • Polyester Tape + 86% TC Braid Shield • Stranded TC Drain Wire																		
PVC Insulation • Black PVC Jacket																		
UL AWM Style 2095 (300V 80°C) 	**8441**	NEC: CMG CEC: CMG FT4	1	Black, Red	100	30.5	3.6	1.6	.015	.38	.025	.64	.210	5.33	49	161	86	282
					U-500	U-152.4	14.0	6.4										
					500	152.4	14.0	6.4										
					U-1000	U-304.8	27.0	12.3										
					1000	304.8	27.0	12.3										
Overall Braid • 18 AWG Stranded Conductors (16x30) • Tinned Copper • Twisted Pair • Separator + 73% Tinned Copper Braid Shield																		
Rubber Insulation • Chrome PVC Jacket																		
300V RMS 80°C	**8208**		1	Red, White	100	30.5	5.2	2.4	.022	.56	.025	.64	.257	6.53	46	151	77	253
					U-500	U-152.4	21.5	9.8										
					500	152.4	22.0	10.0										
					U-1000	U-304.8	43.0	19.5										
					1000	304.8	43.0	19.5										

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Overall Spiral Shield

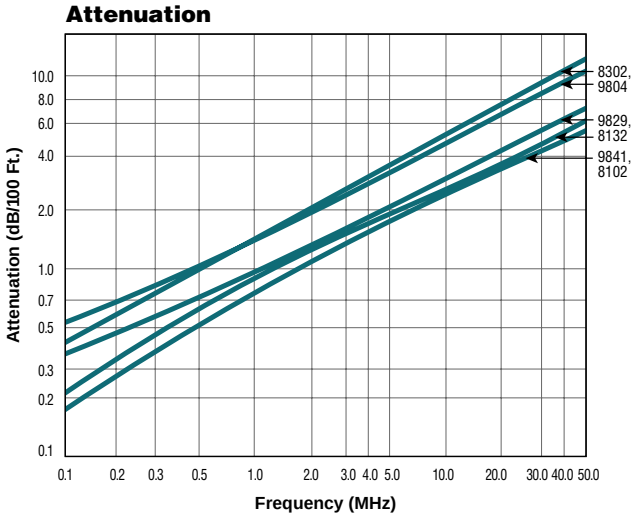
Audio, Control and Instrumentation Cables

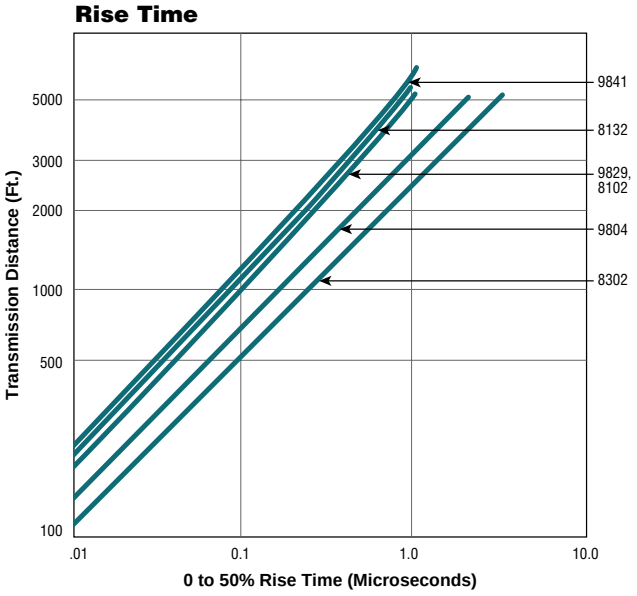
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
Overall Spiral • 22 AWG Stranded Conductors (7x30) • Tinned Copper • Twisted Pair • 85% Tinned Copper Spiral Wrapped Shield																		
PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2095 (300V 80°C) 	**8737**	NEC:	1	Black,	U-500	U-152.4	10.5	4.8	.015	.38	.025	.64	.180	4.57	40	131	70	230
		CMG		Red	500	152.4	10.0	4.5										
		CEC:			U-1000	U-304.8	20.0	9.1										
		CMG FT4			1000	304.8	20.0	9.1										
Overall Spiral • 20 AWG Stranded Conductors (7x28) • Tinned Copper • Twisted Pair • 89% Tinned Copper Spiral Wrapped Shield																		
PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2095 (300V 80°C) 	**8759**	NEC:	1	Black,	U-500	U-152.4	13.0	5.9	.016	.41	.025	.64	.199	5.05	47	154	79	259
		CMG		Red	U-1000	U-304.8	25.0	11.4										
		CEC:			1000	304.8	25.0	11.4										
		CMG FT4																
Overall Spiral • 18 AWG Stranded Conductors (7x26) • Tinned Copper • Twisted Pair • 85% Tinned Copper Spiral Wrapped Shield																		
PVC Insulation • Chrome PVC Jacket																		
300V RMS 60°C 	**8790**	NEC:	1	Red,	U-500	U-152.4	17.0	7.7	.022	.56	.028	.71	.241	6.12	53	174	92	302
		CMG		White	500	152.4	17.5	8.0										
		CEC:			U-1000	U-304.8	34.0	15.5										
		CMG FT4			1000	304.8	35.0	15.9										
Overall Spiral • 16 AWG Stranded Conductors (19x29) • Tinned Copper • Twisted Pair • 85% Tinned Copper Spiral Wrapped Shield																		
PVC Insulation • Chrome PVC Jacket																		
300V RMS 60°C 	**8780**	NEC:	1	Black,	500	152.4	23.5	10.7	.023	.58	.030	.76	.280	7.11	57	187	98	322
		CMG		White	U-1000	U-304.8	45.0	20.5										
		CEC:			1000	304.8	46.0	20.9										
		CMG FT4																

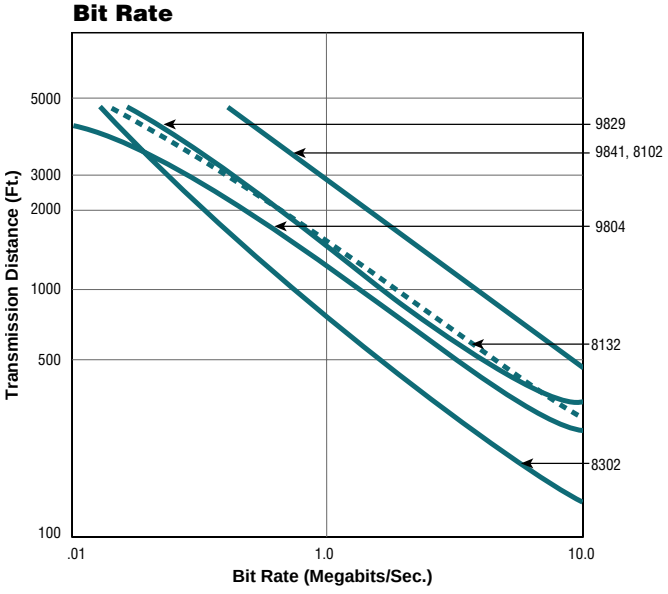
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Overall Foil/Braid Shield

Cable Characteristics

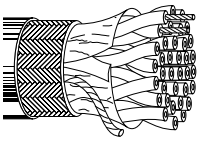






Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232 and EIA RS-422 Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
28 AWG Stranded (7x36) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil® + 90% TC Braid Shield • 28 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2960 (30V 60°C) 	**9804**	NEC: CL2	2	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	3.8 17.5 30.0	1.7 8.0 13.6	64.9Ω/M′ 212.9Ω/km	4.9Ω/M′ 16.1Ω/km	.214	5.44	100	66%	15.5	50.9	27.5	90.2
	9805	NEC: CL2	3	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.2 19.5 35.0	1.9 8.9 15.9	64.9Ω/M′ 212.9Ω/km	4.2Ω/M′ 13.8Ω/km	.222	5.64	100	66%	15.5	50.9	27.5	90.2
	9806	NEC: CL2	4	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.8 19.5 39.0	2.2 8.9 17.7	64.9Ω/M′ 212.9Ω/km	4.0Ω/M′ 13.1Ω/km	.237	6.02	100	66%	15.5	50.9	27.5	90.2
	9807	NEC: CL2	5	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.8 19.5 39.0	2.2 8.9 17.7	64.9Ω/M′ 212.9Ω/km	4.2Ω/M′ 13.8Ω/km	.240	6.10	100	66%	15.5	50.9	27.5	90.2
	9808	NEC: CL2	7	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.3 22.5 44.0	2.4 10.2 20.0	64.9Ω/M′ 212.9Ω/km	3.7Ω/M′ 12.1Ω/km	.256	6.50	100	66%	15.5	50.9	27.5	90.2
	9809	NEC: CL2	9	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.4 27.0 53.0	2.9 12.3 24.1	64.9Ω/M′ 212.9Ω/km	3.1Ω/M′ 10.2Ω/km	.290	7.37	100	66%	15.5	50.9	27.5	90.2
	9812	NEC: CL2	12	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.7 31.0 62.0	3.0 14.1 28.2	64.9Ω/M′ 212.9Ω/km	2.8Ω/M′ 9.2Ω/km	.319	8.10	100	66%	15.5	50.9	27.5	90.2
	9813	NEC: CL2	13	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.0 34.0 66.0	3.2 15.5 30.0	64.9Ω/M′ 212.9Ω/km	2.2Ω/M′ 7.2Ω/km	.336	8.53	100	66%	15.5	50.9	27.5	90.2
	9819	NEC: CL2	18	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	8.3 41.0 82.0	3.8 18.6 37.3	64.9Ω/M′ 212.9Ω/km	2.0Ω/M′ 6.7Ω/km	.365	9.27	100	66%	15.5	50.9	27.5	90.2
	9825	NEC: CL2	25	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	13.6 54.5 108.0	6.2 24.8 49.1	64.9Ω/M′ 212.9Ω/km	1.9Ω/M′ 6.2Ω/km	.429	10.90	100	66%	15.5	50.9	27.5	90.2
	9814	NEC: CL2	31	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	13.4 64.0 127.0	6.1 29.1 57.7	64.9Ω/M′ 212.9Ω/km	2.1Ω/M′ 6.9Ω/km	.462	11.73	100	66%	15.5	50.9	27.5	90.2

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

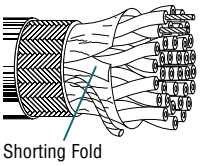
Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232 and EIA RS-485 Applications

28 AWG Stranded (7x36) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil® + 65% TC Braid Shield • 28 AWG Stranded TC Drain Wire

Datalene® Insulation • Chrome PVC Jacket

UL AWM Style 2919 (30V 80°C)



Shorting Fold

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/Ft.	Nom. Capacitance * pF/m	Nom. Capacitance ** pF/Ft.	Nom. Capacitance ** pF/m
	8132	NEC: CL2	2	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	3.6 14.5 28.0	1.6 6.6 12.8	65.0Ω/M′ 213.0Ω/km	5.1Ω/M′ 16.6Ω/km	.220	5.59	120	78%	11.0	36.1	20.0	65.6
	8133	NEC: CL2	3	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.5 17.0 34.0	2.0 7.7 15.5	65.0Ω/M′ 213.0Ω/km	5.2Ω/M′ 17.1Ω/km	.270	6.86	120	78%	11.0	36.1	20.0	65.6
	8134	NEC: CL2	4	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.0 20.0 39.0	2.3 9.1 17.7	65.0Ω/M′ 213.0Ω/km	4.4Ω/M′ 14.3Ω/km	.290	7.37	120	78%	11.0	36.1	20.0	65.6
	8135	NEC: CL2	5	See Chart 5 (Tech Info Section)	100 1000	30.5 304.8	5.3 42.0	2.4 19.1	65.0Ω/M′ 213.0Ω/km	4.2Ω/M′ 13.8Ω/km	.300	7.62	120	78%	11.0	36.1	20.0	65.6
	8138	NEC: CL2	8	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.6 27.0 52.0	2.5 12.3 23.6	65.0Ω/M′ 213.0Ω/km	3.7Ω/M′ 12.3Ω/km	.330	8.38	120	78%	11.0	36.1	20.0	65.6
	8142	NEC: CL2	12.5 (12 pairs + 1 single)	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.0 34.5 69.0	3.2 15.7 31.4	65.0Ω/M′ 213.0Ω/km	3.1Ω/M′ 10.1Ω/km	.407	10.34	120	78%	11.0	36.1	20.0	65.6
	8148	NEC: CL2	18	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	12.2 47.5 92.0	5.5 21.6 41.8	65.0Ω/M′ 213.0Ω/km	2.6Ω/M′ 8.4Ω/km	.465	11.81	120	78%	11.0	36.1	20.0	65.6
	8155	NEC: CL2	25	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	13.1 64.0 121.0	6.0 29.1 55.0	65.0Ω/M′ 213.0Ω/km	2.3Ω/M′ 7.6Ω/km	.565	14.35	120	78%	11.0	36.1	20.0	65.6

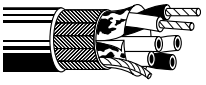
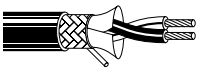
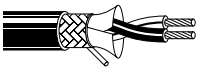
DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-485 Applications
Plenum-Rated and Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil® + 90% TC Braid Shield • 24 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C) 	**9841**	NEC: CM CEC: CM	1	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.8 20.0 40.0	2.2 9.1 18.2	24.0Ω/M′ 78.7Ω/km	3.4Ω/M′ 11.0Ω/km	.232	5.89	120	66%	12.8	42.0	23.0	75.5
													For Plenum versions of 9841, see 82841 or 89841.					
	9842	NEC: CM CEC: CM	2	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.8 29.5 57.0	2.6 13.4 25.9	24.0Ω/M′ 78.7Ω/km	2.2Ω/M′ 7.2Ω/km	.340	8.64	120	66%	12.8	42.0	23.0	75.5
													For Plenum versions of 9842, see 82842.					
	9843	NEC: CM CEC: CM	3	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.1 34.5 67.0	3.2 15.7 30.5	24.0Ω/M′ 78.7Ω/km	2.3Ω/M′ 7.7Ω/km	.360	9.14	120	66%	12.8	42.0	23.0	75.5
	9844	NEC: CM CEC: CM	4	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	43.0 83.0	19.5 37.7	24.0Ω/M′ 78.7Ω/km	2.1Ω/M′ 6.9Ω/km	.390	9.91	120	66%	12.8	42.0	23.0	75.5
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS 	**82841** new	NEC: CMP CEC: CMP FT6	1	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	16.0 28.0	7.3 12.7	24.0Ω/M′ 78.7Ω/km	3.1Ω/M′ 10.2Ω/km	.204	5.18	120	76%	12	39.4	22	72.2
300V RMS	**82842** new	NEC: CMP CEC: CMP FT6	2	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	21.0 42.0	9.5 19.1	24.0Ω/M′ 78.7Ω/km	2.4Ω/M′ 7.9Ω/km	.273	6.93	120	76%	12	39.4	22	72.2
Plenum • Foam FEP Insulation • Red FEP Jacket																		
300V RMS 	**89841** new	NEC: CMP CEC: CMP FT6	1	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	15.5 29.0	7.0 13.2	24.0Ω/M′ 78.7Ω/km	3.1Ω/M′ 10.2Ω/km	.202	5.13	120	76%	12	39.4	22	72.2

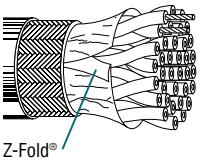
DCR = DC Resistance • TC = Tinned Copper

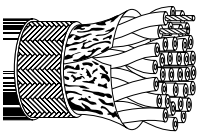
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232 Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (7x32) • Tinned Copper • Multi-paired Cable with Overall 100% Beldfoil® + 65% Tinned Copper Braid Shield																		
Semi-rigid PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C) CSA AWM I A	**8332**	NEC: CMG CEC: CMG FT4	2	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	4.6 18.5 37.0	2.1 8.4 16.8	24.0Ω/M′ 78.7Ω/km	5.4Ω/M′ 17.7Ω/km	.250	6.35	75	60%	30	98	50	164
	8333	NEC: CMG CEC: CMG FT4	3	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.5 22.5 44.0	2.5 10.3 20.1	24.0Ω/M′ 78.7Ω/km	6.6Ω/M′ 21.7Ω/km	.265	6.73	75	60%	30	98	50	164
	8334	NEC: CMG CEC: CMG FT4	4	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.0 24.5 49.0	2.7 11.1 22.3	24.0Ω/M′ 78.7Ω/km	4.5Ω/M′ 14.8Ω/km	.288	7.32	75	60%	30	98	50	164
	8335	NEC: CMG CEC: CMG FT4	5	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.6 28.5 57.0	3.0 13.0 25.9	24.0Ω/M′ 78.7Ω/km	4.6Ω/M′ 15.1Ω/km	.295	7.49	75	60%	30	98	50	164
	8336	NEC: CMG CEC: CMG FT4	6	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.5 30.5 62.0	3.0 13.9 28.2	24.0Ω/M′ 78.7Ω/km	4.7Ω/M′ 15.4Ω/km	.310	7.87	75	60%	30	98	50	164
	8337	NEC: CMG CEC: CMG FT4	7	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.8 32.0 65.0	3.1 14.5 29.5	24.0Ω/M′ 78.7Ω/km	4.7Ω/M′ 15.4Ω/km	.321	8.15	75	60%	30	98	50	164
	8340	NEC: CMG CEC: CMG FT4	10	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	9.1 45.5 90.0	4.1 20.7 40.9	24.0Ω/M′ 78.7Ω/km	3.5Ω/M′ 11.5Ω/km	.385	9.78	75	60%	30	98	50	164
	8342	NEC: CMG CEC: CMG FT4	12.5 (12 pairs + 1 single)	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	11.0 55.0 109.0	5.0 25.0 49.5	24.0Ω/M′ 78.7Ω/km	3.6Ω/M′ 11.8Ω/km	.405	10.29	75	60%	30	98	50	164
	8345	NEC: CMG CEC: CMG FT4	15	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	61.5 123.0	28.0 55.9	24.0Ω/M′ 78.7Ω/km	3.2Ω/M′ 10.5Ω/km	.445	11.30	75	60%	30	98	50	164
UL AWM Style 2464 (300V 80°C)	**8348**	NEC: CMG CEC: CMG FT4	18	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	15.8 78.5 152.0	7.2 35.8 69.3	24.0Ω/M′ 78.7Ω/km	2.7Ω/M′ 8.9Ω/km	.480	12.19	75	60%	30	98	50	164
	8355	NEC: CMG CEC: CMG FT4	25	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	96.5 195.0	43.9 88.6	24.0Ω/M′ 78.7Ω/km	2.5Ω/M′ 8.2Ω/km	.550	13.97	75	60%	30	98	50	164



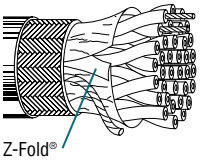


DCR = DC Resistance

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232 and EIA RS-422 Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil® + 65% TC Braid Shield • 24 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C)  Z-Fold®	**9829**	NEC: CM CEC: CM	2	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.4 22.0 43.0	2.5 10.0 19.5	24.0Ω/M′ 78.7Ω/km	4.4Ω/M′ 14.4Ω/km	.291	7.39	100	66%	15.5	50.9	27.5	90.2
	9830	NEC: CM CEC: CM	3	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	25.5 53.0	11.6 24.1	24.0Ω/M′ 78.7Ω/km	4.4Ω/M′ 14.4Ω/km	.305	7.74	100	66%	15.5	50.9	27.5	90.2
	9831	NEC: CM CEC: CM	4	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.2 29.0 58.0	2.8 13.2 26.4	24.0Ω/M′ 78.7Ω/km	3.9Ω/M′ 12.8Ω/km	.330	8.38	100	66%	15.5	50.9	27.5	90.2
	9832	NEC: CM CEC: CM	5	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.6 31.5 65.0	3.0 14.3 29.5	24.0Ω/M′ 78.7Ω/km	3.9Ω/M′ 12.8Ω/km	.338	8.59	100	66%	15.5	50.9	27.5	90.2
	9839	NEC: CM CEC: CM	6	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	35.5 69.0	16.1 31.4	24.0Ω/M′ 78.7Ω/km	2.1Ω/M′ 6.9Ω/km	.364	9.25	100	66%	15.5	50.9	27.5	90.2
	9833	NEC: CM CEC: CM	7	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	37.5 77.0	17.0 35.0	24.0Ω/M′ 78.7Ω/km	3.7Ω/M′ 12.1Ω/km	.370	9.40	100	66%	15.5	50.9	27.5	90.2
	9834	NEC: CM CEC: CM	9	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	47.0 93.0	21.4 42.3	24.0Ω/M′ 78.7Ω/km	3.0Ω/M′ 9.8Ω/km	.419	10.64	100	66%	15.5	50.9	27.5	90.2
	9835	NEC: CM CEC: CM	10	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	51.5 102.0	23.4 46.4	24.0Ω/M′ 78.7Ω/km	2.8Ω/M′ 9.2Ω/km	.451	11.46	100	66%	15.5	50.9	27.5	90.2
	9836	NEC: CM CEC: CM	12	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	14.1 57.0 114.0	6.4 25.9 51.8	24.0Ω/M′ 78.7Ω/km	2.8Ω/M′ 9.2Ω/km	.464	11.79	100	66%	15.5	50.9	27.5	90.2
	9837	NEC: CM CEC: CM	18	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	87.5 174.0	39.8 79.1	24.0Ω/M′ 78.7Ω/km	2.0Ω/M′ 6.6Ω/km	.567	14.40	100	66%	15.5	50.9	27.5	90.2
	9838	NEC: CM CEC: CM	25	See Chart 5 (Tech Info Section)	500	152.4	113.0	51.4	24.0Ω/M′ 78.7Ω/km	1.9Ω/M′ 6.2Ω/km	.670	17.02	100	66%	15.5	50.9	27.5	90.2

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

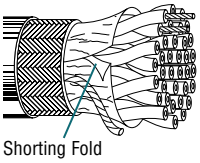
Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232 and EIA RS-422 Applications

24 AWG Stranded (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil® + 65% TC Braid Shield • 24 AWG Stranded TC Drain Wire

Datalene® Insulation • Chrome PVC Jacket

UL AWM Style 2919 (30V 80°C)



Shorting Fold

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
	8102	NEC:	2	See	100	30.5	4.8	2.2	24.0Ω/M′	4.6Ω/M′	.270	6.86	100	78%	12.5	41	22	72.2
		CM		Chart 5	500	152.4	19.0	8.6	78.7Ω/km	15.1Ω/km								
		CEC:		(Tech Info	1000	304.8	38.0	17.3										
		CM		Section)	10000	3048.0	380.0	172.7										
	8103	NEC:	3	See	100	30.5	4.6	2.1	24.0Ω/M′	3.8Ω/M′	.283	7.19	100	78%	12.5	41	22	72.2
		CM		Chart 5	500	152.4	21.5	9.8	78.7Ω/km	12.5Ω/km								
		CEC:		(Tech Info	1000	304.8	42.0	19.1										
		CM		Section)	10000	3048.0	430.0	195.5										
	8104	NEC:	4	See	100	30.5	5.1	2.3	24.0Ω/M′	4.1Ω/M′	.302	7.67	100	78%	12.5	41	22	72.2
		CM		Chart 5	500	152.4	23.0	10.5	78.7Ω/km	13.5Ω/km								
		CEC:		(Tech Info	1000	304.8	46.0	20.9										
		CM		Section)	10000	3048.0	490.0	222.7										
	8105	NEC:	5	See	100	30.5	5.8	2.6	24.0Ω/M′	4.2Ω/M′	.316	8.03	100	78%	12.5	41	22	72.2
		CM		Chart 5	500	152.4	28.0	12.7	78.7Ω/km	13.8Ω/km								
		CEC:		(Tech Info	1000	304.8	53.0	24.1										
		CM		Section)														
	8106	NEC:	6	See	100	30.5	6.3	2.9	24.0Ω/M′	3.5Ω/M′	.341	8.66	100	78%	12.5	41	22	72.2
		CM		Chart 5	500	152.4	30.5	13.9	78.7Ω/km	11.5Ω/km								
		CEC:		(Tech Info	1000	304.8	58.0	26.4										
		CM		Section)														
	8107	NEC:	7	See	100	30.5	6.8	3.1	24.0Ω/M′	3.5Ω/M′	.341	8.66	100	78%	12.5	41	22	72.2
		CM		Chart 5	500	152.4	33.0	15.0	78.7Ω/km	11.5Ω/km								
		CEC:		(Tech Info	1000	304.8	63.0	28.6										
		CM		Section)														
	8108	NEC:	8	See	100	30.5	7.6	3.5	24.0Ω/M′	2.7Ω/M′	.370	9.40	100	78%	12.5	41	22	72.2
		CM		Chart 5	500	152.4	37.5	17.1	78.7Ω/km	8.9Ω/km								
		CEC:		(Tech Info	1000	304.8	72.0	32.8										
		CM		Section)														
	8110	NEC:	10	See	100	30.5	9.9	4.5	24.0Ω/M′	2.4Ω/M′	.427	10.85	100	78%	12.5	41	22	72.2
		CM		Chart 5	500	152.4	45.5	20.7	78.7Ω/km	7.9Ω/km								
		CEC:		(Tech Info	1000	304.8	90.0	40.9										
		CM		Section)														
	8112	NEC:	12.5	See	100	30.5	10.5	4.8	24.0Ω/M′	2.4Ω/M′	.440	11.18	100	78%	12.5	41	22	72.2
		CM	(12 pairs + 1 single)	Chart 5	500	152.4	49.0	22.3	78.7Ω/km	7.9Ω/km								
		CEC:		(Tech Info	1000	304.8	97.0	44.1										
		CM		Section)														
	8115	NEC:	15	See	500	152.4	63.5	28.9	24.0Ω/M′	2.6Ω/M′	.495	12.57	100	78%	12.5	41	22	72.2
		CM		Chart 5	1000	304.8	116.0	52.7	78.7Ω/km	8.5Ω/km								
		CEC:		(Tech Info														
		CM		Section)														
	8118	NEC:	18	See	100	30.5	16.3	7.4	24.0Ω/M′	2.1Ω/M′	.537	13.64	100	78%	12.5	41	22	72.2
		CM		Chart 5	500	152.4	70.5	32.0	78.7Ω/km	6.9Ω/km								
		CEC:		(Tech Info	1000	304.8	144.0	65.5										
		CM		Section)														
	8125	NEC:	25	See	100	30.5	22.4	10.2	24.0Ω/M′	2.0Ω/M′	.632	16.05	100	78%	12.5	41	22	72.2
		CM		Chart 5	500	152.4	98.0	44.5	78.7Ω/km	6.6Ω/km								
		CEC:		(Tech Info	1000	304.8	191.0	86.8										
		CM		Section)														

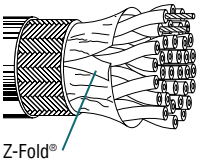
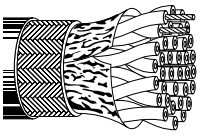
DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232 Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Stranded Conductors (7x30) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil® + 65% Tinned Copper Braid Shield																		
Semi-rigid PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C)  Z-Fold®	**8302**	NEC: CMG CEC: CMG FT4	2	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	5.2 21.0 41.0	2.4 9.6 18.6	15.0Ω/M′ 49.2Ω/km	5.7Ω/M′ 18.7Ω/km	.260	6.60	70	60%	40	131	72	236
	8303	NEC: CMG CEC: CMG FT4	3	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.0 25.0 49.0	2.7 11.4 22.3	15.0Ω/M′ 49.2Ω/km	6.2Ω/M′ 20.3Ω/km	.270	6.86	70	60%	35	115	63	207
	8304	NEC: CMG CEC: CMG FT4	4	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.7 31.5 65.0	3.0 14.3 29.5	15.0Ω/M′ 49.2Ω/km	4.9Ω/M′ 16.1Ω/km	.320	8.13	70	60%	35	115	63	207
	8305	NEC: CMG CEC: CMG FT4	5	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.3 34.5 68.0	3.3 15.7 30.9	15.0Ω/M′ 49.2Ω/km	4.8Ω/M′ 15.7Ω/km	.322	8.18	70	60%	35	115	63	207
	8306	NEC: CMG CEC: CMG FT4	6	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	8.0 39.5 76.0	3.6 18.0 34.5	15.0Ω/M′ 49.2Ω/km	5.0Ω/M′ 16.4Ω/km	.348	8.84	70	60%	35	115	63	207
	8307	NEC: CMG CEC: CMG FT4	7	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	8.6 41.5 82.0	3.9 18.9 37.3	15.0Ω/M′ 49.2Ω/km	5.0Ω/M′ 16.4Ω/km	.348	8.84	70	60%	35	115	63	207
	8308	NEC: CMG CEC: CMG FT4	8	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	10.4 52.0 101.0	4.7 23.7 46.0	15.0Ω/M′ 49.2Ω/km	4.4Ω/M′ 14.4Ω/km	.384	9.75	70	60%	35	115	63	207
UL AWM Style 2464 (300V 80°C) 	**8310**	NEC: CMG CEC: CMG FT4	10	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	12.9 61.0 123.0	5.9 27.7 55.9	15.0Ω/M′ 49.2Ω/km	4.1Ω/M′ 13.4Ω/km	.440	11.18	70	60%	35	115	63	207
	8312	NEC: CMG CEC: CMG FT4	12.5 (12 pairs + 1 single)	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	14.6 72.0 140.0	6.7 32.8 63.8	15.0Ω/M′ 49.2Ω/km	4.2Ω/M′ 13.8Ω/km	.455	11.56	70	60%	35	115	63	207
	8315	NEC: CMG CEC: CMG FT4	15	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	17.3 85.5 167.0	7.9 39.0 76.1	15.0Ω/M′ 49.2Ω/km	3.8Ω/M′ 12.5Ω/km	.502	12.75	70	60%	35	115	63	207
	8318	NEC: CMG CEC: CMG FT4	18	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	19.6 97.0 196.0	8.9 44.1 89.1	15.0Ω/M′ 49.2Ω/km	3.0Ω/M′ 9.8Ω/km	.535	13.59	70	60%	35	115	63	207
	8325	NEC: CMG CEC: CMG FT4	25	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	25.1 126.0 246.0	11.4 57.4 112.1	15.0Ω/M′ 49.2Ω/km	2.9Ω/M′ 9.5Ω/km	.620	15.75	70	60%	35	115	63	207

DCR = DC Resistance

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Overall Foil/Braid Shield

Computer P.O.S. Cables
Plenum-Rated and Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
22 AWG Solid • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil® Shield + 90% TC Braid • 22 AWG Solid TC Drain Wire																		
Polyethylene Insulation • Black PVC Jacket																		
UL AWM Style 2582 (150V 60°C)	**1268A**	NEC: CM CEC: CM	2	Red & Blue, Black & Yellow	1000	304.8	48.0	21.8	16.5Ω/M′ 54.1Ω/km	3.7Ω/M′ 12.1Ω/km	.270	6.86	100	66%	15.5	50.9	27.5	90.2
													For Plenum version of 1268A, see 1269A.					
Plenum • Solid FEP Insulation • Black FEP Jacket																		
300V RMS, Non-conduit	**1269A**	NEC: MPP, CMP CEC: MPP, CMP FT6	2	Red & Blue, Black & Yellow	1000†	304.8	48.0	21.8	16.5Ω/M′ 54.1Ω/km	2.1Ω/M′ 6.9Ω/km	.240	6.10	100	69.5%	15.5	50.9	27.0	88.6
22 AWG Solid • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil + 58% TC Braid Shield • 22 AWG Solid TC Drain Wire																		
Polyethylene Insulation • Black PVC Jacket																		
UL AWM Style 2582 (150V 60°C)	**9855**	NEC: CM CEC: CM	2	Red & Blue, Black & Yellow	U-500 500 1000 10000	U-152.4 152.4 304.8 3048.0	20.0 20.5 40.0 410.0	9.1 9.3 18.2 186.4	16.5Ω/M′ 54.1Ω/km	4.2Ω/M′ 13.8Ω/km	.270	6.86	100	66%	15.5	50.9	27.5	90.2
													For Plenum version of 9855, see 89855.					
22 AWG Solid • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil + 55% TC Braid Shield plus Polyester Tape • 22 AWG Solid TC Drain Wire																		
Plenum • Solid FEP Insulation • Black FEP Jacket																		
300V RMS, Non-conduit	**89855**	NEC: MPP, CMP CEC: MPP, CMP FT6	2	1 Pair: Red & Blue 1 Pair: Black & Yellow	500† 1000†	152.4 304.8	24.0 42.0	10.9 19.1	16.5Ω/M′ 54.1Ω/km	4.9Ω/M′ 16.1Ω/km	.272	6.91	100	69.5%	15.5	50.9	27.0	88.6
22 AWG Solid • Bare Copper • Twisted Pairs • Overall 100% Beldfoil Shield + 58% TC Braid • 22 AWG Solid TC Drain Wire																		
Polyethylene Insulation • Black PVC Jacket																		
UL AWM Style 2919 (30V 80°C)	**9696**	NEC: CM CEC: CM	2	1 Pair: Blue & White with Blue Stripe 1 Pair: Orange & White with Orange Stripe	500 1000	152.4 304.8	22.5 44.0	10.2 20.0	14.2Ω/M′ 46.6Ω/km	4.2Ω/M′ 13.8Ω/km	.290	7.37	100	66%	16.0	52.5	27.5	90.2
													For Plenum version of 9696, see 89696.					
22 AWG Solid • Bare Copper • Twisted Pairs • Overall 100% Beldfoil Shield + 55% TC Braid • 22 AWG Solid TC Drain Wire																		
Plenum • Solid FEP Insulation • Black FEP Jacket																		
300V RMS, Non-conduit	**89696**	NEC: MPP, CMP CEC: MPP, CMP FT6	2	1 Pair: Blue & White with Blue Stripe 1 Pair: Orange & White with Orange Stripe	500† 1000†	152.4 304.8	25.0 47.0	11.4 21.4	16.5Ω/M′ 54.1Ω/km	4.2Ω/M′ 13.8Ω/km	.262	6.65	100	69.5%	15.5	50.9	27.0	88.6

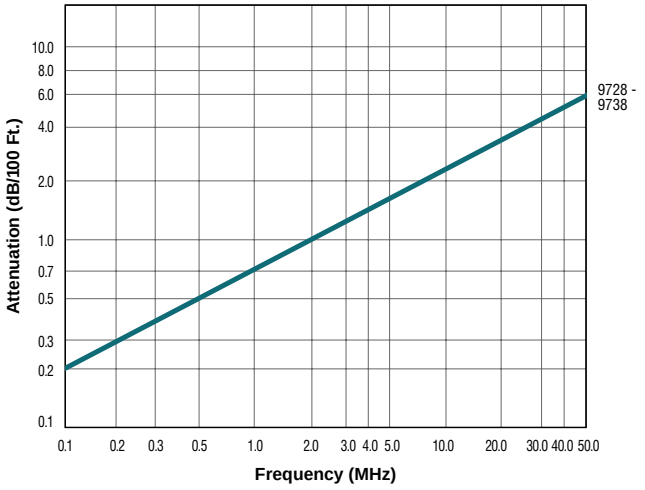
DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary ±10% from length shown.

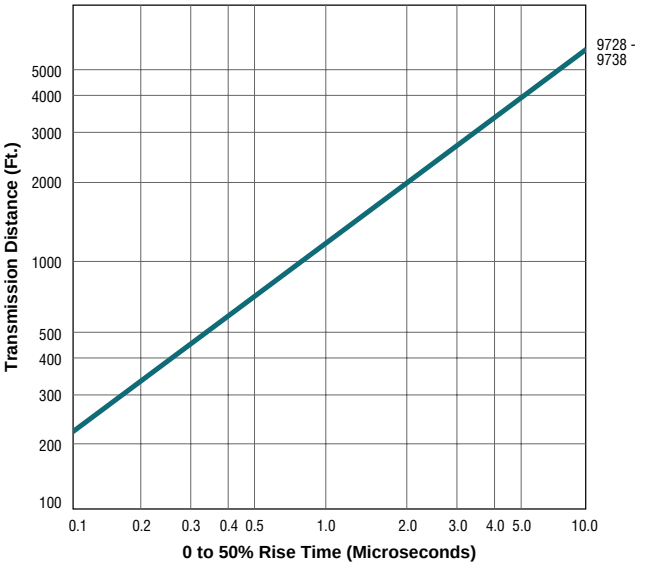
Individually Shielded

Cable Characteristics

Attenuation

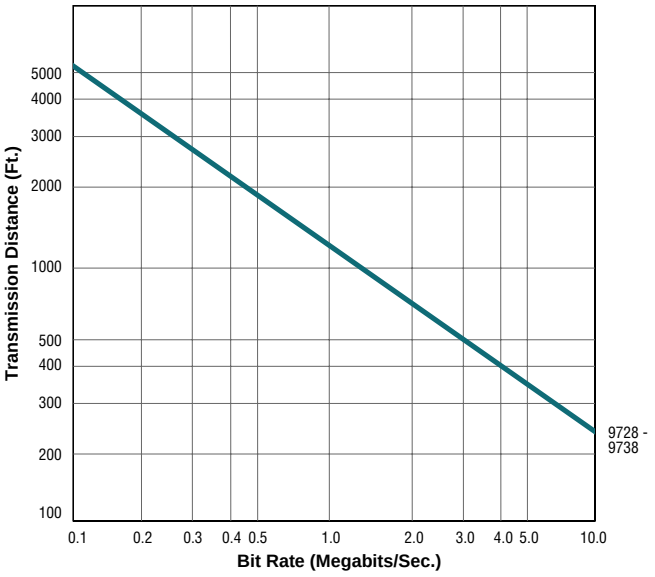


Rise Time



Cables are terminated in their characteristic impedance. Signal source electrical characteristics: 50 ohms and 10% to 90% rise time less than 5 nanoseconds.

Bit Rate



Charts assume 5% peak-to-peak time jitter as determined by eye pattern measurements of pseudorandom NRZ code.

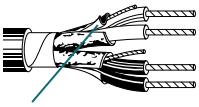
Individually Shielded

Low-Capacitance 100 Ohm Computer Cables for EIA RS-422 and Digital Audio Applications

24 AWG Stranded (7x32) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 24 AWG Stranded TC Drain Wire

Datalene® Insulation • Chrome PVC Jacket

UL AWM Style 2493 (300V 60°C)



Z-Fold®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
	9729	NEC: CM CEC: CM	2	See Chart 3 (Tech Info Section)	100 500 1000 10000	30.5 152.4 304.8 3048.0	4.3 20.5 39.0 390.0	2.0 9.3 17.7 177.8	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.317	8.05	100	78%	12.5	41.0	23.2	76.1
													For Plenum version of 9729, see 89729 or 82729.					
	9730	NEC: CM CEC: CM	3	See Chart 3 (Tech Info Section)	100 500 1000 10000	30.5 152.4 304.8 3048.0	5.1 24.5 46.0 520.0	2.3 11.1 20.9 236.4	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.334	8.48	100	78%	12.5	41.0	23.2	76.1
													For Plenum version of 9730, see 89730.					
	9728	NEC: CM CEC: CM	4	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.0 28.5 55.0	2.7 13.0 25.0	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.363	9.22	100	78%	12.5	41.0	23.2	76.1
													For Plenum version of 9728, see 89728.					
	9731	NEC: CM CEC: CM	6	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	11.1 42.0 83.0	5.0 19.1 37.7	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.421	10.69	100	78%	12.5	41.0	23.2	76.1
													For Plenum version of 9731, see 89731.					
	9732	NEC: CM CEC: CM	9	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	11.9 58.0 108.0	5.4 26.4 49.1	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.488	12.40	100	78%	12.5	41.0	23.2	76.1
													For Plenum version of 9732, see 89732.					
	9733	NEC: CM CEC: CM	11	See Chart 3 (Tech Info Section)	500	152.4	75.0	34.1	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.575	14.61	100	78%	12.5	41.0	23.2	76.1
	9734	NEC: CM CEC: CM	12	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	79.5 154.0	36.1 70.0	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.575	14.61	100	78%	12.5	41.0	23.2	76.1
	9735	NEC: CM CEC: CM	15	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	95.0 185.0	43.2 84.1	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.639	16.23	100	78%	12.5	41.0	23.2	76.1
	9736	NEC: CM CEC: CM	17	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	103.5 210.0	47.0 95.5	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.671	17.04	100	78%	12.5	41.0	23.2	76.1
	9737	NEC: CM CEC: CM	19	See Chart 3 (Tech Info Section)	1000	304.8	231.0	105.0	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.671	17.04	100	78%	12.5	41.0	23.2	76.1
	9738	NEC: CM CEC: CM	27	See Chart 3 (Tech Info Section)	1000	304.8	334.0	151.8	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.797	20.24	100	78%	12.5	41.0	23.2	76.1

DCR = DC Resistance • TC = Tinned Copper

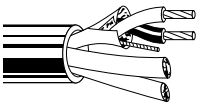
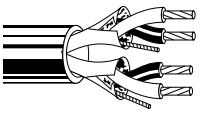
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

See Attenuation, Rise Time and Bit Rate Data for this series on page 5.34.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Individually Shielded

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422, and Digital Audio Applications Plenum-Rated

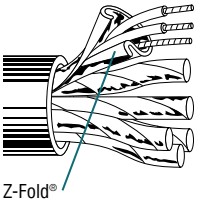
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (7x32) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 24 AWG Stranded TC Drain Wire																		
Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																		
300V RMS, Non-conduit 	**89729**	NEC: CMP CEC: CMP FT6	2	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	18.5 31.0	8.4 14.1	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.261	6.63	100	78%	13.5	44	22.5	73.8
	89730	NEC: CMP CEC: CMP FT6	3	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	23.0 40.0	10.5 18.2	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.278	7.06	100	78%	13.5	44	22.5	73.8
	89728	NEC: CMP CEC: CMP FT6	4	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	26.5 50.0	12.0 22.7	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.307	7.80	100	78%	13.5	44	22.5	73.8
	89731	NEC: CMP CEC: CMP FT6	6	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	35.0 71.0	15.9 32.3	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.361	9.17	100	78%	13.5	44	22.5	73.8
	89732	NEC: CMP CEC: CMP FT6	9	See Chart 5 (Tech Info Section)	1000†	304.8	106.0	48.2	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.429	10.90	100	78%	13.5	44	22.5	73.8
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit 	**82729**	NEC: CMP CEC: CMP FT6	2	See Chart 5 (Tech Info Section)	U-1000 1000†	U-304.8 304.8	27.0 28.0	12.3 12.7	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.255	6.48	100	78%	13.5	44	22.5	73.8

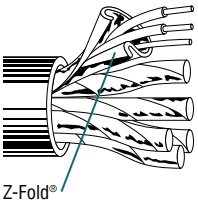
DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary ±10% from length shown.

Individually Shielded

Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
24 AWG Stranded (7x32) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 24 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C)  Z-Fold®	**9990**	NEC: CM CEC: CM	3	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	18.0 36.0	8.2 16.4	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.255	6.48	60	66%	25	82	47	154
	9991	NEC: CM CEC: CM	6	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.7 32.0 62.0	3.1 14.6 28.3	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.330	8.38	60	66%	25	82	47	154
	9992	NEC: CM CEC: CM	9	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	8.8 44.0 86.0	4.0 20.0 39.1	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.383	9.73	60	66%	25	82	47	154
	9993	NEC: CM CEC: CM	12	See Chart 3 (Tech Info Section)	100 1000	30.5 304.8	11.5 107.0	5.2 48.6	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.428	10.87	60	66%	25	82	47	154
	9995	NEC: CM CEC: CM	25	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	23.2 116.0 228.0	10.5 52.7 103.6	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.636	16.15	60	66%	25	82	47	154

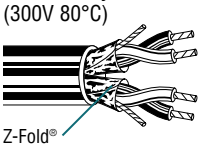
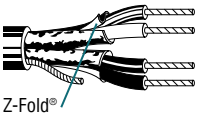
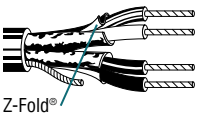
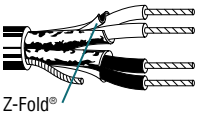
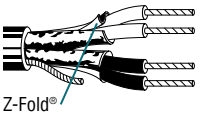
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
22 AWG Solid Conductors • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil • 22 AWG Solid TC Drain Wire																		
PVC Insulation • Overall Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C)  Z-Fold®	**8767**	NEC: MPG, CMG CEC: MPG, CMG FT4	3	See Chart 3 (Tech Info Section)	U-500 500 1000	U-152.4 152.4 304.8	24.0 24.5 49.0	10.9 11.1 22.3	.013	.33	.037	.94	.279	7.10	40	131	77	253
	8768	NEC: MPG, CMG CEC: MPG, CMG FT4	6	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	46.5 92.0	21.1 41.8	.013	.33	.037	.94	.379	9.60	40	131	77	253
	8764	NEC MPG, CMG CEC: MPG, CMG FT4	9	See Chart 3 (Tech Info Section)	1000	304.8	122.0	55.5	.013	.33	.040	1.02	.425	10.80	40	131	77	253
	8765	NEC MPG, CMG CEC: MPG, CMG FT4	11	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	76.5 149.0	34.8 67.7	.013	.33	.040	1.02	.470	11.90	40	131	77	253
	8766	NEC: MPG, CMG CEC: MPG, CMG FT4	15	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	101.5 196.0	46.1 89.1	.013	.33	.045	1.14	.525	13.30	40	131	77	253

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Individually Shielded

Audio, Control and Instrumentation Cables
Plenum-Rated and Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
22 AWG Stranded (7x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 22 AWG Stranded TC Drain Wire																		
Semi-rigid PVC Insulation • Pale Fawn Beige PVC Jacket (Shielded Pairs Parallel under Jacket)																		
UL AWM Style 2464 (300V 80°C)  Z-Fold®	**9406**	NEC: CMG CEC: CMG FT4	2	Black & White, Black & Yellow	100	30.5	4.2	1.9	15.0Ω/M′	13.0Ω/M′	.173	4.39	50	60%	50	164	95	312
					U-500	U-152.4	16.5	7.5	49.2Ω/km	42.7Ω/km	x	x						
					500	152.4	17.0	7.7			.280	7.11						
					U-1000	U-304.8	33.0	15.0										
					1000	304.8	33.0	15.0										
22 AWG Stranded (7x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil • 24 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS 60°C  Z-Fold®	**8723**	NEC: CM CEC: CM	2	Red & Black, Green & White	100	30.5	2.3	1.0	15.0Ω/M′	16.6Ω/M′	.168	4.27	45	66%	35	115	62	203
					U-500	U-152.4	10.5	4.8	49.2Ω/km	54.5Ω/km								
					500	152.4	10.0	4.5										
					U-1000	U-304.8	20.0	9.1										
					1000	304.8	20.0	9.1										
					1640	499.9	32.8	14.9										
					U-2000	U-609.6	40.0	18.2										
					2000	609.6	40.0	18.2										
					3280	999.7	65.6	29.8										
					5000	1524.0	95.0	43.2										
					10000	3048.0	200.0	90.9										
													For Plenum versions of 8723, see 88723, 87723 or 82723.					
Plenum • Halar® Insulation • Natural Flamarrest® Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit  Z-Fold®	**82723**	NEC: CMP CEC: CMP FT6	2	Red & Black, Green & White	U-500†	U-152.4	10.0	4.5	14.7Ω/M′	16.6Ω/M′	.148	3.76	36	62%	43	141	75	246
					U-1000	U-304.8	19.0	8.6	48.2Ω/km	54.5Ω/km								
					1000†	304.8	20.0	9.1										
					U-2000†	U-609.6	38.0	17.3										
Plenum • FEP Insulation • Red FEP Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit  Z-Fold®	**88723**	NEC: CMP CEC: CMP FT6	2	Red & Black, Green & White	100	30.5	3.4	1.5	16.0Ω/M′	14.7Ω/M′	.148	3.76	40	69%	35	115	67	220
					500	152.4	11.0	5.0	52.5Ω/km	48.2Ω/km								
					1000	304.8	21.0	9.5										
Plenum • FEP Insulation • Red Fluorocopolymer Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit  Z-Fold®	**87723**	NEC: CMP CEC: CMP FT6	2	Red & Black, Green & White	500†	152.4	11.0	5.0	16.0Ω/M′	14.7Ω/M′	.148	3.76	40	69%	35	115	67	220
					1000†	304.8	20.0	9.1	52.5Ω/km	48.2Ω/km								

DCR = DC Resistance • TC = Tinned Copper

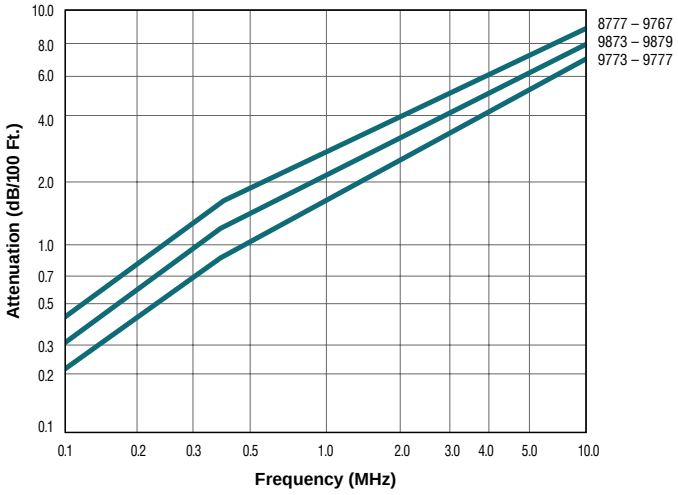
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length show.

Halar is an Ausimont Corporation trademark.

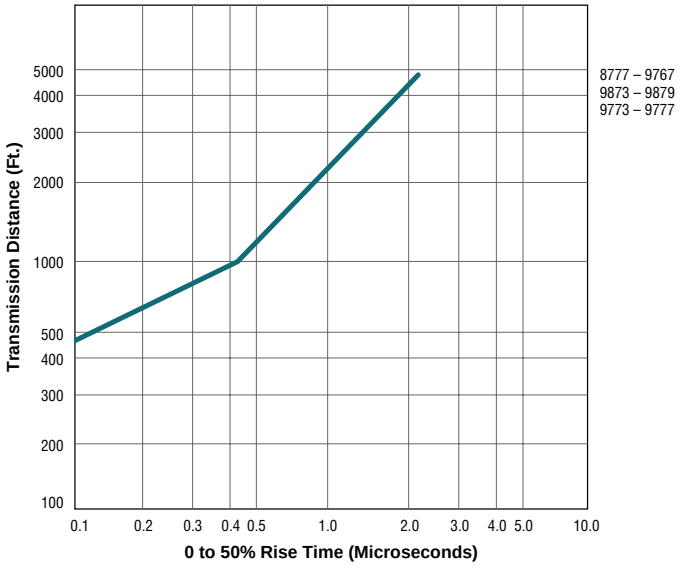
Individually Shielded

Cable Characteristics

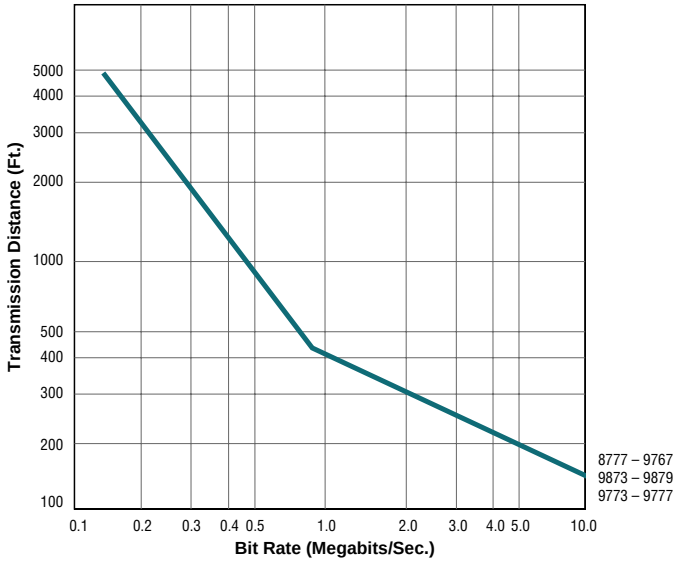
Attenuation



Rise Time



Bit Rate



Recommended for audio, pulse, and radio frequency applications requiring superior circuit isolation.

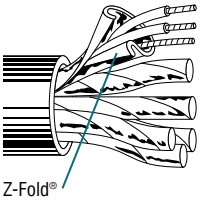
Insulation resistance between shields:
100 megohms/M′ nom.

Capacitance between adjacent shields:
115 pf/ft. nom.

Working voltage between adjacent shields:
50 volts max.

Individually Shielded

Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
22 AWG Stranded (7x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 22 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C)  Z-Fold®	**8777**	NEC: CM CEC: CM	3	See Chart 3 (Tech Info Section)	100 250 U-500 500 U-1000 1000 1640 3280 5000 10000	30.5 76.2 U-152.4 152.4 U-304.8 304.8 499.9 999.7 1524.0 3048.0	5.3 11.3 21.0 21.0 41.0 42.0 67.2 137.8 210.0 450.0	2.4 5.1 9.5 9.5 18.6 19.1 30.6 62.6 95.5 204.5	15.0Ω/M′ 49.2Ω/km	10.6Ω/M′ 34.8Ω/km	.273	6.93	50	66%	30	98	55	180
													For Plenum versions of 8777, see 88777, 87777 or 82777.					
	8778	NEC: CM CEC: CM	6	See Chart 3 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	8.4 20.8 43.0 83.0	3.8 9.4 19.5 37.7	15.0Ω/M′ 49.2Ω/km	10.6Ω/M′ 34.8Ω/km	.362	9.19	50	66%	30	98	55	180
													For Plenum versions of 8778, see 88778, 87778 or 82778.					
	8774	NEC: CM CEC: CM	9	See Chart 3 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	11.6 28.8 58.0 115.0	5.3 13.1 26.4 52.3	15.0Ω/M′ 49.2Ω/km	10.6Ω/M′ 34.8Ω/km	.417	10.59	50	66%	30	98	55	180
	8775	NEC: CM CEC: CM	11	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	14.1 67.0 133.0	6.4 30.5 60.5	15.0Ω/M′ 49.2Ω/km	10.6Ω/M′ 34.8Ω/km	.464	11.79	50	66%	30	98	55	180
	9768	NEC: CM CEC: CM	12	See Chart 3 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	14.9 35.5 73.5 143.0	6.8 16.1 33.4 65.0	15.0Ω/M′ 49.2Ω/km	10.6Ω/M′ 34.8Ω/km	.464	11.79	50	66%	30	98	55	180
	8776	NEC: CM CEC: CM	15	See Chart 3 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	19.7 49.5 98.0 197.0	9.0 22.5 44.5 89.5	15.0Ω/M′ 49.2Ω/km	10.6Ω/M′ 34.8Ω/km	.548	13.92	50	66%	30	98	55	180
	9769	NEC: CM CEC: CM	17	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	22.0 109.0 215.0	10.0 49.5 97.7	15.0Ω/M′ 49.2Ω/km	10.6Ω/M′ 34.8Ω/km	.577	14.66	50	66%	30	98	55	180
	8769	NEC: CM CEC: CM	19	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	25.0 123.5 245.0	11.4 56.1 111.4	15.0Ω/M′ 49.2Ω/km	10.6Ω/M′ 34.8Ω/km	.603	15.32	50	66%	30	98	55	180
	8773	NEC: CM CEC: CM	27	See Chart 3 (Tech Info Section)	100 250† 500† 1000†	30.5 76.2 152.4 304.8	33.8 85.0 166.0 346.0	15.4 38.6 75.5 157.3	15.0Ω/M′ 49.2Ω/km	10.6Ω/M′ 34.8Ω/km	.709	18.00	50	66%	30	98	55	180
	9767	NEC: CM CEC: CM	37	See Chart 3 (Tech Info Section)	500† 1000†	152.4 304.8	224.0 481.0	101.8 218.6	15.0Ω/M′ 49.2Ω/km	10.6Ω/M′ 34.8Ω/km	.800	20.32	50	66%	30	98	55	180

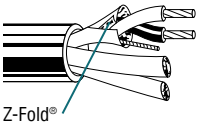
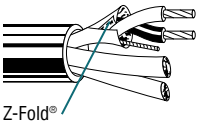
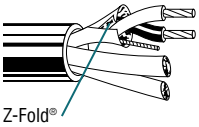
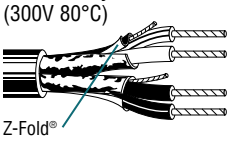
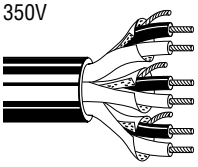
DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools are one piece, but length may vary -0 to +20% from length shown.

See Attenuation, Rise Time and Bit Rate Data for this series on page 5.39.

Individually Shielded

Audio, Control and Instrumentation Cables
Plenum-Rated and Non-Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
22 AWG Stranded (7x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 22 AWG Stranded TC Drain Wire																		
Plenum • Halar® Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit  Z-Fold®	**82777**	NEC: CMP CEC: CMP FT6	3	See Chart 3 (Tech Info Section)	U-500† U-1000 1000†	U-152.4 U-304.8 304.8	19.0 38.0 39.0	8.6 17.3 17.7	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.234	5.94	46	62%	35	115	76	249
	82778	NEC: CMP CEC: CMP FT6	6	See Chart 3 (Tech Info Section)	1000†	304.8	67.0	30.5	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.330	8.38	46	62%	35	115	76	249
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit  Z-Fold®	**88777**	NEC: CMP CEC: CMP FT6	3	See Chart 3 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	6.0 21.0 42.0	2.7 9.5 19.1	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.234	5.94	50	69%	31	102	67	220
	88778	NEC: CMP CEC: CMP FT6	6	See Chart 3 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	8.8 40.0 75.0	4.0 18.2 34.1	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.309	7.85	50	69%	31	102	67	220
Plenum • FEP Insulation • Red Fluorocopolymer Jacket																		
300V RMS, Non-conduit  Z-Fold®	**87777**	NEC: CMP CEC: CMP FT6	3	See Chart 3 (Tech Info Section)	500† 1000†	152.4 304.8	20.0 40.0	9.1 18.2	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.234	5.94	50	69%	31	102	67	220
	87778	NEC: CMP CEC: CMP FT6	6	See Chart 3 (Tech Info Section)	500† 1000†	152.4 304.8	37.5 73.0	17.0 33.2	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.309	7.85	50	69%	31	102	67	220
20 AWG Stranded (7x28) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil • 22 AWG Stranded TC Drain Wire																		
Semi-rigid PVC Insulation • Overall Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C)  Z-Fold®	**9402**	NEC: CMG CEC: CMG FT4	2	Red & Black, Green & White	U-500 1000	U-152.4 304.8	27.0 53.0	12.3 24.1	—	—	.300	7.62	—	—	55	180	95	312
											Insulation Thickness .010	.25						
											Jacket Thickness .041	1.04						
20 AWG Stranded (10x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil • 22 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • Black High-density Polyethylene Jacket																		
Direct Burial 350V 	**9883**		3	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	28.0 56.0	12.8 25.5	6.4Ω/M′ 21.0Ω/km	8.3Ω/M′ 27.2Ω/km	.340	8.64	50	66%	30	98	55	180
	9886		6	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	56.5 109.0	25.8 49.7	6.4Ω/M′ 21.0Ω/km	8.3Ω/M′ 27.2Ω/km	.455	11.56	50	66%	30	98	55	180

DCR = DC Resistance • TC = Tinned Copper

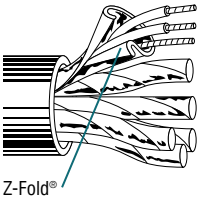
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length show.

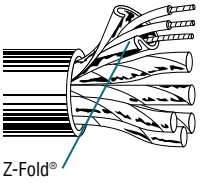
Halar is an Ausimont Corporation trademark.

Individually Shielded

Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
20 AWG Stranded (7x28) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 22 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Overall Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C)	**9873**	NEC: CM CEC: CM	3	See Chart 3 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	7.0 17.3 33.5 66.0	3.2 7.8 15.2 30.0	10.5Ω/M′ 34.4Ω/km	14.0Ω/M′ 45.9Ω/km	.341	8.66	50	66%	30	98	55	180
	9874	NEC: CM CEC: CM	6	See Chart 3 (Tech Info Section)	100 250 500 1000	30.5 76.2 152.4 304.8	13.1 31.0 62.5 125.0	6.0 14.1 28.4 56.8	10.5Ω/M′ 34.4Ω/km	11.3Ω/M′ 37.1Ω/km	.445	11.30	50	66%	30	98	55	180
	9875	NEC: CM CEC: CM	9	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	19.7 97.5 188.0	9.0 44.3 85.5	10.5Ω/M′ 34.4Ω/km	11.3Ω/M′ 37.1Ω/km	.555	14.10	50	66%	30	98	55	180
	9876	NEC: CM CEC: CM	11	See Chart 3 (Tech Info Section)	1000	304.8	220.0	100.0	10.5Ω/M′ 34.4Ω/km	11.3Ω/M′ 37.1Ω/km	.600	15.24	50	66%	30	98	55	180
	9877	NEC: CM CEC: CM	12	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	24.1 119.0 237.0	11.0 54.1 107.7	10.5Ω/M′ 34.4Ω/km	11.3Ω/M′ 37.1Ω/km	.617	15.67	50	66%	30	98	55	180
	9879	NEC: CM CEC: CM	15	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	146.0 296.0	66.4 134.5	10.5Ω/M′ 34.4Ω/km	11.3Ω/M′ 37.1Ω/km	.689	17.50	50	66%	30	98	55	180
18 AWG Stranded (19x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil • 20 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C)	**9773**	NEC: CM CEC: CM	3	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	9.4 45.5 93.0	4.3 20.7 42.3	6.4Ω/M′ 21.0Ω/km	8.3Ω/M′ 27.2Ω/km	.404	10.26	50	66%	30	98	55	180
	9774	NEC: CM CEC: CM	6	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	19.4 95.5 189.0	8.8 43.4 85.9	6.4Ω/M′ 21.0Ω/km	8.3Ω/M′ 27.2Ω/km	.560	14.22	50	66%	30	98	55	180
	9775	NEC: CM CEC: CM	9	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	26.6 132.0 260.0	12.1 60.0 118.2	6.4Ω/M′ 21.0Ω/km	8.3Ω/M′ 27.2Ω/km	.655	16.64	50	66%	30	98	55	180
	9776	NEC: CM CEC: CM	12	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	32.6 171.5 328.0	14.8 78.0 149.1	6.4Ω/M′ 21.0Ω/km	8.3Ω/M′ 27.2Ω/km	.735	18.67	50	66%	30	98	55	180
	9777	NEC: CM CEC: CM	15	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	43.5 209.0 451.0	19.8 95.0 205.0	6.4Ω/M′ 21.0Ω/km	8.3Ω/M′ 27.2Ω/km	.819	20.8	50	66%	30	98	55	180





DCR = DC Resistance • TC = Tinned Copper

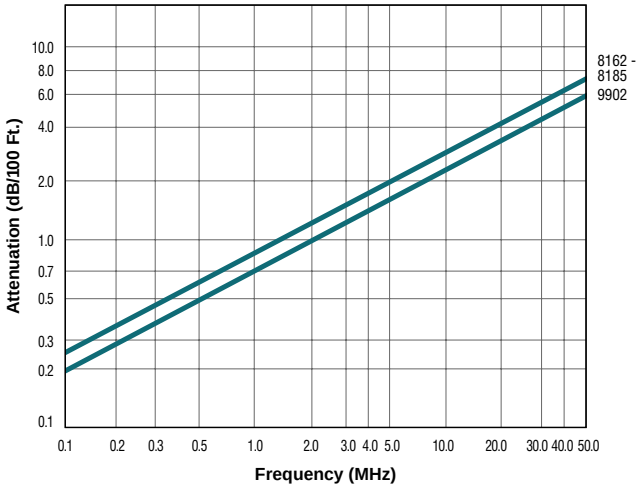
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

See Attenuation, Rise Time and Bit Rate data for this series on page 5.39.

Individually Shielded Pairs with Overall Foil/Braid Shield

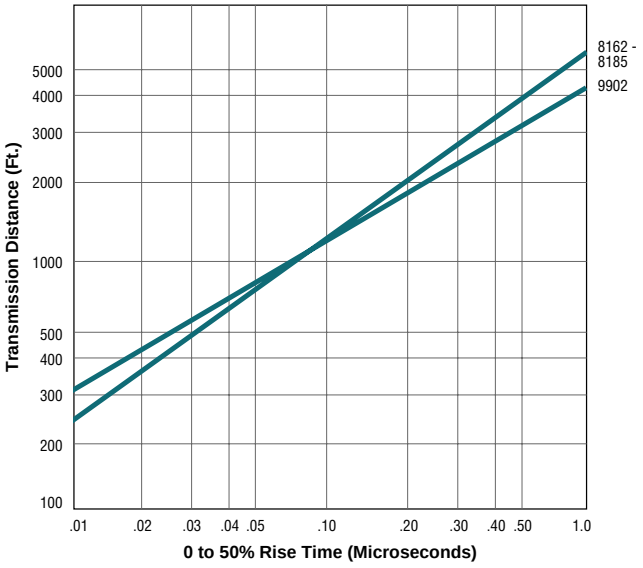
Cable Characteristics

Attenuation



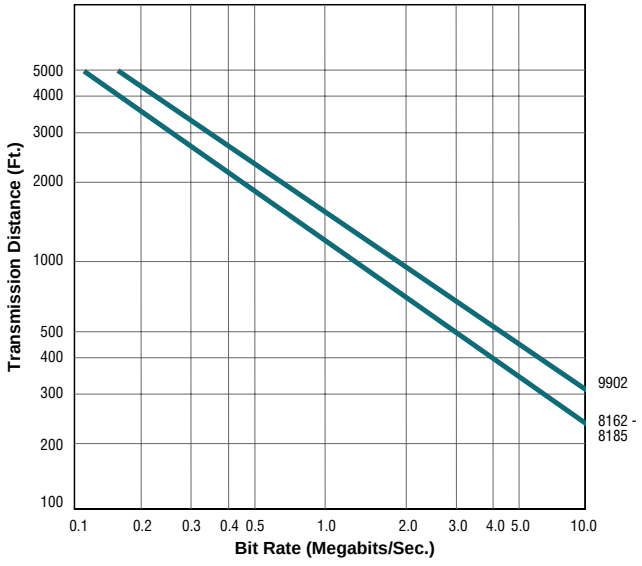
Note: 9902 on page 11.18 in Networking Section

Rise Time



Cables are terminated in their characteristic impedance. Signal source electrical characteristics: 50 ohms and 10% to 90% rise time less than 5 nanoseconds.

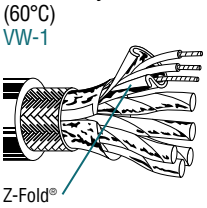
Bit Rate



Charts assume 5% peak-to-peak time jitter as determined by eye pattern measurements of pseudorandom NRZ code.

Individually Shielded Pairs with Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422 and Digital Audio Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (7x32) • TC • Twisted Pairs Individually Beldfoil® Shielded + Overall 100% Beldfoil + 65% TC Braid Shield • Drain Wire▲																		
Datalene® Insulation • Chrome PVC Jacket																		
UL AWM Style 2493 (60°C) VW-1  Z-Fold®	**8162**	NEC: CM CEC: CM	2	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	6.2 30.0 57.0	2.8 13.6 25.9	24.0Ω/M′ 78.7Ω/km	Individual: 18.0Ω/M′ 59.1Ω/km Overall: 4.3Ω/M′ 14.1Ω/km	.343	8.71	100	78%	12.5	41	22	72.2
	8163	NEC: CM CEC: CM	3	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.0 34.0 66.0	3.2 15.5 30.0	24.0Ω/M′ 78.7Ω/km	Individual: 18.0Ω/M′ 59.1Ω/km Overall: 4.4Ω/M′ 14.4Ω/km	.359	9.12	100	78%	12.5	41	22	72.2
	8164	NEC: CM CEC: CM	4	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	8.2 39.5 79.0	3.7 18.0 35.9	24.0Ω/M′ 78.7Ω/km	Individual: 18.0Ω/M′ 59.1Ω/km Overall: 3.2Ω/M′ 10.5Ω/km	.388	9.86	100	78%	12.5	41	22	72.2
	8165	NEC: CM CEC: CM	5	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	9.0 45.0 89.0	4.1 20.5 40.5	24.0Ω/M′ 78.7Ω/km	Individual: 18.0Ω/M′ 59.1Ω/km Overall: 3.4Ω/M′ 11.2Ω/km	.413	10.49	100	78%	12.5	41	22	72.2
	8166	NEC: CM CEC: CM	6	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	12.7 50.0 99.0	5.8 22.7 45.0	24.0Ω/M′ 78.7Ω/km	Individual: 18.0Ω/M′ 59.1Ω/km Overall: 2.8Ω/M′ 9.2Ω/km	.446	11.33	100	78%	12.5	41	22	72.2
	8167	NEC: CM CEC: CM	7	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	52.5 104.0	23.9 47.3	24.0Ω/M′ 78.7Ω/km	Individual: 18.0Ω/M′ 59.1Ω/km Overall: 2.8Ω/M′ 9.2Ω/km	.446	11.33	100	78%	12.5	41	22	72.2

▲24 AWG stranded TC drain wire

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

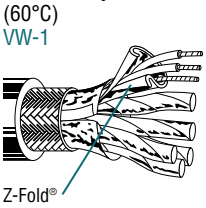
Individually Shielded Pairs with Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422 and Digital Audio Applications

24 AWG Stranded (7x32) • TC • Twisted Pairs Individually Beldfoil® Shielded + Overall 100% Beldfoil + 65% TC Braid Shield • Drain Wire▲

Datalene® Insulation • Chrome PVC Jacket

UL AWM Style 2493 (60°C)
VW-1



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
	8168	NEC: CM CEC: CM	8	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	12.5 61.5 115.0	5.7 28.0 52.3	24.0Ω/M′ 78.7Ω/km	Individual: 18.0Ω/M′ 59.1Ω/km Overall: 3.0Ω/M′ 9.8Ω/km	.479	12.17	100	78%	12.5	41	22	72.2
	8170	NEC: CM CEC: CM	10	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	19.7 83.0 164.0	9.0 37.7 74.5	24.0Ω/M′ 78.7Ω/km	Individual: 18.0Ω/M′ 59.1Ω/km Overall: 2.7Ω/M′ 8.9Ω/km	.584	14.83	100	78%	12.5	41	22	72.2
	8175	NEC: CM CEC: CM	15	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	24.3 107.5 210.0	11.0 48.9 95.5	24.0Ω/M′ 78.7Ω/km	Individual: 18.0Ω/M′ 59.1Ω/km Overall: 2.5Ω/M′ 8.2Ω/km	.665	16.89	100	78%	12.5	41	22	72.2
	8178	NEC: CM CEC: CM	18	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	26.3 117.0 238.0	12.0 53.2 108.2	24.0Ω/M′ 78.7Ω/km	Individual: 18.0Ω/M′ 59.1Ω/km Overall: 2.6Ω/M′ 8.5Ω/km	.686	17.42	100	78%	12.5	41	22	72.2
	8185	NEC: CM CEC: CM	25	See Chart 3 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	34.0 160.5 356.0	15.5 73.0 161.8	24.0Ω/M′ 78.7Ω/km	Individual: 18.0Ω/M′ 59.1Ω/km Overall: 2.4Ω/M′ 7.9Ω/km	.822	20.88	100	78%	12.5	41	22	72.2

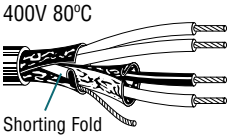
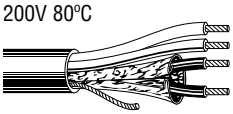
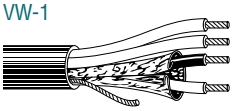
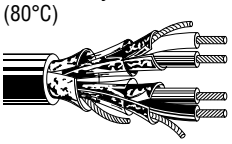
▲24 AWG stranded TC drain wire

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Combination Shields

Special Audio, Communication and Instrumentation Cables

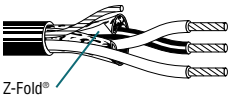
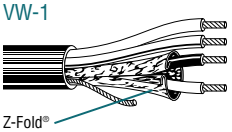
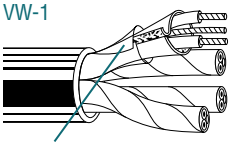
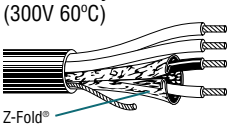
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
25 AWG Stranded Conductors (7x33) • Tinned Copper • Overall 100% Beldfoil® Shield Coverage • 25 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
400V 80ºC  Shorting Fold	**8434**		2	Shielded: Red & Black	100	30.5	2.1	1.0	.013	.33	.020	.51	.165	4.19	25	82	40	131
					500	152.4	7.0	3.2										
				Unshielded: Green & White	U-1000	U-304.8	13.0	5.9										
					1000	304.8	14.0	6.4										
Red/Black pair 100% Beldfoil shielded with drain wire. 3 copper, 4 copper-covered steel strands in each conductor.																		
22 AWG Stranded Conductors (7x30) • Tinned Copper • One Pair 100% Beldfoil Shielded • Stranded Tinned Copper Drain Wire																		
PVC Insulation • Chrome PVC Jacket (Pair and Single Cabled)																		
300V RMS 90ºC Meets NEC Article 800 22 AWG drain wire	**9685**	NEC: CM	1.5 (1 pair + 1 single)	Shielded: Black & White	U-1000	U-304.8	24.0	10.9	.013	.33	.032	.81	.199	5.05	60	197	99	325
				Unshielded: Brown														
Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
200V 80ºC  24 AWG drain wire	**8730**†		2	Shielded: Red & Black	U-1000	U-304.8	25.0	11.4	.008	.20	.030	.76	.205	5.21	34	111	67	220
					1000	304.8	25.0	11.4										
				Unshielded: Green & White														
300V 80ºC VW-1  24 AWG drain wire	**8724**†	NEC: CM CEC: CM	2	Shielded: Red & Black	U-1000	U-304.8	21.0	9.5	.008	.20	.019	.48	.165	4.19	34	112	67	220
					1000	304.8	21.0	9.5										
				Unshielded: Green & White														
22 AWG Stranded Conductors (7x30) • Tinned Copper • Cabled in Pairs • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wires																		
Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
UL AWM Style 2717 (80°C)  Meets NEC Article 800 Each pair Beldfoil shielded with individual drain wire plus polyester film over each shield.	**8728**	NEC: CM CEC: CM	2	Black & Red	U-500	U-152.4	15.0	6.8	.010	.25	.028	.71	.215	5.46	35	115	62	203
					500	152.4	15.5	7.0										
				Green & White	U-1000	U-304.8	30.0	13.6										
					1000	304.8	30.0	13.6										

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Request Technical Bulletin T/8-21 before planning high and low level circuits in the same cable.

Combination Shields

Special Audio, Communication and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
20 AWG Stranded (7x28) • Tinned Copper • Conductors Cabled • 100% Beldfoil® Shield as noted • 20 or 22 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
350V 80ºC  Z-Fold®	**8763**		1.5 (1 pair + 1 single)	Shielded: Black & Red; Unshielded: Clear	1000	304.8	27.0	12.3	.014	.36	.028	.71	.210	5.33	26	85	48	157
Beldfoil shield over Red and Black pair only. Clear conductor is unshielded. 20 AWG drain wire.																		
PVC Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
350V 80ºC VW-1  Z-Fold®	**8722**	NEC: CMG CEC: CMG FT4	2	Shielded: Red & Black; Unshielded: Green & White	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	18.0 18.5 36.0 36.0	8.2 8.4 16.4 16.4	.015	.38	.028	.71	.226	5.74	60	197	99	325
Beldfoil shield over Red and Black conductors only. 22 AWG drain wire. Request Technical Bulletin T/8-21 before planning high and low level circuits in the same cable.																		
Polypropylene Insulation • Chrome PVC Jacket (Cabled Around a Common Axis)																		
400V 105ºC VW-1  Shorting Fold	**8725**	NEC: CM CEC: CM	4	Red & Black; Green & White; White/Red & White/Black; White/Green & White/Yellow	500 1000	152.4 304.8	38.0 74.0	17.3 33.6	.015	.38	.030	.76	.345	8.76	27	89	49	161
Four groups of two conductors with drain wires, each group individually Beldfoil shielded with polyester tape wrap. 22 AWG drain wire.																		
20 and 18 AWG Stranded Conductors (7x28 and 16x30) • TC • 100% Beldfoil Shield over 20 AWG Pair • 22 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Beige PVC Jacket																		
UL AWM Style 2094 (300V 60ºC)  Z-Fold®	**9155**	NEC: CM CEC: CM	2 1 Shld 20 (7x28) 1 Unshld 18 (16x30)	Black & Red Green & White	500 U-1000 1000	152.4 U-304.8 304.8	24.5 47.0 48.0	11.2 21.4 21.8	.020 .019	.51 .48	.031	.79	.262	6.65	24 22	79 72	46	151
NEC Article 800																		

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Plenum-Rated

Unshielded

Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
22 AWG Stranded Conductors (7x30) • Tinned Copper • Twisted Pairs														
Plenum • FEP Insulation • Red FEP Jacket														
300V RMS, Non-conduit	**88442**	NEC: CMP CEC: CMP FT6	1	Black & Red	100 500† 1000†	30.5 152.4 304.8	2.3 5.5 10.0	1.0 2.5 4.5	.006	.15	.012	.30	.102	2.59
	88741	NEC: CMP CEC: CMP FT6	2	Black & Red, Black & White	500† 1000†	152.4 304.8	9.5 21.0	4.3 9.5	.006	.15	.012	.30	.169	4.29
	88757	NEC: CMP CEC: CMP FT6	4	Black & Red, Black & White, Black & Green, Black & Blue	500† 1000†	152.4 304.8	16.0 33.0	7.3 15.0	.006	.15	.012	.30	.200	5.08
Plenum • FEP Insulation • Natural Flamarrest® Jacket														
300V RMS, Non-conduit	**82442** new	NEC: CMP CEC: CMP FT6	1	Black & Red	U-1000† 1000†	U-304.8 304.8	83.0 84.0	37.7 38.2	.006	.15	.014	.36	.112	2.84
	82741	NEC: CMP CEC: CMP FT6	2	Black & Red, Black & White	U-1000† 1000†	U-304.8 304.8	18.0 21.0	8.2 9.5	.006	.15	.014	.36	.179	4.55
	82742	NEC: CMP CEC: CMP FT6	3	Black & Red, Black & White, Black & Green	U-1000† 1000†	U-304.8 304.8	24.0 28.0	10.9 12.7	.006	.15	.014	.36	.191	4.85
	82757	NEC: CMP CEC: CMP FT6	4	Black & Red, Black & White, Black & Green, Black & Blue	U-1000 1000†	U-304.8 304.8	31.0 34.0	14.1 15.5	.006	.15	.014	.36	.210	5.33
	82743	NEC: CMP CEC: CMP FT6	6	Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown	U-1000† 1000†	U-304.8 304.8	44.0 45.0	20.0 20.5	.006	.15	.014	.36	.237	6.02
18 AWG Stranded Conductors (19x30) • Tinned Copper • Twisted Pair														
Plenum • FEP Insulation • Red FEP Jacket														
300V RMS, Non-conduit	**89740**	NEC: CMP CEC: CMP FT6	1	Black & Red	100 500† 1000†	30.5 152.4 304.8	3.0 9.0 17.0	1.4 4.1 7.7	.006	.17	.009	.23	.136	3.45
Plenum • FEP Insulation • Red Fluorocopolymer Jacket														
300V RMS, Non-conduit	**87740**	NEC: CMP CEC: CMP FT6	1	Black & Red	500† 1000†	152.4 304.8	9.0 17.0	4.1 7.7	.006	.17	.011	.28	.140	3.56
Plenum • FEP Insulation • Natural Flamarrest Jacket														
300V RMS, Non-conduit	**82740**	NEC: CMP CEC: CMP FT6	1	Black & Red	U-1000 1000†	U-304.8 304.8	17.0 18.0	7.7 8.2	.006	.17	.014	.36	.146	3.71

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Plenum-Rated

Overall Beldfoil® Shield
Computer Cables for EIA RS-232 Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
24 AWG Stranded Conductors (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wire																		
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit	**88641**	NEC: CMP CEC: CMP FT6	1	Black & Red	100 500† 1000†	30.5 152.4 304.8	2.4 6.0 11.0	1.1 2.7 5.0	.006	.15	.014	.36	.106	2.69	31	102	59	194
	89503	NEC: CMP CEC: CMP FT6	3	Black & White, Black & Red, Black & Green	100 500† 1000†	30.5 152.4 304.8	4.0 12.0 23.0	1.8 5.5 10.5	.006	.15	.014	.36	.175	4.45	21	69	40	131
	89504	NEC: CMP CEC: CMP FT6	4	Black & White, Black & Red, Black & Green, Black & Blue	500† 1000†	152.4 304.8	14.5 31.0	6.6 14.1	.006	.15	.014	.36	.192	4.88	21	69	40	131
	89505	NEC: CMP CEC: CMP FT6	5	Black & White, Black & Red, Black & Green, Black & Blue, Black & Yellow	100 1000†	30.5 304.8	4.9 35.0	2.2 15.9	.006	.15	.014	.36	.197	5.00	21	69	40	131
Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit	**82641**	NEC: CMP CEC: CMP FT6	1	Black & Red	U-1000† 1000†	U-304.8 304.8	9.0 10.0	4.1 4.5	.006	.15	.014	.36	.106	2.69	31	102	59	194
	82502	NEC: CMP CEC: CMP FT6	2	Black & White, Black & Red	U-500† U-1000† 1000†	U-152.4 U-304.8 304.8	8.0 15.0 16.0	3.6 6.8 7.3	.006	.15	.014	.36	.162	4.11	25	82	45	148
	82503	NEC: CMP CEC: CMP FT6	3	Black & White, Black & Red, Black & Green	U-1000† 1000†	U-304.8 304.8	19.0 20.0	8.6 9.1	.006	.15	.014	.36	.169	4.29	25	82	45	148
	82504	NEC: CMP CEC: CMP FT6	4	Black & White, Black & Red, Black & Green, Black & Blue	U-1000† 1000†	U-304.8 304.8	24.0 27.0	10.9 12.3	.006	.15	.014	.36	.193	4.90	25	82	45	148
	82505	NEC: CMP CEC: CMP FT6	5	See Chart 3 (Tech Info Section)	U-1000† 1000†	U-304.8 304.8	30.0 33.0	13.6 15.0	.006	.15	.015	.38	.196	4.98	25	82	45	148
	82506	NEC: CMP CEC: CMP FT6	6	See Chart 3 (Tech Info Section)	U-500† U-1000† 1000†	U-152.4 U-304.8 304.8	17.5 34.0 37.0	8.0 15.5 16.8	.006	.15	.015	.38	.209	5.31	25	82	45	148
	82509	NEC: CMP CEC: CMP FT6	9	See Chart 3 (Tech Info Section)	1000†	304.8	49.0	22.3	.006	.15	.015	.38	.246	6.25	23	75	42	138
	82512	NEC: CMP CEC: CMP FT6	12.5 (12 pairs + 1 single)	See Chart 3 (Tech Info Section)	1000†	304.8	60.0	27.3	.006	.15	.015	.38	.278	7.06	23	75	42	138

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Plenum-Rated

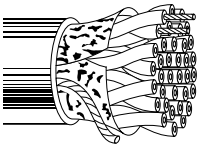
Overall Beldfoil® Shield

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422 and EIA RS-485 Applications

24 AWG Stranded Conductors (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wire

Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket

300V RMS, Non-conduit



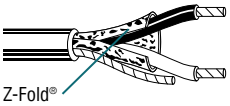
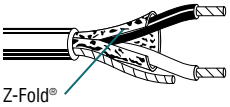
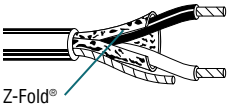
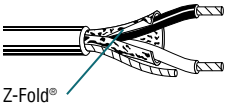
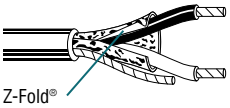
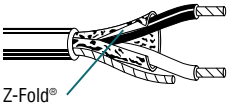
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
	88102	NEC: CMP CEC: CMP FT6	2	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	12.0 24.0	5.5 10.9	24.0Ω/M′ 78.7Ω/km	15.5Ω/M′ 50.9Ω/km	.203	5.16	100	78%	12.95	42.5	23.3	76.4
	88103	NEC: CMP CEC: CMP FT6	3	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	15.5 31.0	7.0 14.1	24.0Ω/M′ 78.7Ω/km	15.5Ω/M′ 50.9Ω/km	.239	6.07	100	78%	12.95	42.5	23.3	76.4
	88104	NEC: CMP CEC: CMP FT6	4	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	19.0 38.0	8.6 17.3	24.0Ω/M′ 78.7Ω/km	14.0Ω/M′ 45.9Ω/km	.259	6.58	100	78%	12.95	42.5	23.3	76.4
	88105	NEC: CMP CEC: CMP FT6	5	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	25.0 44.0	11.4 20.0	24.0Ω/M′ 78.7Ω/km	14.0Ω/M′ 45.9Ω/km	.267	6.78	100	78%	12.95	42.5	23.3	76.4
	88106	NEC: CMP CEC: CMP FT6	6	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	28.0 50.0	12.7 22.7	24.0Ω/M′ 78.7Ω/km	14.0Ω/M′ 45.9Ω/km	.293	7.44	100	78%	12.95	42.5	23.3	76.4
	88107	NEC: CMP CEC: CMP FT6	7.5 (7 pairs + 1 single)	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	32.5 59.0	14.8 26.8	24.0Ω/M′ 78.7Ω/km	14.0Ω/M′ 45.9Ω/km	.293	7.44	100	78%	12.95	42.5	23.3	76.4
	88109	NEC: CMP CEC: CMP FT6	9	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	36.5 74.0	16.6 33.6	24.0Ω/M′ 78.7Ω/km	13.0Ω/M′ 42.7Ω/km	.352	8.94	100	78%	12.95	42.5	23.3	76.4
	88112	NEC: CMP CEC: CMP FT6	12.5 (12 pairs + 1 single)	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	48.0 97.0	21.8 44.1	24.0Ω/M′ 78.7Ω/km	11.8Ω/M′ 38.7Ω/km	.397	10.08	100	78%	12.95	42.5	23.3	76.4
	88118	NEC: CMP CEC: CMP FT6	18.5 (18 pairs + 1 single)	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	66.5 148.0	30.2 67.3	24.0Ω/M′ 78.7Ω/km	11.0Ω/M′ 36.1Ω/km	.482	12.24	100	78%	12.95	42.5	23.3	76.4
	88125	NEC: CMP CEC: CMP FT6	25	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	98.0 195.0	44.5 88.6	24.0Ω/M′ 78.7Ω/km	9.6Ω/M′ 31.5Ω/km	.581	14.76	100	78%	12.95	42.5	23.3	76.4

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary ±10% from length shown.

Plenum-Rated

Overall Beldfoil® Shield
Audio, Control and Instrumentation Cables

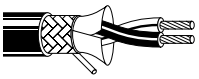
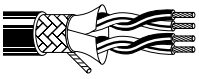
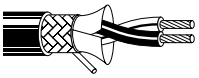
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Stranded Conductors (7x30) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 22 AWG Stranded TC Drain Wire																		
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit  Z-Fold®	**88761**	NEC:	1	Black,	100	30.5	2.7	1.2	.006	.15	.014	.36	.116	2.95	35	115	67	220
		CMP		Red	U-500	U-152.4	7.0	3.2										
		CEC:			500†	152.4	7.5	3.4										
		CMP FT6			U-1000	U-304.8	13.0	5.9										
					1000†	304.8	14.0	6.4										
Plenum • FEP Insulation • Red Fluorocopolymer Jacket																		
300V RMS, Non-conduit  Z-Fold®	**87761**	NEC:	1	Black,	500†	152.4	7.0	3.2	.006	.15	.014	.36	.116	2.95	35	115	67	220
		CMP		Red	1000†	304.8	13.0	5.9										
		CEC:																
		CMP FT6																
Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit  Z-Fold®	**82761**	NEC:	1	Black,	U-500†	U-152.4	6.5	3.0	.006	.15	.014	.36	.116	2.95	35	115	67	220
		CMP		Red	U-1000†	U-304.8	12.0	5.5										
		CEC:			1000†	304.8	13.0	5.9										
		CMP FT6																
18 AWG Stranded Conductors (19x30) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 20 AWG Stranded TC Drain Wire																		
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit  Z-Fold®	**88760**	NEC:	1	Black,	100	30.5	3.7	1.7	.007	.18	.014	.36	.150	3.81	51	167	97	318
		CMP		Red	U-500	U-152.4	12.5	5.7										
		CEC:			500†	152.4	13.0	5.9										
		CMP FT6			U-1000	U-304.8	24.0	10.9										
					1000†	304.8	24.0	10.9										
Plenum • FEP Insulation • Red Fluorocopolymer Jacket																		
300V RMS, Non-conduit  Z-Fold®	**87760**	NEC:	1	Black,	U-500	U-152.4	12.0	5.5	.007	.18	.014	.36	.150	3.81	51	167	97	318
		CMP		Red	500†	152.4	12.5	5.7										
		CEC:			1000†	304.8	23.0	10.5										
		CMP FT6																
Plenum • FEP Insulation • Natural Flamarrest Jacket																		
300V RMS, Non-conduit  Z-Fold®	**82760**	NEC:	1	Black,	U-500†	U-152.4	11.5	5.2	.007	.18	.014	.36	.150	3.81	51	167	97	318
		CMP		Red	U-1000†	U-304.8	22.0	10.0										
		CEC:			1000†	304.8	23.0	10.5										
		CMP FT6																

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Plenum-Rated

Overall Foil/Braid Shield
Low-Capacitance Computer and Computer P.O.S. Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
Low Cap 24 AWG Stranded (7x32) • TC • Twisted Pairs • Overall 100% Beldfoil® + 90% TC Braid Shield • 24 AWG Stranded TC Drain Wire																		
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit 	**82841** new	NEC: CMP CEC: CMP FT6	1	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	16.0 28.0	7.3 12.7	24.0Ω/M′ 78.7Ω/km	3.1Ω/M′ 10.2Ω/km	.204	5.18	120	76%	12	39.4	22	72.2
300V RMS, Non-conduit 	**82842** new	NEC: CMP CEC: CMP FT6	2	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	21.0 42.0	9.5 19.1	24.0Ω/M′ 78.7Ω/km	2.4Ω/M′ 7.9Ω/km	.273	6.93	120	76%	12	39.4	22	72.2
Plenum • Foam FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit 	**89841** new	NEC: CMP CEC: CMP FT6	1	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	15.5 29.0	7.0 13.2	24.0Ω/M′ 78.7Ω/km	3.1Ω/M′ 10.2Ω/km	.202	5.13	120	76%	12	39.4	22	72.2
22 AWG Solid • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil + 90% TC Braid Shield • 22 AWG Solid TC Drain Wire																		
Plenum • Solid FEP Insulation • Black FEP Jacket																		
300V RMS, Non-conduit	**1269A**	NEC: MPP, CMP CEC: MPP, CMP FT6	2	Red & Blue, Black & Yellow	1000†	304.8	48.0	21.8	16.5Ω/M′ 54.1Ω/km	2.1Ω/M′ 6.9Ω/km	.240	6.10	100	69.5%	15.5	50.9	27	88.6
22 AWG Solid • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil + 55% TC Braid Shield plus Polyester Tape • 22 AWG Solid TC Drain Wire																		
Plenum • Solid FEP Insulation • Black FEP Jacket																		
300V RMS, Non-conduit	**89855**	NEC: MPP, CMP CEC: MPP, CMP FT6	2	1 Pair: Red & Blue 1 Pair: Black & Yellow	500† 1000†	152.4 304.8	24.0 42.0	10.9 19.1	16.5Ω/M′ 54.1Ω/km	4.9Ω/M′ 16.1Ω/km	.272	6.91	100	69.5%	15.5	50.9	27	88.6
22 AWG Solid • Bare Copper • Twisted Pairs • Overall 100% Beldfoil + 55% TC Braid Shield • 22 AWG Solid TC Drain Wire																		
Plenum • Solid FEP Insulation • Black FEP Jacket																		
300V RMS, Non-conduit	**89696**	NEC: MPP, CMP CEC: MPP, CMP FT6	2	1 Pair: Blue & White with Blue Stripe 1 Pair: Orange & White with Orange Stripe	500† 1000†	152.4 304.8	25.0 47.0	11.4 21.4	16.5Ω/M′ 54.1Ω/km	4.2Ω/M′ 13.8Ω/km	.262	6.65	100	69.5%	15.5	50.9	27	88.6

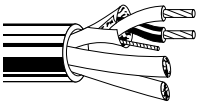
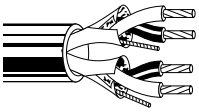
DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary ±10% from length shown.

Plenum-Rated

Individually Shielded Pairs

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422 and Digital Audio Applications

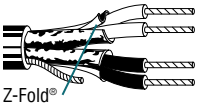
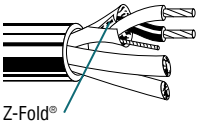
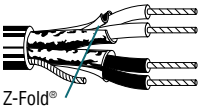
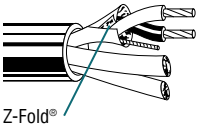
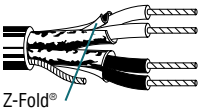
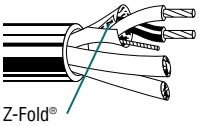
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (7x32) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 24 AWG Stranded TC Drain Wire																		
Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																		
300V RMS, Non-conduit 	**89729**	NEC: CMP CEC: CMP FT6	2	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	18.5 31.0	8.4 14.1	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.261	6.63	100	78%	13.5	44	22.5	73.8
	89730	NEC: CMP CEC: CMP FT6	3	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	23.0 40.0	10.5 18.2	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.278	7.06	100	78%	13.5	44	22.5	73.8
	89728	NEC: CMP CEC: CMP FT6	4	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	26.5 50.0	12.0 22.7	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.307	7.80	100	78%	13.5	44	22.5	73.8
	89705	NEC: CMP CEC: CMP FT6	5	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	30.5 62.0	13.9 28.2	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.327	8.31	100	78%	13.5	44	22.5	73.8
	89731	NEC: CMP CEC: CMP FT6	6	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	35.0 71.0	15.9 32.3	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.361	9.17	100	78%	13.5	44	22.5	73.8
	89757	NEC: CMP CEC: CMP FT6	7	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	39.5 80.0	18.0 36.4	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.361	9.17	100	78%	13.5	44	22.5	73.8
	89732	NEC: CMP CEC: CMP FT6	9	See Chart 5 (Tech Info Section)	1000†	304.8	106.0	48.2	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.429	10.90	100	78%	13.5	44	22.5	73.8
	89734	NEC: CMP CEC: CMP FT6	12	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	71.0 140.0	32.3 63.6	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.498	12.65	100	78%	13.5	44	22.5	73.8
	89758	NEC: CMP CEC: CMP FT6	18	See Chart 5 (Tech Info Section)	500† 1000†	152.4 304.8	100.5 204.0	45.7 92.7	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.616	15.65	100	78%	13.5	44	22.5	73.8
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit 	**82729**	NEC: CMP CEC: CMP FT6	2	See Chart 5 (Tech Info Section)	U-1000 1000†	U-304.8 304.8	27.0 28.0	12.3 12.7	23.3Ω/M′ 76.4Ω/km	14.4Ω/M′ 47.2Ω/km	.255	6.48	100	78%	13.5	44	22.5	73.8

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary ±10% from length shown.

Plenum-Rated

Individually Shielded Pairs
Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
22 AWG Stranded Conductors (7x30) • Tinned Copper • Twisted Pairs • Individually Shielded 100% Beldfoil® • 22 AWG Stranded TC Drain Wire††																		
Plenum • Halar® Insulation • Natural Flamarrest® Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit  Z-Fold®	**82723**	NEC: CMP CEC: CMP FT6	2	Red & Black, Green & White	U-500† U-1000 1000† U-2000†	U-152.4 U-304.8 304.8 U-609.6	10.0 19.0 20.0 38.0	4.5 8.6 9.1 17.3	14.7Ω/M′ 48.2Ω/km	16.6Ω/M′ 54.5Ω/km	.148	3.76	36	62%	43	141	75	246
††82723 has 24 AWG drain wire Pairs cabled on common axis to reduce diameter.																		
300V RMS, Non-conduit  Z-Fold®	**82777**	NEC: CMP CEC: CMP FT6	3	See Chart 3 (Tech Info Section)	U-500† U-1000 1000†	U-152.4 U-304.8 304.8	19.0 38.0 39.0	8.6 17.3 17.7	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.234	5.94	46	62%	35	115	76	249
	82778	NEC: CMP CEC: CMP FT6	6	See Chart 3 (Tech Info Section)	1000†	304.8	67.0	30.5	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.330	8.38	46	62%	35	115	76	249
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit  Z-Fold®	**88723**	NEC: CMP CEC: CMP FT6	2	Red & Black, Green & White	100 500 1000	30.5 152.4 304.8	3.4 11.0 21.0	1.5 5.0 9.5	14.7Ω/M′ 48.2Ω/km	16.6Ω/M′ 54.5Ω/km	.148	3.76	40	69%	35	115	67	220
††88723 has 24 AWG drain wire																		
300V RMS, Non-conduit  Z-Fold®	**88777**	NEC: CMP CEC: CMP FT6	3	See Chart 3 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	6.0 21.0 42.0	2.7 9.5 19.1	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.234	5.94	50	69%	31	102	67	220
	88778	NEC: CMP CEC: CMP FT6	6	See Chart 3 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	8.8 40.0 75.0	4.0 18.2 34.1	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.309	7.85	50	69%	31	102	67	220
Pairs cabled on common axis to reduce diameter.																		
Plenum • FEP Insulation • Red Fluorocopolymer Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit  Z-Fold®	**87723**	NEC: CMP CEC: CMP FT6	2	Red & Black, Green & White	500† 1000†	152.4 304.8	11.0 20.0	5.0 9.1	14.7Ω/M′ 48.2Ω/km	16.6Ω/M′ 54.5Ω/km	.148	3.76	40	69%	35	115	67	220
††87723 has 24 AWG drain wire.																		
300V RMS, Non-conduit  Z-Fold®	**87777**	NEC: CMP CEC: CMP FT6	3	See Chart 3 (Tech Info Section)	500† 1000†	152.4 304.8	20.0 40.0	9.1 18.2	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.234	5.94	50	69%	31	102	67	220
	87778	NEC: CMP CEC: CMP FT6	6	See Chart 3 (Tech Info Section)	500† 1000†	152.4 304.8	37.5 73.0	17.0 33.2	14.7Ω/M′ 48.2Ω/km	11.3Ω/M′ 37.1Ω/km	.309	7.85	50	69%	31	102	67	220
Pairs cabled on common axis to reduce diameter.																		

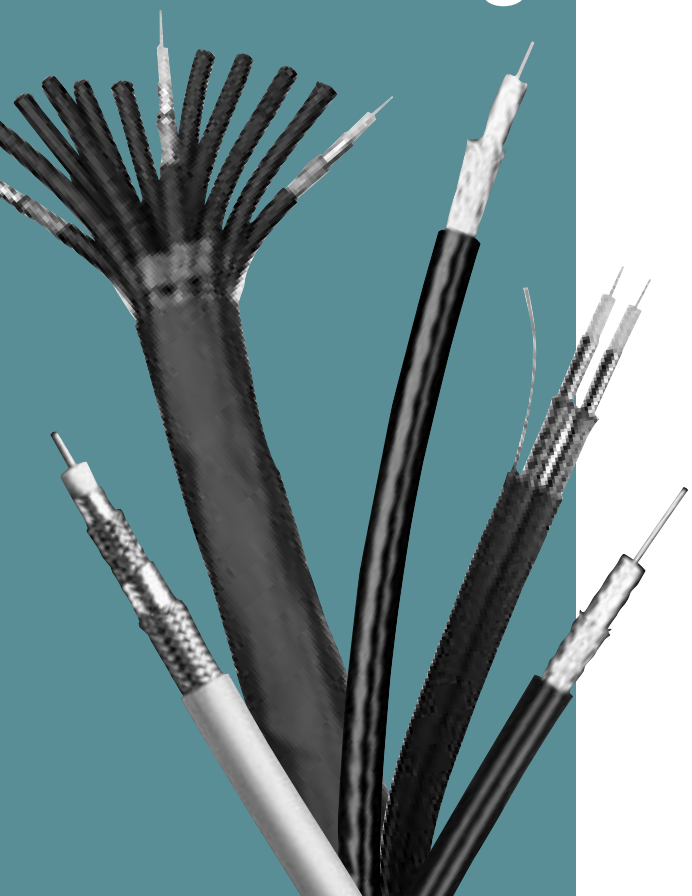
DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length show.

Halar is an Ausimont Corporation trademark.

Belden

6 Coaxial Cables



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Please refer to "Terms of Use of Master Catalog" on page 16.30.

Introduction

Compare Belden® Coaxial cables and the companies who produce them and you will discover the obvious: Belden has no equal. That's because Belden Coaxial cables are time-tested for performance. Performance that guarantees outstanding value. Belden guarantees this level of performance because every cable is tested with equipment that simulates every known environmental and electrical performance condition. As a result, Belden Coaxial cable can be counted on for positive, reliable and trouble-free operation.

Belden Coaxial cables are engineered in a wide selection of sizes and materials, with each offering the benefits needed for physical, electrical and cost-requirement applications. Cable choices include broadband, standard analog, precision video for analog and digital, bundled RGB, high-flex SVHS, video triax, conformable coax and more.

Most of our Coax cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a Coax cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Coax Cable Shielding

Belden's line of coaxial cable features a wide range of shielding configurations. Among the options are:

Duofoil®

Duofoil is a shield in which metallic foil is applied to both sides of a supporting polyester or polypropylene film.

Duobond®

Duobond is essentially the same construction as Duofoil (a laminated shielding tape consisting of aluminum foil/plastic film/ aluminum foil), but with an extra layer of heat-sensitive adhesive bonding the foil shield to the dielectric core. This foil shield provides 100% coverage and insures maximum shield protection.

Duobond II (Foil/Braid)

Combines all the features of Duobond with an outer braid applied for greater protection against interference and to increase the overall tensile strength.

Duobond III (Tri-Shield)

Duobond III utilizes the Duobond II design (foil/braid) plus an additional surrounding layer of Duofoil. This extra layer of foil improves shield reliability and provides an additional interference barrier.

Duobond IV (Quad Shield)

Duobond IV adds a second layer of braid to the Tri-Shield design (foil/braid/foil/braid). This extra layer of braid shield provides improved strength and durability.

Duobond Plus®

Features the same foil/braid/foil construction as Duobond II but with the addition of a shorting fold in the outermost foil. This fold prevents a slot opening from being created in the shield, thereby preventing signal egress or ingress. This unique feature creates the effect of a solid metal conduit, which improves the high-frequency performance of the cable. (See the Technical Information section of this catalog, page 16.88, for a more detailed explanation of "shorting folds.")

Coax Cable Packaging

As with most Belden cables, several Coax cable products are available in Belden's UnReel® cardboard dispenser. The UnReel is a unique packaging dispensing system developed by Belden to save time, cut costs and labor, and eliminate the need for dereeling equipment. Lightweight and more economical than conventional drums or reels, UnReel dispensers have pre-punched handles for easy, individual transport as well as rectangular boxes for easy pallet delivery and storage. UnReel cable pays out smoothly and evenly with no kinking, twisting, or backlashing. It also rolls out 60% faster than conventionally packaged cable.

Corresponding Literature

Technical Bulletins

TB-65: *Digital Studio Cable Guide*

Product Bulletins

NP 182: *Belden Expands Line of Low Loss 50 Ohm RF Transmission Cable*

NP 183: *Belden Introduces Flexible Brilliance® 1505F Precision Digital Video Coaxial Cable*

RG Coaxial and Triaxial Reference Guide

DS-3 and DS-4 Interconnect and Cross-Connect Cables and Low Loss 50 Ohm Wireless RF Transmission Cables

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
DS-3 and DS-4 Interconnect and Cross-connect Cable												
728A Type	**9231**	6.42	Belden	1/.031″ BC (9.9)	PE (.198)	Inner None/98% SPC (187.0) Outer None/95% BC (2.1)	PVC-NC (.305)	.071	75	21.0	-40 to +60	1900
734A Type DS3-4	**734A1**	6.55	Belden	1/.032″ BC (10.0)	GIFPE (.148)	BF/85% TC (2.4)	PVC (.235)	.031	75	16.8	-40 to +75	300
734A Type DS3-4 Bundled 12-Coax	**734A12**	6.55	Belden	1/.032″ BC (10.0)	GIFPE (.148)	BF/85% TC (2.4)	PVC (1.026)	.635	75	16.8	-40 to +75	300
734A Type DS3-4 Plenum	**734A1P**	6.55	Belden	1/.032″ BC (10.0)	FFEP (.148)	BF/85% TC (2.4)	FLM (.215)	.037	75	17.3	-0 to +75	300
734A Type DS3-4 Bundled 6-Coax	**734A6**	6.55	Belden	1/.032″ BC (10.0)	GIFPE (.148)	BF/85% TC (2.4)	PVC (.772)	.465	75	16.8	-40 to +75	300
734D Type DS3-4	**734D1**	6.55	Belden	1/.032″ SPC (10.0)	GIFPE (.148)	BF/85% TC (2.4)	PVC (.235)	.031	75	16.8	-40 to +75	300
734D Type DS3-4 Bundled 12-Coax	**734D12**	6.55	Belden	1/.032″ SPC (10.0)	GIFPE (.148)	BF/85% TC (2.4)	PVC (1.026)	.635	75	16.8	-40 to +75	300
734D Type DS3-4 Plenum	**734D1P**	6.55	Belden	1/.032″ SPC (10.0)	FFEP (.148)	BF/85% TC (2.4)	FLM (.215)	.037	75	17.3	-0 to +75	300
734D Type DS3-4 1-Coax with Tracer	**734D1T**	6.55	Belden	1/.032″ SPC (10.0)	GIFPE (.148)	BF/85% TC (2.4)	PVC (.235 x .309)	.032	75	16.8	-40 to +75	300
734D Type DS3-4 Dual Coax	**734D2**	6.55	Belden	1/.032″ SPC (10.0)	GIFPE (.148)	BF/85% TC (2.4)	PVC (.235 x .470)	.063	75	16.8	-40 to +75	300
734D Type DS3-4 2-Coax with Tracer	**734D2T**	6.55	Belden	1/.032″ SPC (10.0)	GIFPE (.148)	BF/85% TC (2.4)	PVC (.235 x .550)	.064	75	16.8	-40 to +75	300
734D Type DS3-4 Bundled 6-Coax	**734D6**	6.55	Belden	1/.032″ SPC (10.0)	GIFPE (.148)	BF/85% TC (2.4)	PVC (.772)	.465	75	16.8	-40 to +75	300
735A Type DS3-4	**735A1**	6.54	Belden	1/.0159″ SPC (41.0)	FPE (.077)	BF/93% TC (5.3)	PVC (.129)	.011	75	17.7	-40 to +75	300
735A Type DS3-4 Bundled 12-Coax	**735A12**	6.54	Belden	1/.0159″ SPC (41.0)	FPE (.077)	BF/93% TC (5.3)	PVC (.581)	.165	75	17.7	-40 to +75	300
735A Type DS3-4 Bundled 16-Coax	**735A16**	6.54	Belden	1/.0159″ SPC (41.0)	FPE (.077)	BF/93% TC (5.3)	PVC (.636)	.230	75	17.7	-40 to +75	300
735A Type DS3-4 Plenum	**735A1P**	6.54	Belden	1/.0159″ SPC (41.0)	FFEP (.077)	BF/93% TC (5.3)	FLM (.129)	.018	75	17.5	-0 to +75	300
735A Type DS3-4 1-Coax with Tracer	**735A1T**	6.54	Belden	1/.0159″ SPC (41.0)	FPE (.077)	BF/93% TC (5.3)	PVC (.129 x .203)	.013	75	17.7	-40 to +75	300
735A Type DS3-4 Dual Coax	**735A2**	6.54	Belden	1/.0159″ SPC (41.0)	FPE (.077)	BF/93% TC (5.3)	PVC (.129 x .258)	.022	75	17.7	-40 to +75	300
735A Type DS3-4 Bundled 24-Coax	**735A24**	6.54	Belden	1/.0159″ SPC (41.0)	FPE (.077)	BF/93% TC (5.3)	PVC (.870)	.360	75	17.7	-40 to +75	300
735A Type DS3-4 2-Coax with Tracer	**735A2T**	6.54	Belden	1/.0159″ SPC (41.0)	FPE (.077)	BF/93% TC (5.3)	PVC (.129 x .332)	.025	75	17.7	-40 to +75	300
735A Type DS3-4 Bundled 3-Coax	**735A3**	6.54	Belden	1/.0159″ SPC (41.0)	FPE (.077)	BF/93% TC (5.3)	PVC (.309)	.045	75	17.7	-40 to +75	300
735A Type DS3-4 Bundled 6-Coax	**735A6**	6.54	Belden	1/.0159″ SPC (41.0)	FPE (.077)	BF/93% TC (5.3)	PVC (.399)	.085	75	17.7	-40 to +75	300
735A Type DS3-4 Bundled 8-Coax	**735A8**	6.54	Belden	1/.0159″ SPC (41.0)	FPE (.077)	BF/93% TC (5.3)	PVC (.447)	.011	75	17.7	-40 to +75	300
735A Type DS3-4 Bundled 9-Coax	**735A9**	6.54	Belden	1/.0159″ SPC (41.0)	FPE (.077)	BF/93% TC (5.3)	PVC (.484)	.124	75	17.7	-40 to +75	300
Low Loss 50 Ohm Wireless RF Transmission Cables												
RF300	**7809A**	6.60	Belden	1/.072″ BC (2.0)	GIFPE (.190)	DB/95% TC (2.7)	PE (.300)	.055	50	23.0	-40 to +80	300
RF300R Riser	**7809R**	6.60	Belden	1/.072″ BC (2.0)	GIFPE (.190)	DB/95% TC (2.7)	PVC (.300)	.065	50	23.0	-40 to +80	300
RF300WB Burial	**7809WB**	6.60	Belden	1/.072″ BC (2.0)	GIFPE (.190)	DB/95% TC (2.7)	PE (.300)	.055	50	23.0	-40 to +80	300

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

Low Loss 50 Ohm Wireless RF Transmission Cables and Microwave Conformable® Coax

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
Low Loss 50 Ohm Wireless RF Transmission Cables *(continued)*												
RG-174/U Type RF100	**7805**	6.57	Belden	1/.018″ BC (32.0)	PE (.061)	DF/90% TC (9.1)	PVC (.110)	.010	50	31.2	-40 to +80	1100
RG-174/U Type RF 100 Low Loss	**7805R**	6.57	Belden	1/.0195″ BC (27.3)	FPE (.060)	DF/90% TC (9.4)	PVC (.110)	.010	50	26.2	-40 to +80	300
RG-58/U Type RF195	**7806A**	6.58	Belden	1/.037″ BC (7.6)	GIFPE (.110)	DF/90% TC (4.2)	PE (.195)	.024	50	24.3	-40 to +80	300
RG-58/U Type RF195 Riser	**7806R**	6.58	Belden	1/.037″ BC (7.6)	GIFPE (.110)	DF/90% TC (4.2)	PVC (.195)	.026	50	24.3	-40 to +80	300
RG-58/U Type RF200	**7807A**	6.58	Belden	1/.044″ BC (3.3)	GIFPE (.116)	DF/95% TC (4.2)	PE (.195)	.025	50	23.5	-40 to +80	300
RG-58/U Type RF200 Riser	**7807R**	6.58	Belden	1/.044″ BC (3.3)	GIFPE (.116)	DF/95% TC (4.2)	PVC (.195)	.028	50	23.5	-40 to +80	300
RG-8/X Type RF240	**7808A**	6.59	Belden	1/.057″ BC (3.2)	GIFPE (.150)	DB/95% TC (3.5)	PE (.240)	.037	50	23.0	-40 to +80	300
RG-8/X Type RF240 Riser	**7808R**	6.59	Belden	1/.057″ BC (3.2)	GIFPE (.150)	DB/95% TC (3.5)	PVC (.240)	.041	50	23.0	-40 to +80	300
RG-8/X Type RF240 Burial	**7808WB**	6.59	Belden	1/.057″ BC (3.2)	GIFPE (.150)	DB/95% TC (3.5)	PE (.240)	.037	50	23.0	-40 to +80	300
RF300	**7809A**	6.60	Belden	1/.072″ BC (2.0)	GIFPE (.190)	DB/95% TC (2.7)	PE (.300)	.055	50	23.0	-40 to +80	300
RF300R Riser	**7809R**	6.60	Belden	1/.072″ BC (2.0)	GIFPE (.190)	DB/95% TC (2.7)	PVC (.300)	.065	50	23.0	-40 to +80	300
RF300WB Burial	**7809WB**	6.60	Belden	1/.072″ BC (2.0)	GIFPE (.190)	DB/95% TC (2.7)	PE (.300)	.055	50	23.0	-40 to +80	300
RG-8/U Type RF400	**7810A**	6.61	Belden	1/.108″ BCCA (1.3)	GIFPE (.285)	DB/95% TC (1.8)	PE (.405)	.078	50	23.0	-40 to +80	300
RG-8/U Type RF400 Riser	**7810R**	6.61	Belden	1/.108″ BCCA (1.3)	GIFPE (.285)	DB/95% TC (1.8)	PVC (.405)	.090	50	23.0	-40 to +80	300
RG-8/U Type RF400 Burial	**7810WB**	6.61	Belden	1/.108″ BCCA (1.3)	GIFPE (.285)	DB/95% TC (1.8)	PE (.405)	.078	50	23.0	-40 to +80	300
Microwave Conformable Coax												
RG-401/U Type Conformable	**1675A**	6.69	Belden	1/.065″ SCCS (2.5)	TFE (.210)	Copper - Tin Composite	None (.246)	.081	50	29.5	-70 to +200	3000
RG-401/U Type Conformable	**1675J**	6.69	Belden	1/.065″ SCCS (2.5)	TFE (.210)	Copper - Tin Composite	PVC (.286)	.091	50	29.5	-40 to +105	3000
RG-402/U Type Conformable	**1673A**	6.69	Belden	1/.0365″ SCCS (20.5)	TFE (.116)	Copper-Tin Composite (4.5)	None (.138)	.025	50	29.5	-70 to +200	1,900
RG-402/U Type Conformable	**1673B**	6.69	Belden	1/.0362″ SPC (7.9)	TFE (.116)	Copper - Tin Composite	None (.138)	.025	50	29.5	-70 to +200	1900
RG-402/U Type Conformable Jacketed	**1673J**	6.69	Belden	1/.0365″ SCCS (20.5)	TFE (.116)	Copper - Tin Composite (4.5)	PVC (.178)	.031	50	29.5	-70 to +200	1,900
RG-405/U Type Conformable	**1671A**	6.68	Belden	1/.0201″ SCCS (64.2)	TFE (.062)	Copper-Tin Composite (10.2)	None (.085)	.012	50	29.5	-70 to +200	1,500
RG-405/U Type Conformable	**1671B**	6.68	Belden	1/.0201″ SPC (25.7)	TFE (.062)	Copper - Tin Composite	None (.085)	.012	50	29.5	-70 to +200	1500
RG-405/U Type Conformable Jacketed	**1671J**	6.68	Belden	1/.0201″ SCCS (64.2)	TFE (.062)	Copper - Tin Composite	PVC (.127)	.016	50	29.5	-70 to +200	1,500
M17-151 Type Conformable	**1674A**	6.68	Belden	1/.0113″ SCCS (205.0)	TFE (.084)	Copper - Tin Composite	None (.047)	.003	50	29.5	-70 to +200	1,000
M17-151 Type Conformable	**1674B**	6.68	Belden	1/.0113″ SPC (11.0)	TFE (.034)	Copper - Tin Composite	None (.047)	.003	50	29.5	-70 to +200	1000
75 Ohm Conformable	**1672A**	6.70	Belden	1/.0113″ SCCS (205.0)	TFE (.062)	Copper-Tin Composite (10.2)	None (.085)	.012	75	19.5	-70 to +200	500

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

Microwave Conformable® Coax and RG-6 Type

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
Microwave Conformable Coax *(continued)*												
75 Ohm Conformable	**1672B**	6.70	Belden	1/.0113″ SPC (11.0)	TFE (.062)	Copper - Tin Composite	None (.085)	.012	50	19.5	-40 to +105	500
75 Ohm Conformable Jacketed	**1672J**	6.70	Belden	1/.0113″ SCCS (205.0)	TFE (.062)	Copper - Tin Composite (10.2)	PVC (.127)	.016	75	19.5	-70 to +200	500
RG-6 Type												
RG-6/U Type Plenum	**1152A**	6.25	Belden, IBM P/N1501919	1/.040″ CCS (28.0)	FFEP (.170)	DF/60% TC DF/40% TC (1.8)	FEP (.273)	.048	75	16.5	-70 to +200	300
RG-6/U Type	**1189A**	6.24	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBIV, 60% AL 40% AL (4.8)	PVC (.298)	.032	75	16.2	-40 to +80	300
RG-6/U Type Plenum	**1189AP**	6.24	Belden	1/.040″ CCS (28.0)	FFEP (.170)	DBIV/60% AL 40% AL (4.8)	FLM (.248)	.039	75	16.3	-20 to +75	300
RG-6/U Type Burial	**1190A**	6.25	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBIV/60% AL 40% AL (4.8)	PE (.298)	.029	75	16.2	-55 to +80	300
RG-6/U Type Messengered	**1191AM**	6.24	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBIV/60% AL 40% AL (4.8)	PVC (.298 x .433)	.040	75	16.2	-40 to +80	300
RG-6/U Type Messengered	**1258AM**	6.19	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.270 x .410)	.042	75	16.2	-40 to +80	300
RG-6/U Type Messengered	**1260AM**	6.23	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DB+/80% AL (4.6)	PVC (.275 x .416)	.042	75	16.2	-40 to +80	300
RG-6/U Type	**1530A**	6.20	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/90% AL (5.0)	PVC (.270)	.029	75	16.2	-40 to +80	300
RG-6/U Type Plenum	**1530AP**	6.20	Belden	1/.040″ CCS (28.0)	FFEP (.170)	DBII/90% AL (5.0)	FLM (.235)	.027	75	16.3	-20 to +75	300
RG-6/U Type Messengered	**1531AM**	6.20	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/90% AL (5.0)	PVC (.270 x .410)	.044	75	16.2	-40 to +80	300
RG-6/U Type Burial	**1532A**	6.20	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/90% AL (5.0)	PE (.270)	.024	75	16.2	-55 to +80	300
RG-6/U Type	**1545A**	6.19	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.270)	.030	75	16.2	-40 to +80	300
RG-6/U Type	**1546A**	6.21	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBIII/60% AL (6.5)	PVC (.275)	.029	75	16.2	-40 to +80	300
RG-6/U Type	**1613A**	6.22	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBIII/80% AL (5.2)	PVC (.275)	.030	75	16.2	-40 to +80	300
RG-6/U Type Burial	**1614A**	6.22	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBIII/80% AL (5.2)	PE (.275)	.024	75	16.2	-55 to +80	300
RG-6/U Type Messengered	**1615AM**	6.22	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBIII/80% AL (5.2)	PVC (.275 x .416)	.043	75	16.2	-40 to +80	300
RG-6/U Type Messengered	**1616AM**	6.22	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBIII/80% AL (5.2)	PVC (.275 x .416)	.043	75	16.2	-40 to +80	300
RG-6/U Type	**1621A**	6.24	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DB+/90% AL (3.7)	PVC (.275)	.030	75	16.2	-40 to +80	300
RG-6/U Type Digital Video	**1694A**	6.44	Belden	1/.040″ BC (6.4)	GIFPE (.180)	DF/95% TC (2.8)	PVC (.275)	.039	75	16.2	-40 to +80	300
RG-6/U Type Plenum	**1695A**	6.44	Belden	1/.040″ BC (6.4)	FFEP (.170)	DF/95% TC (2.8)	FLM (.234)	.033	75	16.2	-20 to +75	300
RG-6/U Type	**1829A**	6.31	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.270)	.028	75	16.2	-40 to +80	300
RG-6/U Type	**1829AC**	6.31	Belden	1/.040″ BC (6.4)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.270)	.028	75	16.2	-40 to +80	300
RG-6/U Type Burial	**1829B**	6.31	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PE (.270)	.024	75	16.2	-55 to +80	300
RG-6/U Type Burial	**1829BC**	6.31	Belden	1/.040″ BC (6.4)	GIFPE (.180)	DBII/60% AL (9.0)	PE (.270)	.024	75	16.2	-55 to +80	300

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

RG-6 Type

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
RG-6 Type *(continued)*												
RG-6/U Type Messengered	**1832AM**	6.20	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/90% AL (5.0)	PVC (.270 x .410)	.042	75	16.2	-40 to +80	300
RG-6/U Type Burial	**1837A**	6.21	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBIII/60% AL (6.5)	PE (.275)	.024	75	16.2	-55 to +80	300
RG-6/U Type Static Ground	**1839A**	6.32	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.270 x .405)	.040	75	16.2	-40 to +80	300
RG-6/U Type Static Ground	**1839AC**	6.32	Belden	1/.040″ BC (6.4)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.270 x .405)	.040	75	16.2	-40 to +80	300
RG-6/U Type Static Ground	**1840A**	6.32	Belden	2/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.273 x .703)	.069	75	16.2	-40 to +80	300
RG-6/U Type Static Ground	**1840AC**	6.32	Belden	2/.040″ BC (6.4)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.273 x .703)	.069	75	16.2	-40 to +80	300
RG-6/U Type	**1841A**	6.32	Belden	2/.040″ BC (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.273 x .595)	.058	75	16.2	-40 to +80	300
RG-6/U Type	**1841AC**	6.32	Belden	2/.040″ BC (6.4)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.273 x .595)	.058	75	16.2	-40 to +80	300
RG-6/U Type Burial	**1843A**	6.33	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PE (.273 x .750)	.052	75	16.2	-55 to +80	300
RG-6/U Type	**1884A**	6.24	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBIV/60% AL 40% AL (4.8)	PVC (.298)	.035	75	16.2	-40 to +80	300
RG-6/U Type	**3131A**	6.80	Belden	1/.040″ CCS (28.0)	FPE (.180)	DBIV/60% AL 40% AL (3.6)	PVC (.298)	.041	75	16.2	-30 to +75	350
RG-6/U Type	**3132A**	6.80	Belden	1/.040″ CCS (28.0)	FFPE (.170)	DBIV/60% AL 40% AL (3.6)	FCP (.274)	.036	75	16.3	-20 to +150	300
RG-6/U Type	**7915A**	6.33	Belden	1/.040″ BC (6.4)	GIFPE (.180)	DB+/80% AL (4.6)	PVC (.275)	.029	75	16.2	-40 to +80	300
RG-6/U Type	**7916A**	6.33	Belden	1/.040″ BC (6.4)	GIFPE (.180)	DBIV/60% AL 40% AL (4.8)	PVC (.298)	.032	75	16.2	-40 to +80	300
RG-6A/U Type	**8215**	6.38	Belden	1/.028″ CCS (32.0)	PE (.185)	None/96% BC None/95% BC (1.1)	PE (.332)	.069	75	20.5	-55 to +80	2,700
RG-6/U Type	**9058**	6.23	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DB+/80% AL (4.6)	PVC (.275)	.029	75	16.2	-40 to +80	300
RG-6/U Type Messengered	**9059AM**	6.23	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DB+/80% AL (4.6)	PVC (.275 x .416)	.042	75	16.2	-40 to +80	300
RG-6/U Type Burial	**9062**	6.23	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DB+/80% AL (4.6)	PE (.275)	.023	75	16.2	-55 to +80	300
RG-6/U Type Burial	**9066**	6.19	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PE (.270)	.026	75	16.2	-55 to +80	300
RG-6/U Type	**9072**	6.23	Belden	2/.040″ CCS (28.0)	GIFPE (.180)	DB+/80% AL (4.6)	PVC (.280 x .605)	.061	75	16.2	-40 to +80	300
RG-6/U Type	**9077**	6.19	Belden	2/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.270 x .590)	.057	75	16.2	-40 to +80	300
RG-6/U Type	**9116**	6.19	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.270)	.030	75	16.2	-40 to +80	300
RG-6/U Type	**9116N**	6.19	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.270)	.030	75	16.2	-40 to +80	300
RG-6/U Type Plenum	**9116P**	6.19	Belden	1/.040″ CCS (28.0)	FFEP (.170)	DBII/60% AL (9.0)	FLM (.235)	.025	75	16.3	-20 to +75	300
RG-6/U Type Riser	**9116R**	6.19	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.270)	.030	75	16.2	-30 to +75	300
RG-6/U Type Messengered	**9117M**	6.19	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (9.0)	PVC (.270 x .410)	.042	75	16.2	-40 to +80	300
RG-6/U Type	**9118**	6.21	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBII/60% AL (6.5)	PVC (.275)	.026	75	16.2	-40 to +80	300

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

RG-6 and RG-8 Types

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
RG-6 Type *(continued)*												
RG-6/U Type Messengered	**9119M**	6.21	Belden	1/.040″ CCS (28.0)	GIFPE (.180)	DBIII/60% AL (5.0)	PVC (.275 x .416)	.042	75	16.2	-40 to +80	300
RG-6/U Type	**9248**	6.38	Belden	1/.040″ BC (6.4)	GIFPE (.180)	DF/61% TC (5.0)	PVC (.270)	.031	75	16.2	-40 to +80	300
RG-6/U Type	**9290**	6.38	Belden	1/.037″ BC (0.1)	FPE (.180)	None/95% BC None/95% BC (2.0)	PVC (.288)	.054	75	17.3	-40 to +80	300
RG-6/U Type Plenum	**82120**	6.25	Belden	1/.040″ CCS (28.0)	FFEP (.170)	DF/95% TC (1.7)	FLM (.234)	.044	75	16.5	-20 to +75	300
RG-6/U Type Plenum	**82248**	6.38	Belden	1/.040″ BC (7.5)	FFEP (.170)	DF/63% TC (5.1)	FLM (.226)	.030	75	16.5	-20 to +75	300
RG-6/U Type Plenum	**87120**	6.25	Belden	1/.040″ CCS (28.0)	FFEP (.170)	DF/95% TC (1.7)	FCP (.234)	.043	75	16.5	-20 to +150	300
RG-6/U Type Plenum	**89120**	6.25	Belden	1/.040″ CCS (28.0)	FFEP (.170)	DF/95% TC (1.7)	FEP (.234)	.044	75	16.5	-70 to +200	300
RG-6/U Type Plenum	**89248**	6.38	Belden	1/.040″ BC (7.5)	FFEP (.170)	DF/63% TC (5.1)	FEP (.222)	.032	75	16.5	-70 to +200	300
RG-8 Type												
RG-8/U Type	**7733A**	6.66	Belden	1/.108″ BC (0.9)	FFEP (.280)	DF/90% TC (1.8)	FCP (.355)	.100	50	24.2	-20 to +150	300
RG-8/X Type RF240	**7808A**	6.59	Belden	1/.057″ BC (3.2)	GIFPE (.150)	DB/95% TC (3.5)	PE (.240)	.037	50	23.0	-40 to +80	300
RG-8/X Type RF240 Riser	**7808R**	6.59	Belden	1/.057″ BC (3.2)	GIFPE (.150)	DB/95% TC (3.5)	PVC (.240)	.041	50	23.0	-40 to +80	300
RG-8/X Type RF240 Burial	**7808WB**	6.59	Belden	1/.057″ BC (3.2)	GIFPE (.150)	DB/95% TC (3.5)	PE (.240)	.037	50	23.0	-40 to +80	300
RG-8/U Type RF400	**7810A**	6.61	Belden	1/.108″ BCCA (1.3)	GIFPE (.285)	DB/95% TC (1.8)	PE (.405)	.078	50	23.0	-40 to +80	300
RG-8/U Type RF400 Riser	**7810R**	6.61	Belden	1/.108″ BCCA (1.3)	GIFPE (.285)	DB/95% TC (1.8)	PVC (.405)	.090	50	23.0	-40 to +80	300
RG-8/U Type RF400 Burial	**7810WB**	6.61	Belden	1/.108″ BCCA (1.3)	GIFPE (.285)	DB/95% TC (1.8)	PE (.405)	.078	50	23.0	-40 to +80	300
RG-8/U Type	**8214**	6.65	Belden	7/.108″ BC (1.2)	FRFPE (.285)	None/97% BC (1.1)	PVC (.403)	.101	50	26.0	-40 to +80	300
RG-8/U Type	**8237**	6.65	JAN-C-17A	7/.085″ BC (1.9)	PE (.285)	None/97% BC (1.1)	PVC (.405)	.101	52	28.5	-40 to +80	3,700
RG-8A/U Type	**9251**	6.65	MIL-C-17D	7/.085″ BC (1.9)	PE (.285)	None/97% BC (1.2)	PVC-NC (.405)	.099	52	29.5	-40 to +80	3,700
RG-8/X Type	**9258**	6.65	Belden	19/.058″ BC (4.3)	GIFPE (.155)	None/95% BC (3.3)	PVC (.242)	.037	50	24.8	-40 to +80	300
RG-8/U Type Thick Ethernets	**9880**	6.79	Belden, DEC PN17-00451-00	1/.0855″ BC (1.4)	FPE (.243)	DBIV/94% TC, 90% TC	PVC (.405)	.116	50	26.0	-40 to +60	300
RG-8/U Type Triaxial	**9888**	6.86	Belden	7/.036″ BC (1.2)	FPE (.285)	Inner None/97% BC (1.2) Outer None/80% BC (2.1)	Inner PE (.370) Outer PE (.480)	.130	50	26.0	-55 to +80	300
RG-8/U Type	**9913**	6.66	Belden	1/.108″ BC (0.9)	SSPE (.286)	DBII/90% TC (1.8)	PVC (.405)	.104	50	24.6	-40 to +80	300
RG-8/U Type	**9913F7**	6.66	Belden	7/.036″ BC (1.1)	GIFPE (.285)	DB/95% TC (1.1)	BELFLEX (.405)	.088	50	24.6	-40 to +80	3700
RG-8/U Type	**9914**	6.66	Belden	1/.103″ BC (1.2)	GIFPE (.285)	DBII/95% TC (1.1)	PVC (.403)	.104	50	24.8	-40 to +80	300
RG-8/U Type Thick Ethernet Plenum	**89880**	6.79	Belden, DEC PN17-00324-00	1/.0855″ BC (1.4)	FFEP (.245)	DBIV/90% TC, 90% TC	FCP (.375)	.126	50	26.0	-25 to +150	300
RG-8/U Type Plenum	**89913**	6.66	Belden	1/.108″ BC (0.9)	SSFEP (.295)	DBII/90%TC (1.8)	FCP (.364)	.114	50	25.0	-20 to +150	300

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

RG/11U Type

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
RG-11/U Type												
RG-11/U Type Plenum	**1153A**	6.28	Belden, IBM P/N1501908	1/.064″ CCS (11.0)	FFEP (.280)	DF/60% TC DF/40% TC (1.8)	FEP (.387)	.092	75	16.5	-70 to +200	300
RG-11/U Type	**1523A**	6.26	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DBII/60% AL (4.1)	PVC (.400)	.054	75	16.2	-40 to +80	300
RG-11/U Type	**1523AN**	6.26	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DBII/60% AL (4.1)	PVC (.400)	.054	75	16.2	-40 to +80	300
RG-11/U Type Plenum	**1523AP**	6.26	Belden	1/.064″ CCS (11.0)	FFEP (.274)	DBII/60% AL (4.1)	PVDF (.348)	.057	75	16.3	-20 to +150	300
RG-11/U Type Riser	**1523R**	6.26	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DBII/60% AL (4.1)	PVC (.400)	.054	75	16.2	-30 to +75	300
RG-11/U Type Messengered	**1524AM**	6.26	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DBII/60% AL (4.1)	PVC (.400 x .580)	.080	75	16.2	-40 to +80	300
RG-11/U Type Burial	**1525A**	6.26	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DBII/60% AL (4.1)	PE (.400)	.046	75	16.2	-55 to +80	300
RG-11/U Type	**1617A**	6.28	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DBIV/60% AL 40% AL (3.0)	PVC (.407)	.059	75	16.2	-40 to +80	300
RG-11/U Type	**1618A**	6.28	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DBIV/60% AL 40% AL (3.0)	PE (.407)	.053	75	16.2	-55 to +80	300
RG-11/U Type Messengered	**1619AM**	6.28	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DBIV/60% AL 40% AL (3.0)	PVC (.407 x .560)	.075	75	16.2	-40 to +80	300
RG-11/U Type Messengered	**1620AM**	6.28	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DBIV/60% AL 40% AL (3.0)	PVC (.407 x .560)	.078	75	16.2	-40 to +80	300
RG-11/U Type Triaxial High-Flex Version	**1858A**	6.52	Belden	19/.064″ BC (3.0)	FPE (.312)	Inner None/95% BC (1.2) Outer None/95% BC (1.4)	Inner PE (.405) Outer BELFX (.520)	.147	75	17.3	-50 to +80	300
RG-11/U Type Triaxial Plenum	**1859A**	6.52	Belden	19/.064″ BC (3.0)	FFEP (.285)	Inner None/95% (1.4) Outer None/87% (1.4)	Inner FCP (.350) Outer FCP (.406)	.128	75	16.5	-20 to +125	300
RG-11/U Type	**3094A**	6.80	Belden	1/.064″ CCS (11.0)	FPE (.280)	DBIV/60% AL 40% AL (1.8)	PVC (.407)	.062	75	16.2	-40 to +80	600
RG-11/U Type	**3095A**	6.81	Belden	1/.064″ CCS (11.0)	FFPE (.280)	DBIV/60% AL 40% AL (1.8)	FCP (.387)	.076	75	16.5	-20 to +150	300
RG-11/U Type	**7731A**	6.44	Belden	1/.064″ BC (2.5)	GIFPE (.280)	DF/95% TC (1.5)	PVC (.400)	.081	75	16.0	-40 to +75	300
RG-11/U Type Plenum	**7732A**	6.44	Belden	1/.064″ BC (2.5)	FFEP (.274)	DF/95% TC (2.5)	FCP (.348)	.075	75	16.3	-20 to +150	300
RG-11/U Type Triax Flooded	**7803A**	6.53	Belden	1/.064″ BC (2.5)	GIFPE (.285)	Inner None/95% BC (1.6) Outer None/95% BC (1.4)	Inner PE (.365) Outer PE (.475)	.112	75	16.1	-55 to +80	300
RG-11/U Type	**8213**	6.39	Belden	1/.064″ BC (2.5)	GIFPE (.285)	None/97% BC (1.1)	PE (.405)	.079	75	16.1	-55 to +80	300
RG-11/U Type Triaxial	**8233**	6.53	Belden	1/.064″ BC (2.5)	GIFPE (.285)	Inner None/95% BC (1.4) Outer None/80% BC (1.4)	Inner PE (.365) Outer PE (.475)	.113	75	16.1	-55 to +80	300

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

RG/11U and RG-58 Types

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
RG-11/U Type *(continued)*												
RG-11/U Type Triaxial	**8233A**	6.53	Belden	1/.064″ BC (2.5)	GIFPE (.285)	Inner None/95% BC (1.4) Outer None/80% BC (1.4)	Inner PVC (.365) Outer PVC (.475)	.113	75	16.1	-40 to +80	300
RG-11/U Type	**8238**	6.39	JAN-C-17A	7/.048″ TC (6.1)	FRSFPE (.285)	None/97% BC (1.2)	PVC (.405)	.099	75	20.5	-40 to +80	300
RG-11A/U Type	**8261**	6.39	MIL-C-17D	7/.048″ TC (6.1)	PE (.285)	None/97% BC (1.2)	PVC-NC (.405)	.090	75	20.5	-40 to +60	3,700
RG-11/U Type	**9011**	6.26	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DF/40% AL (5.3)	PVC (.400)	.060	75	16.2	-40 to +80	300
RG-11/U Type	**9064**	6.27	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DB+/77% AL (3.8)	PVC (.400)	.062	75	16.2	-40 to +80	300
RG-11/U Type Messengered	**9065M**	6.27	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DB+/77% AL (3.8)	PVC (.400 x .580)	.080	75	16.2	-40 to +80	300
RG-11/U Type Triaxial	**9192**	6.52	Belden	19/.064″ BC (3.3)	FPE (.312)	Inner None/90% BC (1.6) Outer None/82% BC (1.7)	Inner PE (.390) Outer PVC (.520)	.134	75	17.3	-40 to +80	300
RG-11/U QPL M17/6-RG11	**9212**	6.75	MIL-C-17G	7/.048″ TC (6.1)	PE (.285)	None/97% BC (1.2)	PVC-NC (.405)	.090	75	20.5	-40 to +85	3,700
RG-11/U Type Triaxial	**9232**	6.52	Belden	19/.064″ BC (3.0)	FPE (.312)	Inner None/90% BC (1.6) Outer None/82% BC (1.7)	Inner PE (.390) Outer H (.520)	.140	75	17.3	-20 to +80	300
RG-11/U Type	**9292**	6.39	Belden	1/.064″ BC (2.5)	FPE (.280)	DF/61% TC (2.8)	PVC (.405)	.077	75	18.1	-40 to +80	300
RG-11/U Type Burial	**9764**	6.27	Belden	1/.064″ CCS (11.0)	GIFPE (.280)	DB+/77% AL (3.8)	PE (.400)	.056	75	16.2	-55 to +80	300
RG-11/U Type Plenum	**89292**	6.39	Belden	1/.064″ BC (2.5)	FFEP (.274)	DF/63% TC (2.9)	FEP (.348)	.073	75	16.3	-70 to +200	300
RG-58 Type												
RG-58/U Type RF195	**7806A**	6.58	Belden	1/.037″ BC (7.6)	GIFPE (.110)	DF/90% TC (4.2)	PE (.195)	.024	50	24.3	-40 to +80	300
RG-58/U Type RF195 Riser	**7806R**	6.58	Belden	1/.037″ BC (7.6)	GIFPE (.110)	DF/90% TC (4.2)	PVC (.195)	.026	50	24.3	-40 to +80	300
RG-58/U Type RF200	**7807A**	6.58	Belden	1/.044″ BC (3.3)	GIFPE (.116)	DF/95% TC (4.2)	PE (.195)	.025	50	23.5	-40 to +80	300
RG-58/U Type RF200 Riser	**7807R**	6.58	Belden	1/.044″ BC (3.3)	GIFPE (.116)	DF/95% TC (4.2)	PVC (.195)	.028	50	23.5	-40 to +80	300
RG-58A/U Type	**8219**	6.64	Belden	19/.037″ TC (8.8)	FPE (.114)	None/96% TC (4.1)	PVC (.194)	.025	53	26.5	-40 to +80	300
RG-58/U	**8240**	6.64	JAN-C-17A	1/.033″ BC (10.0)	PE (.116)	None/95% TC (4.1)	PVC (.193)	.025	51	28.5	-40 to +80	1,400
RG-58A/U Type	**8259**	6.64	JAN-C-17A	19/.035″ TC (10.8)	PE (.116)	None/95% TC (4.1)	PVC (.192)	.024	50	30.8	-40 to +75	1,400
RG-58C/U QPL M17/155/U QPL	**8262**	6.73	MIL-C-17G	19/.035″ TC (10.8)	PE (.115)	None/95% TC (4.1)	PVC-NC (.195)	.026	50	30.8	-40 to +85	1,400
RG-58/U Type	**9201**	6.63	Belden	1/.033″ BC (10.0)	PE (.116)	None/78% BC (5.5)	PVC (.193)	.022	52	29.7	-40 to +80	1,400
RG-58/U QPL M17/28-RG058	**9203**	6.73	MIL-C-17G	19/.035″ TC (10.8)	PE (.116)	None/95% TC (4.1)	PVC-NC (.195)	.025	50	30.8	-40 to +85	1,400

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

RG-58 and RG-59/U Types

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
RG-58 Type *(continued)*												
RG-58A/U Type Triaxial	**9222**	6.86	Belden	7/.0126″ TC (9.5)	PE (.114)	Inner None/95% TC (4.7) Outer None/85% TC (4.3)	Inner PE (.175) Outer PVC (.240)	.037	50	30.8	-40 to +75	1,400
RG-58/U Type	**9223**	6.78	Belden	7/.030″ TC (10.8)	PE (.112)	DB/95% TC (4.1)	PVC (.195)	.026	50	37.0	-40 to +80	1,900
RG-58A/U Type	**9310**	6.63	Belden	1/.033″ BC (10.0)	PE (.114)	DBII/55% TC (14.0)	PVC (.193)	.020	50	30.8	-40 to +80	1,400
RG-58A/U Type	**9311**	6.64	Belden	19/.037″ TC (8.8)	FPE (.114)	DBII/55% TC (17.0)	PVC (.193)	.018	52	26.0	-40 to +80	300
RG-58/U Type Thin Ethernets	**9907**	6.79	DEC P/N 17-01248-00	19/.037″ TC (8.8)	FPE (.102)	DBII/93% TC (5.8)	PVC (.185)	.022	50	25.4	-40 to +75	300
RG-58/U Type Plenum	**82240**	6.64	Belden	1/.032″ BC (10.2)	FEP (.107)	None/95% TC (6.7)	FLM (.159)	.025	53	27.5	-20 to +75	1,400
RG-58/U Type Thin Ethernets Plenum	**82907**	6.79	Belden	19/.0375″ TC (8.8)	FFEP (.095)	DBII/94% TC (5.8)	FLM (.160)	.022	50	26.0	-20 to +75	300
RG-58/U Type Plenum	**88240**	6.64	Belden	1/.032″ BC (10.2)	FEP (.107)	None/95%TC (6.7)	FEP (.159)	.027	53.5	26.4	-70 to +200	1,400
RG-58/U Type Thin Ethernet Plenum	**89907**	6.79	DEC P/N 17-01246-00	19/.0375″ TC (8.8)	FFEP (.095)	DBII/94% TC (5.8)	FCP (.160)	.022	50	26.0	-20 to +150	300
RG-59/U Type												
RG-59/U Type Plenum	**1151A**	6.18	Belden, IBM P/N 1501917	1/.032″ CCS (26.0)	FFEP (.140)	DF/52% TC DF/34% TC (2.3)	FEP (.236)	.035	75	16.5	-70 to +200	300
RG-59/U Type	**1186A**	6.17	Belden	1/.032″ CCS (44.5)	GIFPE (.144)	DBIV/67% AL 40% AL (7.0)	PVC (.265)	.025	75	16.2	-40 to +80	300
RG-59/U Type	**1426A**	6.37	Belden	1/.032″ BC (10.0)	GIFPE (.145)	None/95% BC (2.6)	PVC (.242)	.038	75	16.3	-30 to +75	300
RG-59/U Type	**1505A**	6.29	Belden	1/.032″ BC (10.0)	GIFPE (.145)	DF/95% BC (3.18)	PVC (.234)	.036	75	16.3	-30 to +75	300
RG-59/U Type	**1505F**	6.29	Belden	7/.011″ BC (12.2)	GIFPE (.145)	None/94% BC (2.4) None/94% BC (2.4)	PVC (.242)	.040	75	17.0	-20 to +60	300
RG-59/U Type Plenum	**1506A**	6.42	Belden	1/.032″ BC (10.0)	FFEP (.133)	DF/95% TC (3.8)	FLM (.199)	.033	75	16.0	0 to +75	300
RG-59/U Type	**1830A**	6.31	Belden	1/.032″ CCS (44.5)	GIFPE (.144)	DBII/40% AL (17.0)	PVC (.237)	.021	75	16.2	-40 to +80	300
RG-59/U Type Triaxial	**1856A**	6.51	Belden	1/.032″ BC (10.6)	GIFPE (.145)	Inner None/95% BC (2.5) Outer None/95% BC (1.6)	Inner PE (.216) Outer BELFX (.360)	.076	75	16.2	-50 to +80	300
RG-59/U Type Triax	**1856B**	6.51	Belden	1/.032″ BC (10.1)	GIFPE (.145)	Inner None/95% BC (2.5) Outer None/95% BC (1.6)	Inner PVC (.216) Outer BELFX (.360)	.073	75	16.2	-35 to +75	300
RG-59/U Type Triaxial High-Flex Version	**1857A**	6.50	Belden	19/.031″ BC (14.0)	GIFPE (.143)	Inner None/95% BC (2.5) Outer None/90% BC (1.6)	Inner PE (.216) Outer BELFX (.360)	.076	75	17.0	-50 to +80	300

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

RG-59/U Type

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
RG-59/U Type *(continued)*												
RG-59/U Type	**7721A**	6.30	Belden	1/.032″ SPC (10.1)	GIFPE (.145)	DBII/95% TC (3.5)	PVC (.235 x .511)	.057	75	16.2	-0 to +80	300
RG-59/U Type	**8212**	6.37	Belden	1/.032″ CCS (44.5)	FPE (.143)	None/95% BC (2.6)	PE (.242)	.030	75	17.3	-55 to +80	300
RG-59/U Type	**8221**	6.36	Belden	1/.0253″ CCS (55.0)	FPE (.146)	None/95% BC (2.6)	PVC (.242)	.032	80	16.3	-40 to +75	300
RG-59/U Type Triaxial	**8232**	6.50	Belden	1/.032″ BC (10.0)	GIFPE (.145)	Inner None/95% BC (2.5) Outer None/80% BC (2.8)	Inner PE (.225) Outer PE (.315)	.053	75	16.3	-55 to +80	300
RG-59/U Type Triaxial	**8232A**	6.50	Belden	1/.032″ BC (10.0)	GIFPE (.145)	Inner None/96% BC (2.5) Outer None/80% BC (2.8)	Inner PVC (.226) Outer PVC (.315)	.065	75	16.3	0 to +75	300
RG-59/U Type	**8241**	6.35	Belden	1/.023″ CCS (47.0)	PE (.146)	None/95% BC (2.6)	PVC (.241)	.036	75	20.5	-40 to +80	1,700
RG-59/U Type	**8241A**	6.35	Belden	1/.023″ CCS (47.0)	FRSFPE (.146)	None/95% BC (2.6)	PVC (.242)	.039	75	20.5	-40 to +80	300
RG-59/U Type	**8241B**	6.35	Belden	1/.0228″ BC (20.0)	PE (.146)	None/95% BC (2.9)	PVC (.242)	.034	75	20.5	-40 to +80	1,700
RG-59/U Type	**8241F**	6.35	Belden	7/.030″ BC (15.0)	FPE (.146)	None/95% BC (2.6)	PVC-M (.241)	.032	75	17.3	-30 to +60	300
RG-59B/U Type	**8263**	6.36	MIL-C-17D	1/.023″ CC (47.0)	PE (.146)	None/95% BC (2.6)	PVC-NC (.241)	.035	75	20.5	-40 to +60	1,700
RG-59/U Type Precision	**8279**	6.41	Belden	7/.023″ BC (19.1)	PE (.146)	None/95% TC (4.5)	PE (.220)	.026	75	20.5	-55 to +80	2,300
RG-59/U Type Precision Video	**8281**	6.30	Belden	1/.032″ BC (9.9)	PE (.198)	None/97% TC None/95% TC (1.1)	PE (.305)	.068	75	20.5	-55 to +80	2,900
RG-59/U Type Precision Video	**8281B**	6.30	Belden	1/.032″ BC (9.9)	FRSFPE (.198)	None/97% TC None/95% TC (1.1)	PVC (.305)	.076	75	20.5	-40 to +80	300
RG-59/U Type Precision Video	**8281F**	6.30	Belden	7/.0315″ BC (11.8)	PE (.193)	None/97% TC None/95% TC (1.7)	PVC-M (.304)	.060	75	20.5	-20 to +60	2,900
RG-59/U Type	**9100**	6.16	Belden	1/.032″ CCS (44.5)	GIFPE (.144)	DBII/40% AL (17.0)	PVC (.237)	.020	75	16.2	-40 to +80	300
RG-59/U Type	**9104**	6.17	Belden	1/.032″ CCS (44.5)	GIFPE (.144)	DBII/67% AL (12.0)	PVC (.237)	.022	75	16.2	-40 to +80	300
RG-59/U Type	**9104N**	6.17	Belden	1/.032″ CCS (44.5)	GIFPE (.144)	DBII/67% AL (12.0)	PVC (.237)	.022	75	16.2	-40 to +80	300
RG-59/U Type Plenum	**9104P**	6.17	Belden	1/.032″ CCS (44.5)	FFEP (.140)	DBII/67% AL (12.0)	FLM (.203)	.020	75	16.3	-20 to +75	300
RG-59/U Type	**9110**	6.17	Belden	1/.032″ CCS (44.5)	GIFPE (.144)	DBIII/67% AL (11.0)	PVC (.242)	.022	75	16.2	-40 to +80	300
RG-59/U Type Precision Video	**9141**	6.43	Belden	1/.032″ BC (9.9)	PE (.200)	None/97% TC None/95% TC (1.1)	PE (.305)	.068	75	20.0	-55 to +80	2,900
RG-59/U Type	**9167**	6.29	Belden	1/.032″ SCCS (25.8)	GIFPE (.144)	DB+/95% AL (4.5)	PVC (.242)	.028	75	16.2	-40 to +80	300
RG-59/U QPL M17/29-RG59	**9204**	6.75	MIL-C-17G	1/.023″ CCS (47.0)	PE (.146)	None/95% BC (2.6)	PVC-NC (.241)	.034	75	20.5	-40 to +85	1,700
RG-59/U Type Precision Video	**9209**	6.41	Belden	1/.02275″ BC (20.4)	PE (.146)	DF/95% TC (4.5)	PE (.220)	.027	75	20.5	-55 to +80	2,300

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

RG-59/U and RG-62 Types

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
RG-59/U Type *(continued)*												
RG-59/U Type Precision Video	**9209A**	6.41	Belden	1/.02275″ BC (20.4)	FRSFPE (.146)	DF/95% TC (4.5)	PVC (.220)	.031	75	20.5	-40 to +80	300
RG-59/U Type	**9224**	6.78	Belden	1/.025″ BCCS (54.0)	PE (.146)	None/93% BC (2.5)	PVC (.242)	.038	75	22.0	-40 to +75	1,900
RG-59/U Type Precision Video	**9231**	6.42	W/E 728B	1/.031″ BC (9.9)	PE (.198)	None/97% TC None/95% TC (1.1)	PVC-NC (.305)	.071	75	20.5	-40 to +80	2,900
RG-59/U Type	**9240**	6.37	Belden	1/.032″ CCS (61.5)	FPE (.143)	None/80% BC (5.6)	PVC (.241)	.028	75	17.3	-40 to +75	300
RG-59/U Type	**9244**	6.36	Belden	1/.0253″ CCS (50.0)	PE (.146)	None/85% BC (4.5)	PVC (.242)	.034	75	19.4	-40 to +80	1,700
RG-59/U Type	**9259**	6.36	Belden	7/.030″ BC (15.0)	FPE (.146)	None/95% BC (2.6)	PVC (.242)	.033	75	17.3	-40 to +80	300
RG-59/U Type Triaxial	**9267**	6.51	Belden	1/.033″ BC (10.1)	GIFPE (.146)	Inner None/95% BC (2.5) Outer None/80% BC (2.6)	Inner PE (.216) Outer H (.360)	.079	75	17.3	-20 to +80	300
RG-59/U Type	**9274**	6.37	Belden	1/.032″ CCS (44.5)	FPE (.143)	None/95% BC (2.6)	PVC (.240)	.030	75	17.3	-40 to +80	300
RG-59/U Type	**9275**	6.16	Belden	1/.032″ CCS (44.5)	GIFPE (.144)	DF/40% AL (17.0)	PVC (.237)	.023	75	16.2	-40 to +80	300
RG-59/U Type Dual	**9555**	6.80	Belden	1/.023″ CCS (50.0)	FRSFPE (.146)	None/95% BC (2.6)	PVC (.238 x .478)	.075	75	20.5	-40 to +80	1,700
RG-59/U Type	**9659**	6.36	Belden	7/.030″ BC (15.0)	FPE (.146)	None/95% BC (2.6)	PVC-NC (.242)	.033	75	17.3	-40 to +80	300
RG-59/U Type Plenum	**82108**	6.18	Belden	1/.032″ CCS (26.0)	FFEP (.140)	DF/96% TC (2.6)	FLM (.202)	.039	75	16.5	-20 to +75	300
RG-59/U Type Plenum	**82241**	6.35	Belden	1/.023″ CCS (52.0)	FEP (.134)	None/97% BC (2.6)	FLM (.193)	.035	75	19.5	-20 to +75	1,700
RB-59/U Type Plenum	**82259**	6.36	Belden	7/.030″ BC (15.0)	FFEP (.135)	None/95% BC (2.6)	FLM (.193)	.030	75	17.3	-20 to +75	300
RG-59/U Type Plenum	**88241**	6.35	Belden	1/.023″ CCS (52.0)	FEP (.134)	None/97% BC (2.6)	FEP (.193)	.037	75	19.5	-70 to +200	1,700
RG-59/U Type Plenum Triax	**88232**	6.50	Belden	1/.032″ BC (34.5)	FFEP (.140)	Inner None/95% BC (2.6) None/95% BC (2.6)	Inner FEP (.188) Outer FEP (.246)	.058	75	16.7	-70 to +200	300
RG-59/U Type Precision Video Plenum	**88281**	6.43	Belden	1/.032″ BC (9.9)	FEP (.185)	None/98% TC None/96% TC (1.1)	FCP (.271)	.082	75	19.5	-20 to +150	2,900
RG-59/U Type Plenum	**89108**	6.18	Belden	1/.032″ CCS (26.0)	FFEP (.140)	DF/96% TC (2.6)	FEP (.203)	.035	75	16.5	-70 to +200	300
RG-59/U Type Plenum	**89259**	6.36	Belden	7/.030″ BC (15.0)	FFEP (.135)	None/95% BC (2.6)	FEP (.193)	.033	75	17.3	-70 to +200	300
RG-59/U Type Dual Plenum	**89555**	6.80	Belden	1/.023″ CCS (50.0)	FEP (.134)	None/95% BC (2.6)	FEP (.212 x .424)	.086	75	19.5	-70 to +200	1,700
RG-62 Type												
RG-62/U Type	**8254**	6.81	JAN-C-17A	1/.0253″ CCS (41.2)	SSPE (.146)	None/95% BC (2.9)	PVC (.238)	.032	93	13.5	-40 to +80	750
RG-62B/U Type	**8255**	6.81	MIL-C-17D	7/.024″ CCS (59.0)	SSPE (.146)	None/95% BC (2.9)	PVC-NC (.242)	.032	93	13.5	-40 to +80	750
RG-62A/U Type	**9228**	6.81	Belden	1/.0253″ CCS (41.2)	SSPE (.146)	None/95% BC (2.9)	HDPE (.242)	.033	93	13.5	-55 to +80	750
RG-62A/U Type	**9268**	6.81	Belden, IBM P/N 5252750	1/.0253″ CCS (41.2)	SSPE (.146)	None/95% BC (2.9)	PVC (.260)	.037	93	13.5	-40 to +80	750

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

RG-62 and Other Misc. RG Types

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
RG-62 Type *(continued)*												
RG62A/U Type	**9269**	6.81	Belden, IBM P/N 323921	1/.0253″ CCS (41.2)	SSPE (.146)	None/95% BC (2.9)	PVC (.239)	.034	93	13.5	-40 to +80	750
RG-62/U QPL M17/30-RG62	**9862**	6.76	MIL-C-17G	1/.0263″ CCS (41.2)	SSPE (.146)	None/95% BC (2.9)	PVC-NC (.242)	.033	93	13.5	-40 to +80	750
RG-62/U Type Plenum	**82262**	6.82	Belden	1/.025″ CCS (41.2)	FFEP (.146)	None/94% BC (3.4)	FLM (.204)	.030	93	12.8	-20 to +75	300
RG-62/U Type Plenum	**82269**	6.82	Belden	1/.025″ CCS (41.2)	SSFEP (.142)	None/94% BC (3.4)	FLM (.200)	.030	93	12.8	-20 to +75	300
RG-62U Type Plenum	**86262**	6.82	Belden, IBM P/N4885584II	1/.025″ CCS (41.2)	FFEP (.146)	None/94% BC (3.4)	FEP (.204)	.032	93	12.8	-70 to +200	300
RG-62/U Type Plenum	**87269**	6.82	Belden	1/.025″ CCS (41.2)	SSFEP (.142)	None/94% BC (3.4)	FCP (.200)	.031	93	12.8	-20 to +150	300
RG-62/U Type Plenum	**89269**	6.82	Belden, IBM P/N4885584I	1/.025″ CCS (41.2)	SSFEP (.142)	None/94% BC (3.4)	FEP (.200)	.033	93	12.8	-70 to +200	300
Other Misc. RG Types												
RG-63/ U QPL M17/31-RG63	**9857**	6.76	MIL-C-17G	1/.0253″ CCS (41.2)	SSPE (.285)	None/97% BC (1.2)	PVC-NC (.405)	.087	125	9.7	-40 to +80	750
RG-71/U QPL M17/90-RG71	**9169**	6.76	MIL-C-17G	1/.0253″ CCS (41.2)	SSPE (.146)	None/95% BC None/94% TC (1.5)	PE (.245)	.046	93	13.5	-55 to +85	750
RG-122/U QPL M17/157-00001	**9252**	6.72	MIL-C-17G	27/.030″ TC (17.1)	PE (.096)	None/95% TC (5.2)	PVC-NC (.160)	.017	50	30.8	-40 to +85	1,400
RG-142B/U QPL M17/158-00001	**83242**	6.73	MIL-C-17G	1/.037″ SCCS (19.3)	TFE (.116)	None/96% SC None/95% SC (2.3)	FEP (.195)	.043	50	29.0	-70 to +200	1,400
RG-142/U QPL M17/60-RG142	**84142**	6.73	MIL-C-17G	1/.037″ SCCS (19.3)	TFE (.116) (2.3)	None/96% SC None/95% SC	FEP (.195)	.043	50	29.2	-70 to +200	1,400
RG-174/U Type RF100	**7805**	6.57	Belden	1/.018″ BC (32.0)	PE (.061)	DF/90% TC (9.1)	PVC (.110)	.010	50	31.2	-40 to +80	1100
RG-174/U Type RF 100 Low Loss	**7805R**	6.57	Belden	1/.0195″ BC (27.3)	FPE (.060)	DF/90% TC (9.4)	PVC (.110)	.010	50	26.2	-40 to +80	300
RG-174/U Type	**8216**	6.63	MIL-C-17F	7/.019″ CCS (97.0)	PE (.060)	None/90% TC (10.7)	PVC (.110)	.008	50	30.8	-40 to +75	1,100
RG-174/U Type	**9239**	6.78	Belden	7/.019″ BCCS (97.0)	PE (.044)	None/90% TC (14.0)	PVC (.101)	.008	50	38.0	-40 to +60	1,100
RG-178B/U QPL M17/169-00001	**83265**	6.72	MIL-C-17G	7/.012″ SCCS (244.0)	TFE (.033)	None/95% SC (14.6)	FEP (.071)	.005	50	29.0	-70 to +200	750
RG-179/U QPL M17/94-RG179	**83264**	6.75	MIL-C-17G	7/.012″ SCCS (244.0)	TFE (.062)	None/95% SC (8.5)	FEP (.100)	.010	75	19.5	-70 to +200	900
RG-180/U QPL M17/95-RG 180	**83266**	6.76	MIL-C-17G	7/.012″ SCCS (344.0)	TFE (.102)	None/91% SC (6.5)	FEP (.141)	.018	95	15.0	-70 to +200	1,100
RG-187A/U Type	**83267**	6.80	MIL-C-17D	7/.012″ SCCS (258.0)	TFE (.063)	None/95% SC (8.5)	TFE-T (.111)	.010	75	19.5	-70 to +200	900
RG-188A/U Type	**83269**	6.63	MIL-C-17D	7/.020″ SCCS (91.2)	TFE (.058)	None/96% SC (8.5)	TFE-T (.108)	.011	50	29.0	-70 to +200	900
RG-212/U QPL M17/162-00001	**9861**	6.74	MIL-C-17G	1/.0556″ SC (3.3)	PE (.185)	None/95% SC None/95% SC (1.1)	PVC-NC (.332)	.081	50	30.8	-40 to +80	2,200
RG-213/U QPL M17/163-00001	**8267**	6.74	MIL-C-17G	7/.089″ BC (1.7)	PE (.285)	None/97% BC (1.2)	PVC-NC (.405)	.102	50	30.8	-40 to +80	3,700
RG-214/U QPL M17/164-00001	**8268**	6.74	MIL-C-17G	7/.089″ SC (1.7)	PE (.285)	None/95% SC None/97% SC (.7)	PVC-NC (.425)	.128	50	30.8	-40 to +80	3,700
RG-216/U QPL M17/77-RG216	**9850**	6.75	MIL-C-17G	7/.048″ TC (6.1)	PE (.185)	None/95% BC None/95% BC (.8)	PVC-NC (.425)	.122	75	20.5	-40 to +80	3,700

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

Misc. RG Types, Miniature and Bundled Coax

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
Other Misc. RG Types *(continued)*												
RG-223/U QPL M17/167-00001	**9273**	6.73	MIL-C-17G	1/.034″ SC (8.8)	PE (.117)	None/95% SC None/95% SC (2.5)	PVC-NC (.212)	.036	50	30.8	-40 to +60	1,700
RG-303/U QPL M17/111-RG303	**84303**	6.73	MIL-C-17G	1/.037″ SCCS (16.3)	TFE (.116)	None/95% SC (4.3)	FEP (.170)	.030	50	29.0	-70 to +200	1,400
RG-316/U QPL M17/172-00001	**83284**	6.72	MIL-C-17G	7/.020″ SCCS (84.1)	TFE (.058)	None/96.5% SC (6.5)	FEP (.098)	.010	50	29.0	-70 to +200	900
RG-316/U QPL M17/113-RG316	**84316**	6.72	MIL-C-17G	7/.020″ SCCS (84.1)	TFE (.058)	None/95% SC (6.5)	FEP (.098)	.010	50	29.2	-70 to +200	900
Miniature Coax												
Miniature Coax	**8218**	6.34	Belden	7/.017″ CCS (120.0)	PE (.100)	None/93% TC (6.5)	PVC (.150)	.014	75	20.5	-40 to +60	1700
Miniature Coax	**8700**	6.78	Belden	1/.013″ TC (66.9)	PP (.023)	None/90% BC (28.7)	PVC (.054)	.003	32	55.2	-30 to +105	300
Miniature Coax	**9221**	6.34	Belden	7/.012″ TC (100.0)	FPE (.058)	None/89% TC (11.7)	PVC (.097)	.006	75	17.3	-40 to +60	30
Miniature RG-59/U Type	**1855A**	6.40	Belden	1/.023″ BC (20.1)	GIFPE (.102)	DF/95% TC (7.6)	PVC (.159)	.018	75	16.5	-40 to +75	300
Miniature RG-59/U Type	**1865A**	6.40	Belden	19/.021″ BC (27.4)	GIFPE (.094)	DF/95% TC (5.4)	PVC (.150)	.014	75	16.5	-40 to +80	300
Bundled Coax												
Bundled Coax RG-59 Type Plenum RGB 3-Coaxial	**1824A**	6.48	Belden	7/.030″ BC (15.3)	FFEP (.135)	DF/95% TC (2.5)	FLM (.475)	.099	75	17.3	0 to +75	300
Bundled Coax RG-59 Type Plenum RGB 4-Coaxial	**1825A**	6.48	Belden	7/.030″ BC (15.3)	FFEP (.135)	DF/95% TC (2.5)	FLM (.527)	.132	75	16.5	0 to +60	300
Bundled Coax RG-59 Type Plenum RGB 5-Coaxial	**1826A**	6.48	Belden	7/.030″ BC (15.3)	FFEP (.135)	DF/95% TC (2.5)	FLM (.585)	.165	75	16.5	0 to +60	300
Bundled Coax Sub-Miniature RGB 3-Coaxial	**1520A**	6.47	Belden	7/.012″ TC (103.2)	FPE (.056)	DF/90% TC (9.5)	PVC (.283)	.042	75	17.3	-40 to +60	300
Bundled Coax Sub-Miniature RGB 4-Coaxial	**1521A**	6.47	Belden	7/.012″ TC (103.2)	FPE (.056)	DF/90% TC (9.5)	PVC (.310)	.050	75	17.3	-40 to +60	300
Bundled Coax Sub-Miniature RGB 5-Coaxial	**1522A**	6.47	Belden	7/.012″ TC (103.2)	FPE (.056)	DF/90% TC (9.5)	PVC (.338)	.058	75	17.3	-40 to +60	300
Bundled Coax Miniature RGB 3-Coaxial	**1406B**	6.47	Belden	7/.019″ BC (71.5)	FPE (.090)	DF/93% TC (8.6)	PVC (.388)	.064	75	17.3	-40 to +60	300
Bundled Coax Miniature RGB 4-Coaxial	**1407B**	6.47	Belden	7/.019″ BC (37.3)	FPE (.090)	DF/93% TC (8.6)	PVC (.455)	.088	75	17.3	-40 to +60	300
Bundled Coax Miniature RGB 5-Coaxial	**1417B**	6.47	Belden	7/.019″ BC (37.3)	FPE (.090)	DF/93% TC (8.6)	PVC (.477)	.102	75	17.3	-40 to +60	300
Bundled Coax Miniature RGB 3-Coaxial	**1164B**	6.48	Belden	7/.019″ BC (37.3)	FPE (.090)	DF/93% TC (8.6)	PVC (.388)	.066	75	17.3	-40 to +60	300
Bundled Coax Miniature RGB 4-Coaxial	**1167B**	6.48	Belden	7/.019″ BC (37.3)	FPE (.090)	DF/93% TC (8.6)	PVC (.455)	.090	75	17.3	-40 to +60	300
Bundled Coax Miniature RGB 5-Coaxial	**1418B**	6.48	Belden	7/.019″ BC (37.3)	FPE (.090)	DF/93% TC (8.6)	PVC (.477)	.104	75	17.3	-40 to +60	300
Bundled SDI Coax 3-Coaxial RG-6 Type	**7710A**	6.46	Belden	1/.040″ BC (6.4)	GIFPE (.180)	DF/95% TC (2.8)	PVC-M (.770)	.234	75	16.2	-40 to +60	300

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

RG Coaxial and Triaxial Reference Guide

Bundled and SVHS Coax

Cable Designation	Part No.	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) Non UL	Max. Oper. Voltage (RMS) Non UL
Bundled Coax *(continued)*												
Bundled SDI Coax 4-Coaxial RG-6 Type	**7711A**	6.46	Belden	1/.040″ BC (6.4)	GIFPE (.180)	DF/95% TC (2.8)	PVC-M (.843)	.303	75	16.2	-40 to +60	300
Bundled SDI Coax 5-Coaxial RG-6 Type	**7712A**	6.46	Belden	1/.040″ BC (6.4)	GIFPE (.180)	DF/95% TC (2.8)	PVC-M (.942)	.371	75	16.2	-40 to +60	300
Bundled SDI Coax 10-Coaxial RG-6 Type	**7713A**	6.46	Belden	1/.040″ BC (6.4)	GIFPE (.180)	DF/95% TC (2.8)	PVC-M (1.386)	.772	75	16.2	-40 to +60	300
RG-59/U Type Bundled 3-Coax (Miniature)	**7787A**	6.45	Belden	1/.023″ BC (20.1)	GIFPE (.102)	DF/95% TC (7.6)	PVC (.432)	.081	75	16.5	-35 to +75	300
RG-59/U Type Bundled 4-Coax (Miniature)	**7788A**	6.45	Belden	1/.023″ BC (20.1)	GIFPE (.102)	DF/95% TC (7.6)	PVC (.481)	.106	75	16.5	-35 to +75	300
RG-59/U Type Bundled 5-Coax (Miniature)	**7789A**	6.45	Belden	1/.023″ BC (20.1)	GIFPE (.102)	DF/95% TC (7.6)	PVC (.539)	.133	75	16.5	-35 to +75	300
RG-59/U Type Bundled 6-Coax (Miniature)	**7790A**	6.45	Belden	1/.023″ BC (20.1)	GIFPE (.102)	DF/95% TC (7.6)	PVC (.597)	.163	75	16.5	-35 to +75	300
RG-59/U Type Bundled 12-Coax (Miniature)	**7791A**	6.45	Belden	1/.023″ BC (20.1)	GIFPE (.102)	DF/95% TC (7.6)	PVC (.796)	.280	75	16.5	-35 to +75	300
RG-59/U Type Bundled 12-Coax (Miniature)	**7792A**	6.45	Belden	1/.023″ BC (20.1)	GIFPE (.102)	DF/95% TC (7.6)	PVC (.825)	.336	75	16.5	-35 to +75	300
RG-59/U Type Bundled 3-Coax	**7794A**	6.45	Belden	1/.032″ BC (10.0)	GIFPE (.145)	DF/95% TC (3.8)	PVC (.631)	.084	75	16.3	-35 to +75	300
RG-59/U Type Bundled 4-Coax	**7795A**	6.45	Belden	1/.032″ BC (10.0)	GIFPE (.145)	DF/95% TC (3.8)	PVC (.706)	.190	75	16.3	-35 to +75	300
RG-59/U Type Bundled 5-Coax	**7796A**	6.45	Belden	1/.032″ BC (10.0)	GIFPE (.145)	DF/95% TC (3.8)	PVC (.790)	.238	75	16.3	-35 to +75	300
RG-59/U Type Bundled 10-Coax	**7798A**	6.45	Belden	1/.032″ BC (10.0)	GIFPE (.145)	DF/95% TC (3.8)	PVC (1.160)	.501	75	16.3	-35 to +75	300
SVHS Coax												
Parallel Coax SVHS 2-Coaxial Plenum	**7700A**	6.49	Belden	7/.012″ TC (91.5)	FFEP (.053)	None/98% TC (7.4)	FLM (.107 x .214)	.017	75	17.3	-20 to +60	300
Parallel Coax SVHS 2-Coaxial High-Flex Design	**1807A**	6.49	Belden	7/.012″ TC (85.2)	FPE (.056)	None/90% TC (7.5)	PVC (.110 x .230)	.013	75	17.3	-40 to +60	300
Round SVHS 2-Coaxial High-Flex Design	**1808A**	6.49	Belden	7/.012″ TC (85.2)	FPE (.056)	None/90% TC (7.5)	PVC (.254)	.031	75	17.3	-40 to +60	300

*Inner conductors are entered as: number of strands/strand diameter (in inches).

See page 6.15 for key to abbreviations used in this table.

Conductor Abbreviations
BC = Bare Copper
BCCA = Bare Copper-covered Aluminum
CCS = Copper-clad Steel
SC = Silver-coated copper
SCA = Silver-coated Alloy
SCCS = Silver-coated Copper-covered Steel
SPC = Silver-plated Copper
TC = Tinned Copper

Braid Abbreviations
AL = Aluminum
BC = Bare Copper
CT = Copper-Tin Composite
SC = Silver-coated copper
SPC = Silver-plated Copper
TC = Tinned Copper

Tape Abbreviations
BF = Beldfoil®
DB = Duobond®
DBII = Duobond II
DBIII = Duobond III
DBIV = Duobond IV
DB+ = Duobond Plus®
DF = Duofoil®
F = Foil

Insulation Abbreviations
FEP = Fluorinated Ethylene Propylene
FFEP = Foam FEP
FPE = Foam Polyethylene
FRSFPE = Flame-retardant Semi-foam Polyethylene
GIFPE = Gas-injected Foam Polyethylene
PE = Solid Polyethylene
PP = Solid Polypropylene
SSFEP = Semi-solid FEP
SSPE = Semi-solid Polyethylene
TFE = Tetrafluoroethylene

Jacket Abbreviations
BELFX = Belflex®
FCP = Fluorocopolymer
FEP = Fluorinated Ethylene Propylene
FG = Fiberglass
FLM = Flamarrest®
H = Hypalon®
HDPE = High-density Polyethylene
PE = Polyethylene
PVC = Polyvinyl Chloride
PVC-M = Matte finish Polyvinyl Chloride
PVC-NC = Non-contaminating Polyvinyl Chloride
TFE-T = Tetrafluoroethylene Tape Wrap

For information on coaxial cables not listed in this table, or for a comprehensive Connector Cross-Reference, please contact Belden Electronics Division, Technical Support at: **1-800-BELDEN-1**.

Hypalon is a DuPont trademark.

Broadband Coax

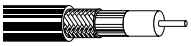
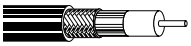
MATV Cables
Series 59

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
Series 59 • 20 AWG Solid .032″ Bare Copper-covered Steel • Foil + Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**9275**	NEC: CATV CM CEC: CM	U-500 500 U-1000▲ 1000	U-152.4 152.4 U-304.8 304.8	12.0 12.5 24.0 24.0	5.5 5.7 10.9 10.9	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.144	3.66	Duofoil® + 40% Aluminum Braid 17.0Ω/M′ 55.8Ω/km	.237	6.02	75	83%	16.2	53.1	See Chart on page 6.88		
▲U-1000 ft. put-up also available in White.												Sweep tested 5 MHz to 550 MHz.							
80°C	**9100**	NEC: CATV CM CEC: CM	U-500 U-1000▲ 1000	U-152.4 U-304.8 304.8	12.0 24.0 24.0	5.5 10.9 10.9	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.144	3.66	Duobond® II + 40% Aluminum Braid 17.0Ω/M′ 55.8Ω/km	.237	6.02	75	83%	16.2	53.1	See Chart on page 6.88		
▲U-1000 ft. put-up also available in White.												Sweep tested 5 MHz to 1 GHz.							

BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Broadband Coax

CATV Cables
Series 59

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 59 • 20 AWG Solid .032″ Bare Copper-covered Steel • Duobond® + Aluminum Braid(s) Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C 	**9104**	NEC: CATV CM CEC: CM	U-1000▲ 1000▲	U-304.8 304.8	25.0 25.0	11.4 11.4	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.144	3.66	Duobond II + 67% Aluminum Braid 12.0Ω/M′ 39.4Ω/km	.237	6.02	75	83%	16.2	53.1	See Chart on page 6.88		
▲1000 ft. and U-1000 ft. put-ups also available in Beige and White.																			
80°C	**9104N** new		1000◆	304.8	25.0	11.4	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.144	3.66	Duobond II + 67% Aluminum Braid 12.0Ω/M′ 39.4Ω/km	.237	6.02	75	83%	16.2	53.1	See Chart on page 6.88		
◆1000 ft. put-up also available in White.																			
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C 	**9104P**	NEC: CATV CMP CEC: CMP FT6	U-1000† 1000†	U-304.8 304.8	22.0 24.0	10.0 10.9	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.140	3.56	Duobond II + 67% Aluminum Braid 12.0Ω/M′ 39.4Ω/km	.203	5.16	75	83%	16.3	53.5	1 10 50 100 200 400 700 900 1000	.4 .8 1.8 2.6 3.8 5.6 7.6 8.8 9.4	1.3 2.6 5.9 8.5 12.5 18.4 24.9 28.9 30.8
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**9110**	NEC: CATV CM CEC: CM	U-1000▲ 1000	U-304.8 304.8	25.0 26.0	11.4 11.8	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.144	3.66	Duobond III + 67% Aluminum Braid 12.0Ω/M′ 39.4Ω/km	.242	6.15	75	83%	16.2	53.1	See Chart on page 6.88		
▲U-1000 ft. put-up also available in White.																			
80°C	**1186A**	NEC: CATV CM CEC: CM	1000	304.8	28.0	12.7	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.144	3.66	Duobond IV* + 67% & 46% Aluminum Braids 7.0Ω/M′ 23.0Ω/km	.265	6.73	75	83%	16.2	53.1	See Chart on page 6.88		

Sweep tested 5 MHz to 1 GHz.

BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

*Duobond IV = Duobond II + 67% aluminum braid + Duofoil® tape + 46% aluminum braid.

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Broadband Coax

CATV Cables
Series 59

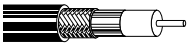
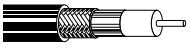
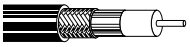
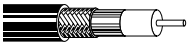
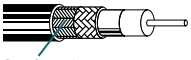
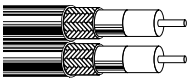
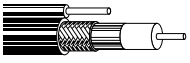
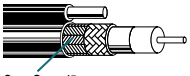
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 59 • 20 AWG Solid .032″ Bare Copper-covered Steel • Duofoil® + Tinned Copper Braid(s) Shield																			
Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C	**89108**	NEC: CATVP CMP CEC: CMP FT6	500† 1000†	152.4 304.8	19.0 38.0	8.6 17.3	20 AWG (solid) .032″ BCCS 26.0Ω/M′ 85.3Ω/km	.140	3.56	Duofoil + 96% TC Braid 2.6Ω/M′ 8.5Ω/km	.203	5.16	75	82%	16.5	54.1	1 10 50 100 200 400 700 900 1000	.4 .8 1.8 2.6 3.8 5.6 7.6 8.8 9.4	1.3 2.6 5.9 8.5 12.5 18.4 24.9 28.9 30.8
												Sweep tested 5 MHz to 400 MHz.							
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**82108**	NEC: CATVP CMP CEC: CMP FT6	U-1000† 1000†	U-304.8 304.8	35.0 35.0	15.9 15.9	20 AWG (solid) .032″ BCCS 26.0Ω/M′ 85.3Ω/km	.140	3.56	Duofoil + 96% TC Braid 2.6Ω/M′ 8.5Ω/km	.202	5.13	75	82%	16.5	54.1	1 10 50 100 200 400 700 900 1000	.4 .8 1.8 2.6 3.8 5.6 7.6 8.8 9.4	1.3 2.6 5.9 8.5 12.5 18.4 24.9 28.9 30.8
												Sweep tested 5 MHz to 400 MHz.							
Plenum • Foam FEP Insulation • Snow Beige FEP Jacket																			
200°C	**1151A**	NEC: CMP CEC: CMP FT6	1000†	304.8	40.0	18.2	20 AWG (solid) .032″ BCCS 26.0Ω/M′ 85.3Ω/km	.140	3.56	(2) Duofoil Shields + (2) TC Braids 2.3Ω/M′ 7.5Ω/km	.236	5.99	75	84%	16.5	54.1	1 10 50 100 200 400 700 900 1000	.4 .8 1.8 2.6 3.8 5.6 7.6 8.8 9.4	1.3 2.6 5.9 8.5 12.5 18.4 24.9 28.9 30.8
												Sweep tested 5 MHz to 400 MHz.							

BCCS = Bare Copper-covered Steel • DCR = DC Resistance • TC = Tinned Copper

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Broadband Coax

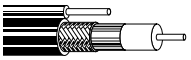
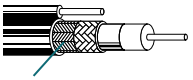
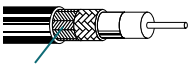
CATV Cables
Series 6

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 6 • 18 AWG Solid .040″ Bare Copper-covered Steel • Duobond® II + 60% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Polyethylene Jacket (Black or Orange)																			
Burial 80°C CoreGuard®	**9066**		1000	304.8	27.0	12.3	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C 	**9116**	NEC: CATV CM CEC: CM	U-500▲ 500▲ U-1000◆ 1000◆	U-152.4 U-152.4 U-304.8 304.8	15.5 17.5 31.0 32.0	7.0 7.9 14.1 14.5	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
▲500 ft. and U-500 ft. put-ups also available in White. ◆1000 ft. and U-1000 ft. put-ups also available in White or Beige.																			
80°C 	**9116N** new		1000	304.8	31.0	14.1	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
80°C 	**9116R**	NEC: CATVR CMR CEC: CMR FT4	500 U-1000 1000	152.4 U-304.8 304.8	17.0 34.0 35.0	7.7 15.5 15.9	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C 	**9116P**	NEC: CATVP CMP CEC: CMP FT6	U-1000 1000	U-304.8 304.8	27.0 28.0	12.3 12.7	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.170	4.32	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.235	5.97	75	83%	16.3	53.5	1 10 50 100 200 400 700 900 1000	.3 .7 1.6 2.2 3.0 4.6 6.6 7.7 8.2	1.0 2.2 5.2 7.2 9.8 15.1 21.7 25.3 26.9
												Sweep tested 5 MHz to 1 GHz.							
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C  CoreGuard®	**1545A**	NEC: CATV CM CEC: CM	U-1000 1000	U-304.8 304.8	32.0 32.0	14.5 14.5	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
80°C 	**9077**	NEC: CATV CM CEC: CM	1000	304.8	64.0	29.1	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270 x .590	6.86 x 14.99	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
80°C  .051″ (1.3mm) galvanized steel messenger.	**9117M**		1000	304.8	44.0	20.0	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270 x .410	6.86 x 10.41	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
80°C  CoreGuard® .051″ (1.3mm) galvanized steel messenger.	**1258AM**		1000	304.8	45.0	20.5	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270 x .410	6.86 x 10.41	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							

BCCS = Bare Copper-covered Steel • DCR = DC Resistance
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

Broadband Coax

CATV Cables
Series 6

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 6 • 18 AWG Solid .040″ Bare Copper-covered Steel • Duobond® II + 90% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**1530A**	NEC: CATV CM CEC: CM	U-1000▲ 1000▲	U-304.8 304.8	32.0 33.0	14.5 15.0	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 90% Aluminum Braid 5.0Ω/M′ 16.4Ω/km	.270	6.86	75	83%	16.2	53.1	See Chart on page 6.88		
▲1000 ft. and U-1000 ft. put-ups also available in Beige.												Sweep tested 5 MHz to 1 GHz.							
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**1530AP**	NEC: CATVP CMP CEC: CMP FT6	U-1000† 1000†	U-304.8 304.8	29.0 30.0	13.2 13.6	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.170	4.32	Duobond II + 90% Aluminum Braid 5.0Ω/M′ 16.4Ω/km	.235	5.97	75	83%	16.3	53.5	1 10 50 100 200 400 700 900 1000	.3 .7 1.6 2.2 3.0 4.6 6.6 7.7 8.2	1.0 2.2 5.2 7.2 9.8 15.1 21.7 25.3 26.9
												Sweep tested 5 MHz to 1 GHz.							
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C 	**1531AM**		1000	304.8	45.0	20.5	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 90% Aluminum Braid 5.0Ω/M′ 16.4Ω/km	.270 x .410	6.86 x 10.41	75	83%	16.2	53.1	See Chart on page 6.88		
.051″ (1.3mm) galvanized steel messenger.												Sweep tested 5 MHz to 1 GHz.							
80°C  CoreGuard®	**1832AM**		1000	304.8	45.0	20.5	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 90% Aluminum Braid 5.0Ω/M′ 16.4Ω/km	.270 x .410	6.86 x 10.41	75	83%	16.2	53.1	See Chart on page 6.88		
.051″ (1.3mm) galvanized steel messenger.												Sweep tested 5 MHz to 1 GHz.							
Gas-injected Foam Polyethylene Insulation • Polyethylene Jacket (Black or Orange)																			
Burial 80°C  CoreGuard®	**1532A**		1000	304.8	28.0	12.7	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 90% Aluminum Braid 5.0Ω/M′ 16.4Ω/km	.270	6.86	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							

BCCS = Bare Copper-covered Steel • DCR = DC Resistance

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†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Broadband Coax

CATV Cables
Series 6

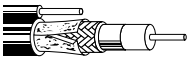
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
Series 6 • 18 AWG Solid .040″ Bare Copper-covered Steel • Duobond® III + 60% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**9118**	NEC: CATV CM CEC: CM	U-1000▲ 1000	U-304.8 304.8	31.0 32.0	14.1 14.5	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond III + 60% Aluminum Braid 6.5Ω/M′ 21.3Ω/km	.275	6.99	75	83%	16.2	53.1			See Chart on page 6.88
▲U-1000 ft. put-up also available in Beige.												Sweep tested 5 MHz to 1 GHz.							
80°C	**9119M**		1000	304.8	45.0	20.5	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond III + 60% Aluminum Braid 6.5Ω/M′ 21.3Ω/km	.275 x .416	6.99 x 10.57	75	83%	16.2	53.1			See Chart on page 6.88
.051″ (1.3mm) galvanized steel messenger.												Sweep tested 5 MHz to 1 GHz.							
80°C CoreGuard®	**1546A**	NEC: CATV CM CEC: CM	U-1000 1000	U-304.8 304.8	32.5 33.0	14.5 15.0	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond III + 60% Aluminum Braid 6.5Ω/M′ 21.3Ω/km	.275	6.99	75	83%	16.2	53.1			See Chart on page 6.88
												Sweep tested 5 MHz to 1 GHz.							
Gas-injected Foam Polyethylene Insulation • Black Polyethylene Jacket																			
Burial 80°C CoreGuard®	**1837A**		1000	304.8	28.0	12.7	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond III + 60% Aluminum Braid 6.5Ω/M′ 21.3Ω/km	.275	6.99	75	83%	16.2	53.1			See Chart on page 6.88
												Sweep tested 5 MHz to 1 GHz.							

BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

Broadband Coax

CATV Cables
Series 6

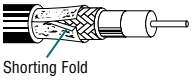
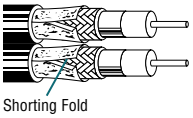
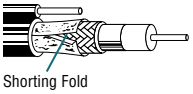
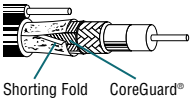
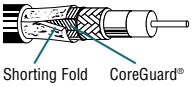
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
Series 6 • 18 AWG Solid .040″ Bare Copper-covered Steel • Duobond® III + 80% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**1613A**	NEC: CATV CM CEC: CM	U-1000 1000	U-304.8 304.8	32.0 33.0	14.5 15.0	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond III + 80% Aluminum Braid 5.2Ω/M′ 17.1Ω/km	.275	6.99	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
80°C  .051″ (1.3mm) galvanized steel messenger.	**1615AM**		1000	304.8	46.0	20.9	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond III + 80% Aluminum Braid 5.2Ω/M′ 17.1Ω/km	.275 x .416	6.99 x 10.57	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
80°C CoreGuard® .051″ (1.3mm) galvanized steel messenger.	**1616AM**		1000	304.8	46.0	20.9	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond III + 80% Aluminum Braid 5.2Ω/M′ 17.1Ω/km	.275 x .416	6.99 x 10.57	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
Gas-injected Foam Polyethylene Insulation • Polyethylene Jacket (Black or Orange)																			
Burial 80°C CoreGuard®	**1614A**		1000	304.8	29.0	13.2	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond III + 80% Aluminum Braid 5.2Ω/M′ 17.1Ω/km	.275	6.99	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							

BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

Broadband Coax

CATV Cables
Series 6

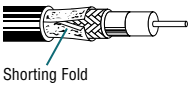
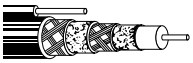
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 6 • 18 AWG Solid .040″ Bare Copper-covered Steel • Duobond Plus® + 80% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C  Shorting Fold	**9058**	NEC: CATV CM CEC: CM	U-1000◆ 1000▲	U-304.8 304.8	33.0 33.0	15.0 15.0	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond Plus + 80% Aluminum Braid 4.6Ω/M′ 15.1Ω/km	.275	6.99	75	83%	16.2	53.1	Sweep tested 5 MHz to 1 GHz.		See Chart on page 6.88
▲1000 ft. put-up also available in White. ◆U-1000 ft. put-up also available in White or Beige.																			
80°C  Shorting Fold	**9072** new	NEC: CATV CM CEC: CM	1000	304.8	70.0	31.8	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond Plus + 80% Aluminum Braid 4.6Ω/M′ 15.1Ω/km	.280 x .605	7.11 x 15.37	75	83%	16.2	53.1	Sweep tested 5 MHz to 1 GHz.		See Chart on page 6.88
80°C  Shorting Fold	**9059AM**		1000	304.8	47.0	21.4	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond Plus + 80% Aluminum Braid 4.6Ω/M′ 15.1Ω/km	.275 x .416	6.99 x 10.57	75	83%	16.2	53.1	Sweep tested 5 MHz to 1 GHz.		See Chart on page 6.88
.051″ (1.3mm) galvanized steel messenger.																			
80°C  Shorting Fold CoreGuard®	**1260AM**		1000	304.8	47.0	21.4	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond Plus + 80% Aluminum Braid 4.6Ω/M′ 15.1Ω/km	.275 x .416	6.99 x 10.57	75	83%	16.2	53.1	Sweep tested 5 MHz to 1 GHz.		See Chart on page 6.88
.051″ (1.3mm) galvanized steel messenger.																			
Gas-injected Foam Polyethylene Insulation • Polyethylene Jacket (Black or Orange)																			
Burial 80°C  Shorting Fold CoreGuard®	**9062**		1000	304.8	29.0	13.2	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond Plus + 80% Aluminum Braid 4.6Ω/M′ 15.1Ω/km	.275	6.99	75	83%	16.2	53.1	Sweep tested 5 MHz to 1 GHz.		See Chart on page 6.88

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

Broadband Coax

CATV Cables
Series 6

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 6 • 18 AWG Solid .040″ Bare Copper-covered Steel • Duobond Plus® + 90% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C  Shorting Fold	**1621A**	NEC: CATV CM CEC: CM	1000	304.8	34.0	15.5	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond Plus + 90% Aluminum Braid 3.7Ω/M′ 12.1Ω/km	.275	6.99	75	83%	16.2	53.1	See Chart on page 6.88		
Sweep tested 5 MHz to 1 GHz.																			
Series 6 • 18 AWG Solid .040″ Bare Copper-covered Steel • Duobond® IV* Quad Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**1189A**	NEC: CATV CM CEC: CM	U-500▼ U-1000▲ 1000◆	U-152.4 U-304.8 304.8	16.0 37.0 37.0	7.3 16.8 16.8	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond IV 60% & 40% Aluminum Braids 4.8Ω/M′ 15.7Ω/km	.298	7.57	75	83%	16.2	53.1	See Chart on page 6.88		
Sweep tested 5 MHz to 1 GHz.																			
▼U-500 ft. put-up also available in White. ▲U-1000 ft. put-up also available in White or Neutral. ◆1000 ft. put-up also available in White, Beige or Neutral.																			
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**1189AP** new	NEC: CATVP CMP CEC: CMP FT6	U-1000† 1000†	U-304.8 304.8	41.0 42.0	18.6 19.1	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.170	4.32	Duobond IV 60% & 40% Aluminum Braids 4.8Ω/M′ 15.7Ω/km	.248	6.30	75	83%	16.3	53.5	1 10 50 100 200 400 700 900 1000	.3 .7 1.6 2.2 3.0 4.6 6.6 7.7 8.2	1.0 2.2 5.2 7.2 9.8 15.1 21.7 25.3 26.9
Sweep tested 5 MHz to 1 GHz.																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C CoreGuard®	**1884A**	NEC: CATV CM CEC: CM	U-1000◗ 1000◗	U-304.8 304.8	39.0 38.0	17.7 17.3	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond IV 60% & 40% Aluminum Braids 4.8Ω/M′ 15.7Ω/km	.298	7.57	75	83%	16.2	53.1	See Chart on page 6.88		
Sweep tested 5 MHz to 1 GHz.																			
◗1000 ft. and U-1000 ft. put-ups also available in Neutral.																			
80°C 	**1191AM**		1000†	304.8	49.0	22.3	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond IV 60% & 40% Aluminum Braids 4.8Ω/M′ 15.7Ω/km	.298 x .433	7.57 x 11.00	75	83%	16.2	53.1	See Chart on page 6.88		
Sweep tested 5 MHz to 1 GHz.																			
.051″ (1.3mm) galvanized steel messenger.																			

BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

*Duobond IV = Duobond II + 60% aluminum braid + Duofoil® tape + 40% aluminum braid.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Broadband Coax

CATV Cables
Series 6

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 6 • 18 AWG Solid .040″ Bare Copper-covered Steel • Duobond® IV* Quad Shield																			
Gas-injected Foam Polyethylene Insulation • Polyethylene Jacket (Black or Orange)																			
Burial 80°C CoreGuard®	**1190A**		1000	304.8	33.0	15.0	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond IV 60% + 40% Aluminum Braids 4.8Ω/M′ 15.7Ω/km	.298	7.57	75	83%	16.2	53.1	Sweep tested 5 MHz to 1 GHz.	See Chart on page 6.88	
Series 6 • 18 AWG Solid .040″ Bare Copper-covered Steel • Duofoil® + Tinned Copper Braid Shield																			
Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C	**89120**	NEC: CATVP CMP CEC: CMP FT6	500† 1000†	152.4 304.8	23.0 46.0	10.5 20.9	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.170	4.32	Duofoil 95% TC Braid 1.7Ω/M′ 5.6Ω/km	.234	5.94	75	82%	16.5	54.1	Sweep tested 5 MHz to 400 MHz.	1 10 50 100 200 400 700 900 1000	.3 .7 1.6 2.2 3.0 4.6 6.6 7.7 8.2	1.0 2.2 5.2 7.2 9.8 15.1 21.7 25.3 26.9
Plenum • Foam FEP Insulation • Black Fluorocopolymer Jacket																			
150°C	**87120**	NEC: CATVP CMP CEC: CMP FT6	500† 1000†	152.4 304.8	22.5 44.0	10.2 20.0	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.170	4.32	Duofoil 95% TC Braid 1.7Ω/M′ 5.6Ω/km	.234	5.94	75	82%	16.5	54.1	Sweep tested 5 MHz to 400 MHz.	1 10 50 100 200 400 700 900 1000	.3 .7 1.6 2.2 3.0 4.6 6.6 7.7 8.2	1.0 2.2 5.2 7.2 9.8 15.1 21.7 25.3 26.9
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**82120**	NEC: CATVP CMP CEC: CMP FT6	1000†	304.8	44.0	20.0	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.170	4.32	Duofoil 95% TC Braid 1.7Ω/M′ 5.6Ω/km	.234	5.94	75	82%	16.5	54.1	Sweep tested 5 MHz to 400 MHz.	1 10 50 100 200 400 700 900 1000	.3 .7 1.6 2.2 3.0 4.6 6.6 7.7 8.2	1.0 2.2 5.2 7.2 9.8 15.1 21.7 25.3 26.9
Plenum • Foam FEP Insulation • Snow Beige Tint FEP Jacket																			
200°C	**1152A**	NEC: CMP CEC: CMP FT6	500† 1000†	152.4 304.8	29.0 53.0	13.2 24.1	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.170	4.32	(2) Duofoil Shields + (2) TC Braids 1.8Ω/M′ 5.9Ω/km	.273	6.93	75	82%	16.5	54.1	Sweep tested 5 MHz to 400 MHz.	1 10 50 100 200 400 700 900 1000	.3 .7 1.6 2.2 3.0 4.6 6.6 7.7 8.2	1.0 2.2 5.2 7.2 9.8 15.1 21.7 25.3 26.9

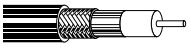
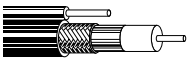
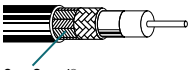
BCCS = Bare Copper-covered Steel • DCR = DC Resistance • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

*Duobond IV = Duobond II + 60% aluminum braid + Duofoil tape + 40% aluminum braid.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Broadband Coax

CATV Cables
Series 11

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 11 • 14 AWG Solid .064″ Bare Copper-covered Steel • Duofoil® + 40% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**9011**		1000	304.8	66.0	30.0	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duofoil + 40% Aluminum Braid 5.3Ω/M′ 17.4Ω/km	.400	10.16	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
Series 11 • 14 AWG Solid .064″ Bare Copper-covered Steel • Duobond® II + 60% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**1523A**	NEC: CATV CM CEC: CM	1000	304.8	63.0	28.6	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond II + 60% Aluminum Braid 4.1Ω/M′ 13.4Ω/km	.400	10.16	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
80°C 	**1523AN**		1000	304.8	68.0	30.9	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond II + 60% Aluminum Braid 4.1Ω/M′ 13.4Ω/km	.400	10.16	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
80°C	**1523R**	NEC: CATVR CMR CEC: CMR FT4	500 1000	152.4 304.8	34.0 70.0	15,4 31.8	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond II + 60% Aluminum Braid 4.1Ω/M′ 13.4Ω/km	.400	10.16	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
Plenum • Foam FEP Insulation • Black Fluorocopolymer Jacket																			
150°C	**1523AP**	NEC: CATVP CMP CEC: CMP FT6	1000 †	304.8	62.0	28.2	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.274	6.96	Duobond II + 60% Aluminum Braid 4.1Ω/M′ 13.4Ω/km	.348	8.84	75	83%	16.3	53.5	1 10 50 100 200 400 700 900 1000	.2 .4 1.0 1.4 2.3 3.7 5.3 6.4 6.9	.6 1.3 3.3 4.6 7.5 12.1 17.4 21.0 22.6
												Sweep tested 5 MHz to 1 GHz.							
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C 	**1524AM**		1000	304.8	85.0	38.6	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond II + 60% Aluminum Braid 4.1Ω/M′ 13.4Ω/km	.400 x .580	10.16 x 14.73	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
.072″ (1.83mm) galvanized steel messenger.																			
Gas-injected Foam Polyethylene Insulation • Polyethylene Jacket (Black or Orange)																			
Burial 80°C  CoreGuard®	**1525A**		1000	304.8	60.0	27.3	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond II + 60% Aluminum Braid 4.1Ω/M′ 13.4Ω/km	.400	10.16	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							

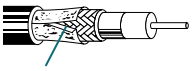
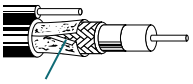
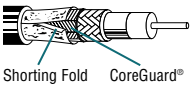
BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

† Spools are one piece, but length may vary ±10% from length shown.

Broadband Coax

CATV Cables
Series 11

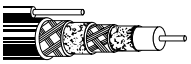
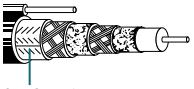
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
Series 11 • 14 AWG Solid .064″ Bare Copper-covered Steel • Duobond Plus® + 77% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C  Shorting Fold	**9064**	NEC: CATV CM CEC: CM	1000	304.8	68.0	30.9	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond Plus + 77% Aluminum Braid 3.8Ω/M′ 12.5Ω/km	.400	10.16	75	83%	16.2	53.1			See Chart on page 6.88
											Sweep tested 5 MHz to 1 GHz.								
80°C  Shorting Fold	**9065M**		1000	304.8	86.0	39.1	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond Plus + 77% Aluminum Braid 3.8Ω/M′ 12.5Ω/km	.400 x .580	10.16 x 14.73	75	83%	16.2	53.1			See Chart on page 6.88
											Sweep tested 5 MHz to 1 GHz.								
.072″ (1.83mm) galvanized steel messenger.																			
Gas-injected Foam Polyethylene Insulation • Polyethylene Jacket (Black or Orange)																			
Burial 80°C  Shorting Fold CoreGuard®	**9764**		1000	304.8	60.0	27.3	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond Plus + 77% Aluminum Braid 3.8Ω/M′ 12.5Ω/km	.400	10.16	75	83%	16.2	53.1			See Chart on page 6.88
											Sweep tested 5 MHz to 1 GHz.								

BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

Broadband Coax

CATV Cables
Series 11

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 11 • 14 AWG Solid .064″ Bare Copper-covered Steel • Duobond® IV* Quad Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C CoreGuard®	**1617A**	NEC: CATV CM CEC: CM	1000	304.8	67.0	30.5	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond IV 60% & 40% Aluminum Braids 3.0Ω/M′ 9.8Ω/km	.407	10.34	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
80°C  .072″ (1.83mm) galvanized steel messenger.	**1619AM**		1000	304.8	84.0	38.2	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond IV 60% & 40% Aluminum Braids 3.0Ω/M′ 9.8Ω/km	.407 x .560	10.34 x 14.22	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
80°C  CoreGuard® .072″ (1.83mm) galvanized steel messenger.	**1620AM**		1000	304.8	86.0	39.1	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond IV 60% & 40% Aluminum Braids 3.0Ω/M′ 9.8Ω/km	.407 x .560	10.34 x 14.22	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
Gas-injected Foam Polyethylene Insulation • Black Polyethylene Jacket																			
Burial 80°C CoreGuard®	**1618A**		1000	304.8	61.0	27.7	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond IV 60% & 40% Aluminum Braids 3.0Ω/M′ 9.8Ω/km	.407	10.34	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
Series 11 • 14 AWG Solid .064″ Bare Copper-covered Steel • Duofoil® + Tinned Copper Braids Shield																			
Plenum • Foam FEP Insulation • Snow Beige FEP Jacket																			
200°C	**1153A**	NEC: CMP CL2P CEC: CMP FT6	500† 1000†	152.4 304.8	52.5 106.0	23.9 48.2	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	(2) Duofoil Shields + (2) TC Braids 1.8Ω/M′ 5.9Ω/km	.387	9.83	75	82%	16.2	53.1	1 10 50 100 200 400 700 900 1000	.2 .4 1.2 1.7 2.5 3.5 4.6 5.3 5.6	.7 1.3 3.9 5.6 8.2 11.5 15.1 17.4 18.4
												Sweep tested 5 MHz to 400 MHz.							

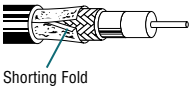
BCCS = Bare Copper-covered Steel • DCR = DC Resistance • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

* Duobond IV = Duobond II + 60% aluminum braid + Duofoil tape + 40% aluminum braid.
† Spools are one piece, but length may vary ±10% from length shown.

Broadband Coax

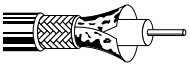
Headend/Video Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .032″ Silver-plated, Copper-covered Steel • Duobond Plus® + 95% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • PVC Jacket (Available in 12 colors)◆																			
80°C  Shorting Fold	**9167**	NEC: CATVR CMR CEC: CMR FT4	1000◆	304.8	28.0	12.7	20 AWG (solid) .032″ SPCCS 25.8Ω/M′ 84.6Ω/km	.144	3.66	Duobond Plus + 95% Aluminum Braid 4.5Ω/M′ 14.8Ω/km	.242	6.15	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							

◆Available in Black, Gray, White, Red, Blue, Yellow, Brown, Orange, Green, Violet, Tan, or Pink.

20 AWG Solid .032″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield

Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)◆

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
SDI/HDTV Digital Video 75°C 	**1505A**	NEC: CMR CEC: CMG FT4	500▲	152.4	17.5	8.0	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145	3.68	Duofoil + 95% TC Braid 3.8Ω/M′ 12.5Ω/km	.234	5.94	75	83%	16.3	53.5	1	.3	1.0
			1000◆	304.8	36.0	16.4											3.6	.6	1.8
			5000◆	1524.0	165.4	75.2											10	.9	2.9
																	71.5	2.1	6.9
																	135	2.7	8.9
																	270	3.8	12.5
																	360	4.4	14.4
																	540	5.5	18.0
																	720	6.4	21.0
																	750	6.5	21.3
																	1000	7.6	24.9
																	1500	9.3	30.5
																	2250	11.6	38.0
																	3000	13.4	44.0

For Plenum version of 1505A, see 1506A.

Also available in bundled versions. See 7794A through 7798A.

100% Sweep tested. 5 MHz to 3 GHz.

▲500 ft. put-up available in Black, Red or Blue only.
◆1000 ft. and 5000 ft. put-ups available in all ten colors: Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or White.

22 AWG Stranded (7x29) .031″ Bare Compacted Copper* • Double Tinned Copper Braid Shield

Gas-injected Foam HDPE Insulation • PVC Jacket (Matte Black, Red, Green, Blue, Yellow, White or Violet)

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
High-Flex SDI/HDTV Video Patch 75°C	**1505F** new	NEC: CM CEC: CM	1000	304.8	44.0	20.0	22 AWG (7x29) .031″ BCC 12.2Ω/M′ 40.0Ω/km	.145	3.68	TC Double Braid 95% Shield Coverage 2.4Ω/M′ 7.8Ω/km	.242	6.15	75	80%	17.0	55.7	1	.2	.7
																	3.6	.5	1.6
																	10	.9	2.9
																	71.5	2.5	8.2
																	135	3.5	11.5
																	270	5.1	16.7
																	360	6.0	19.7
																	540	7.4	24.3
																	720	8.7	28.5
																	750	8.9	29.2
																	1000	10.5	34.4
																	1500	13.3	43.6
																	2250	16.9	55.4
																	3000	20.3	66.6

100% Sweep tested. 5 MHz to 3 GHz.

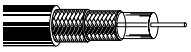
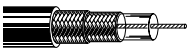
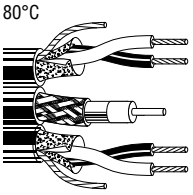
*Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • SPC = Silver-plated Copper • SPCCS = Silver-plated, Copper-covered Steel • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

Broadband Coax

Headend/Video Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .031″ Bare Copper • 98% Tinned Copper Double Braid Shield																			
Polyethylene Insulation • Polyethylene Jacket (Available in Red, Yellow, Green, Light Blue, White, Orange or Black)																			
80°C 	**8281**		500▲ 1000	152.4 304.8	37.0 74.0	16.8 33.6	20 AWG (solid) .031″ BC 9.9Ω/M′ 32.5Ω/km	.198	5.03	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.305	7.75	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .8 2.1 3.0 4.3 5.1 6.3 7.4 7.6 9.2	.8 1.8 2.6 6.9 9.8 14.1 16.6 20.7 24.3 24.9 30.2
											For Plenum version of 8281, see 88281. 100% Sweep tested. 5 MHz to 850 MHz.								
▲500 ft. put-up not available in White.																			
Flame-retardant Semi-foam Polyethylene Insulation • PVC Jacket (Available in 10 colors)◆																			
UL AWM Style 1354 (30V 80°C)	**8281B**	NEC: CMR CEC: CMG FT4	1000	304.8	85.0	38.6	20 AWG (solid) .031″ BC 9.9Ω/M′ 32.5Ω/km	.198	5.03	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.305	7.75	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .8 2.1 3.0 4.4 5.1 6.6 7.8 8.0 10.2	.8 1.8 2.6 6.9 9.8 14.4 16.6 21.5 25.4 26.2 33.5
											For Plenum version of 8281B, see 88281. 100% Sweep tested. 5 MHz to 850 MHz.								
◆8281B available in Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White or Black.																			
22 AWG Stranded (7x29) .031″ Bare Compacted Copper* • Double Tinned Copper Braid Shield																			
Polyethylene Insulation • PVC Jacket (Matte Red, Blue, Green, Gray or Black)																			
High-Flex 60°C 	**8281F**		500◆ 1000	152.4 304.8	32.0 65.0	14.5 29.5	22 AWG (7x29) .031″ BCC 12.2Ω/M′ 40.0Ω/km	.193	4.90	TC Double Braid 98% Shield Coverage 1.7Ω/M′ 5.6Ω/km	.305	7.75	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .9 2.5 3.6 5.1 6.0 7.4 8.7 8.9 10.5	.9 1.7 2.9 8.0 11.6 16.7 19.7 24.3 28.5 29.2 34.4
											100% Sweep tested. 5 MHz to 850 MHz.								
◆500 ft. put-up available in Black only.																			
Composite Cable: 20 AWG Coax with Duobond® + TC Braid • (2) **22 AWG** Stranded (7x30) Twisted Pairs Individually Beldfoil® Shielded																			
Gas-injected Foam Polyethylene (Coax) **and Polyolefin** (Pairs) **Insulation • PVC Jacket** (Available in 10 colors)†																			
Siamese Construction 80°C 	**7721A** new	NEC: CATV CM CEC: CM	500 1000	152.4 304.8	32.0 64.0	14.5 29.1	1 Coax: Series 59 20 AWG (solid) .032″ SPC 10.1Ω/M′ 33.1Ω/km	.145	3.68	Duobond II + 95% TC Braid 3.5Ω/M′ 11.5Ω/km	.235 x .511	5.97 x 12.98	75	83%	16.2	53.1	1 4 10 55 211 450 550 750 870 1000	.3 .6 .9 1.8 3.6 5.3 5.9 7.0 7.5 8.1	1.0 1.8 2.9 6.0 11.8 17.5 19.4 22.9 24.7 26.5
								Coax OD: .235	5.97										
							2 Pair: 22 AWG (stranded) (7x30) .030″ TC 10.0Ω/M′ 32.8Ω/km Black & Red, Green & White	Pair OD: .046	1.17	Individually Beldfoil Shielded 100% Shield Coverage w/Drain Wire 14.1Ω/M′ 46.3Ω/km	—	—	45	66%	34.0	111.5	—	—	—
											Sweep tested 5 MHz to 1 GHz.								
†Available in Black, Red, Brown, Orange, Green, Yellow, Blue, Violet, Gray or White.																			

BC = Bare Copper • BCC = Bare Compacted Copper • DCR = DC Resistance • SPC = Silver-plated Copper • SPCCS = Silver-plated, Copper-covered Steel • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

*Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.

DBS Cable

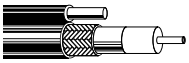
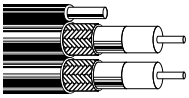
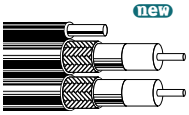
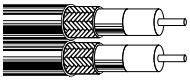
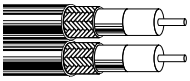
Series 59 and Series 6

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 59 • 20 AWG Solid .032″ Bare Copper-covered Steel • Duobond® II + 40% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**1830A**	NEC: CATV CM CEC: CM	U-1000	U-304.8	24.0	10.9	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/M′	.144	3.66	Duobond II + 40% Aluminum Braid 17.0Ω/M′ 55.8Ω/km	.237	6.02	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250	.8 1.8 3.4 5.2 6.5 7.0 7.7 9.3 10.3 11.9	2.5 6.0 11.0 17.1 21.4 22.9 25.2 30.5 33.8 39.0
											Sweep tested 950 MHz to 2.25 GHz.								
Series 6 • 18 AWG Solid .040″ Bare Copper or Bare Copper-covered Steel Cond. (see below) • Duobond II + 60% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • PVC Jacket (Black, Gray or White)																			
80°C	**1829A**	NEC: CATV CM CEC: CM	U-1000▲ 1000▲	U-304.8 304.8	31.0 31.0	14.1 14.1	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1
											Sweep tested 950 MHz to 2.25 GHz.								
▲1000 ft. and U-1000 ft. put-ups also available in Beige.																			
80°C	**1829AC**	NEC: CATV CM CEC: CM	U-1000 1000	U-304.8 304.8	31.0 31.0	14.1 14.1	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250 3000	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1 11.0	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1 36.1
											Sweep tested 950 MHz to 2.25 GHz.								
Gas-injected Foam Polyethylene Insulation • Black Polyethylene Jacket																			
Burial 80°C CoreGuard®	**1829B** new		1000	304.8	27.0	12.3	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1
											Sweep tested 950 MHz to 2.25 GHz.								
Burial 80°C CoreGuard®	**1829BC** new		1000	304.8	28.0	12.7	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250 3000	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1 11.0	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1 36.1
											Sweep tested 950 MHz to 2.25 GHz.								

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

DBS Cable

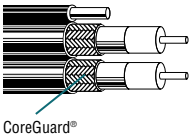
Series 6

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 6 • 18 AWG Solid .040″ Bare Copper or Bare Copper-covered Steel Cond. (see below) • Duobond® II + 60% AL Braid Shield *(cont'd)*																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**1839A**		1000	304.8	42.0	19.1	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270 x .405	6.86 x 10.29	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1
.045″ (1.14mm) copper-covered steel, static ground.											Sweep tested 950 MHz to 2.25 GHz.								
80°C 	**1839AC** new		1000▲	304.8	43.0	19.5	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270 x .405	6.86 x 10.29	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250 3000	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1 11.0	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1 36.1
▲1000 ft. put-up also available in Gray or White. .045″ (1.14mm) copper-covered steel static ground.											Sweep tested 950 MHz to 2.25 GHz.								
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C 	**1840A**		500 1000	152.4 304.8	37.0 74.0	16.8 33.6	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.273 x .703	6.93 x 17.86	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1
.045″ (1.14mm) copper-covered steel static ground.											Sweep tested 950 MHz to 2.25 GHz.								
80°C 	**1840AC** new		500▲	152.4	38.5	17.5	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.273 x .703	6.93 x 17.86	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250 3000	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1 11.0	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1 36.1
▲500 ft. put-up also available in Gray or White. .045″ (1.14mm) copper-covered steel static ground.											Sweep tested 950 MHz to 2.25 GHz.								
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C 	**1841A**	NEC: CATV CM CEC: CM	1000	304.8	66.0	30.0	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.273 x .595	6.93 x 15.11	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1
											Sweep tested 950 MHz to 2.25 GHz.								
Gas-injected Foam Polyethylene Insulation • PVC Jacket (Black, Gray or White)																			
80°C 	**1841AC** new	NEC: CATV CM CEC: CM	500	152.4	33.0	15.0	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.273 x .595	6.93 x 15.11	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250 3000	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1 11.0	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1 36.1
											Sweep tested 950 MHz to 2.25 GHz.								

AL = Aluminum • BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

DBS Cable

Series 6

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 6 • 18 AWG Solid .040″ Bare Copper-covered Steel Conductor • Duobond® II + 60% Aluminum Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black Polyethylene Jacket																			
Burial 80°C  CoreGuard®	**1843A**		500 1000	152.4 304.8	32.5 64.0	14.8 29.1	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.273 x .750	6.93 x 19.05	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1
											Sweep tested 950 MHz to 2.25 GHz.								
.045″ (1.14mm) copper-covered steel static ground.																			
Series 6 • 18 AWG Solid .040″ Bare Copper Conductor • Duobond + Aluminum Braid(s) Shield																			
Gas-injected Foam Polyethylene Insulation • PVC Jacket (Black or White)																			
80°C Shorting Fold	**7915A** new	NEC: CATV CM CEC: CM	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	16.0 18.0 34.0 34.0	7.3 8.2 15.5 15.5	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duobond Plus®+ 80% Aluminum Braid 4.6Ω/M′ 15.1Ω/km	.275	6.99	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1
											Sweep tested 5 MHz to 2.25 GHz.								
80°C	**7916A** new	NEC: CATV CM CEC: CM	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	18.0 20.0 37.0 37.0	8.2 9.1 16.8 16.8	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duobond IV* 60% & 40% Aluminum Braids 4.8Ω/M′ 15.7Ω/km	.298	7.57	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1
											Sweep tested 5 MHz to 2.25 GHz.								

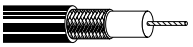
BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

*Duobond IV = Duobond II + 60% aluminum braid + Duofoil® tape + 40% aluminum braid.

Standard Analog Video Cable

75 Ohm Miniature Coax

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
30 AWG Stranded (7x38) .012″ Tinned Copper • 89% Tinned Copper Braid Shield																			
Foam HDPE Insulation • Black PVC Jacket																			
UL AWM	**9221**		100	30.5	2.3	1.0	30 AWG	.058	1.47	TC Braid	.097	2.46	75	78%	17.3	56.8	1	.7	2.3
Style 1375			U-500	U-152.4	3.5	1.6	(7x38)			89% Shield							4	1.3	4.3
(30V 60°C)			500	152.4	4.5	2.0	.012″			Coverage							5	1.6	5.2
							TC			11.7Ω/M′							10	2.2	7.2
							100.0Ω/M′			38.4Ω/km							50	5.1	16.7
							328.0Ω/km										100	7.3	23.9
																	200	10.5	34.4
																	400	15.5	50.9
																	1000	26.6	87.3
27 AWG Stranded (7x35) .017″ Bare Copper-covered Steel • 93% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**8218**		U-500	U-152.4	8.0	3.6	27 AWG	.100	2.54	TC Braid	.150	3.81	75	66%	20.5	67.3	1	1.2	3.9
Style 1354			500	152.4	8.0	3.6	(7x35)			93% Shield							10	2.4	7.9
(30V 60°C)			U-1000	U-304.8	16.0	7.3	.017″			Coverage							50	4.2	13.8
			1000	304.8	16.0	7.3	BCCS			5.7Ω/M′							100	5.7	18.7
							120.0Ω/M′			18.7Ω/km							200	8.3	27.2
							393.7Ω/km										400	12.1	39.7
																	700	16.5	54.1
																	900	19.0	62.3
																	1000	20.0	65.6

BCCS = Bare Copper-covered Steel • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Standard Analog Video Cable

RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
23 AWG Solid .023″ Bare Copper or Bare Copper-covered Steel Conductor (see below) • 95% Bare Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 75°C)	**8241**	NEC: CMX CEC: CMX	100 U-500 500 U-1000▲ 1000 2000 5000	30.5 U-152.4 152.4 U-304.8 304.8 609.6 1524.0	5.0 20.5 22.5 40.0 41.0 82.0 205.0	2.3 9.3 10.2 18.2 18.6 37.3 93.2	23 AWG (solid) .023″ BCCS 49.0Ω/M′ 160.7Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.242	6.15	75	66%	20.5	67.3	1 10 50 100 200 400 700 900 1000	.6 1.1 2.4 3.4 4.9 7.0 9.7 11.1 12.0	2.0 3.6 7.9 11.2 16.1 23.0 31.8 36.4 39.4
											For Plenum versions of 8241, see 88241 or 82241.								
▲U-1000 ft. put-up also available in Red, Yellow, Green, Lt. Blue, White or Orange.																			
Flame-retardant Semi-foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 75°C)	**8241A**	NEC: CMG CEC: CMG FT4	U-1000 1000	U-304.8 304.8	42.0 43.0	19.1 19.5	23 AWG (solid) .023″ BCCS 49.0Ω/M′ 160.7Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.242	6.15	75	66%	20.5	67.3	1 5 10 50 100 200 400 700 900 1000	.6 .9 1.1 2.4 3.4 4.9 7.0 10.1 11.7 13.2	2.0 3.0 3.6 7.9 11.2 16.1 23.0 33.1 38.2 43.3
Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 80°C)	**8241B**	NEC: CM CEC: CM	U-1000 1000	U-304.8 304.8	37.0 38.0	16.8 17.3	23 AWG (solid) .023″ BC 20.4Ω/M′ 66.9Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.9Ω/M′ 9.5Ω/km	.242	6.15	75	66%	20.5	67.3	1 10 50 100 200 400 700 900 1000	.4 1.1 2.4 3.4 4.9 7.0 9.7 11.1 12.0	1.3 3.6 7.9 11.2 16.1 23.0 31.8 36.4 39.4
22 AWG Stranded (7x30) .030″ Bare Copper • 95% Bare Copper Braid Shield																			
Foam Polyethylene Insulation • PVC Jacket (Available in Matte Black, Red, Blue, Green, White, Gray or Yellow)																			
High-Flex 60°C	**8241F**		1000	304.8	34.0	15.5	22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.242	6.15	75	78%	17.3	56.8	1 10 50 100 200 400 700 900 1000	.3 .9 2.1 3.0 4.5 6.6 8.9 10.1 10.9	1.0 3.0 6.9 9.8 14.8 21.7 29.2 33.1 35.8
23 AWG Solid .023″ Bare Copper-covered Steel Conductor • 97% Bare Copper Braid Shield																			
Plenum • FEP Insulation • Black FEP Jacket																			
200°C	**88241**	NEC: CMP CEC: CMP FT6	500† 1000†	152.4 304.8	20.5 40.0	9.3 18.2	23 AWG (solid) .023″ BCCS 49.0Ω/M′ 160.7Ω/km	.132	3.35	BC Braid 97% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.190	4.83	75	69.5%	19.5	64.0	1 10 50 100 200 400 700 900 1000	.5 1.0 2.3 3.3 5.2 8.4 11.6 13.8 14.8	1.6 3.3 7.5 10.8 17.1 27.6 38.0 45.3 48.5
Suitable for Outdoor and Direct Burial applications.																			
Plenum • FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**82241**	NEC: CMP CEC: CMP FT6	U-500† U-1000† 1000†	U-152.4 U-304.8 304.8	16.0 32.0 32.0	7.3 14.5 14.5	23 AWG (solid) .023″ BCCS 49.0Ω/M′ 160.7Ω/km	.132	3.35	BC Braid 97% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.190	4.83	75	69.5%	19.5	64.0	1 10 50 100 200 400 700 900 1000	.5 1.0 2.3 3.3 5.2 8.4 11.6 13.8 14.8	1.6 3.3 7.5 10.8 17.1 27.6 38.0 45.3 48.5

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

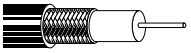
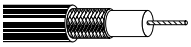
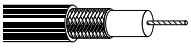
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Standard Analog Video Cable

RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
22 AWG Solid Bare Copper-covered Steel • Bare Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 60°C)	**8263**	NEC: CMX CEC: CMX	U-500 U-1000 1000	U-152.4 U-304.8 304.8	19.5 39.0 38.0	8.9 17.7 17.3	23 AWG (solid) .023″ BCCS 49.0Ω/M′ 160.7Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.242	6.15	75	66%	20.5	67.3	1 10 50 100 200 400 700 900 1000	.6 1.1 2.4 3.4 4.9 7.0 9.7 11.1 12.0	2.0 3.6 7.9 11.2 16.1 23.0 31.8 36.4 39.4
Non-contaminating Black PVC Jacket.																			
UL AWM Style 1354 (30V 80°C)	**9244**	NEC: CMX CEC: CMX	U-500 U-1000 1000 3280	U-152.4 U-304.8 304.8 1000.0	18.0 36.0 36.0 118.1	8.2 16.4 16.4 53.8	22 AWG (solid) .025″ BCCS 50.0Ω/M′ 164.0Ω/km	.146	3.71	BC Braid 85% Shield Coverage 4.5Ω/M′ 14.8Ω/km	.242	6.15	75	66%	19.4	63.6	1 10 50 100 200 400 700 900 1000	.6 1.1 2.4 3.4 4.9 7.0 9.7 11.1 12.0	2.0 3.6 7.9 11.2 16.1 23.0 31.8 36.4 39.4
											100% Sweep tested. 5 MHz to 450 MHz.								
Foam Polyethylene Insulation • Black PVC Jacket																			
75°C	**8221**		U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	18.5 18.5 36.0 36.0	8.4 8.4 16.4 16.4	22 AWG (solid) .025″ BCCS 50.0Ω/M′ 164.0Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.242	6.15	80	78%	16.3	53.5	1 10 50 100 200 400 700 900 1000	.4 .9 2.0 2.9 4.1 5.9 7.8 8.8 9.9	1.4 3.0 6.6 9.5 13.4 19.4 25.6 28.9 32.5
																			
22 AWG Stranded (7x30) .030″ Bare Copper • 95% Bare Copper Braid Shield																			
Foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 60°C) VW-1	**9659**	NEC: CMX CEC: CMX	U-500 U-1000 1000	U-152.4 U-304.8 304.8	18.0 36.0 36.0	8.2 16.4 16.4	22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M 8.5Ω/km	.242	6.15	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.3 .9 2.1 3.0 4.5 6.6 8.9 10.1 10.9	1.0 3.0 6.9 9.8 14.8 21.6 29.2 33.1 35.8
											100% Sweep tested. 5 MHz to 450 MHz.								
Non-contaminating PVC Jacket. For CCTV applications.																			
UL AWM Style 1354 (30V 80°C)	**9259**	NEC: CM CEC: CM	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.6 18.5 20.5 36.0 36.0	2.1 8.4 9.3 16.4 16.4	22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M 8.5Ω/km	.241	6.12	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.3 .9 2.1 3.0 4.5 6.6 8.9 10.1 10.9	1.0 3.0 6.9 9.8 14.8 21.7 29.2 33.1 35.8
											For Plenum versions of 9259, see 89259 or 82259.								
For CCTV applications.																			
Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C	**89259**	NEC: CMP CEC: CMP FT6	100 500 † 1000 †	30.5 152.4 304.8	5.1 18.0 34.0	2.3 8.2 15.5	22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km	.135	3.43	BC Braid 95% Shield Coverage 2.6Ω/M 8.5Ω/km	.193	4.90	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.3 .9 2.1 3.0 4.5 6.6 9.0 10.1 11.0	1.0 3.0 6.9 9.8 14.8 21.6 29.5 33.1 36.1
Suitable for Outdoor and Direct Burial applications.																			
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**82259**	NEC: CMP CEC: CMP FT6	U-1000 † 1000 †	U-304.8 304.8	31.0 33.0	14.1 15.0	22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km	.135	3.43	BC Braid 95% Shield Coverage 2.6Ω/M 8.5Ω/km	.193	4.90	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.3 .9 2.1 3.0 4.5 6.6 9.0 10.1 11.0	1.0 3.0 6.9 9.8 14.8 21.6 29.5 33.1 36.1

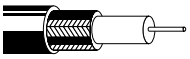
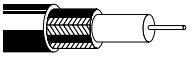
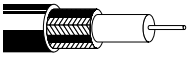
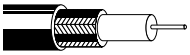
BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Standard Analog Video Cable

RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .032″ Bare Copper-covered Steel • Bare Copper Braid Shield																			
Foam Polyethylene Insulation • Black PVC Jacket																			
75°C 	**9240**		1000†	304.8	30.0	13.6	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.143	3.63	BC Braid 80% Shield Coverage 5.6Ω/M′ 18.4Ω/km	.241	6.12	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.6 1.0 2.1 3.0 4.5 6.6 8.9 10.1 10.9	2.0 3.3 6.9 9.8 14.8 21.6 29.2 33.1 35.8
											100% Sweep tested. 5 MHz to 850 MHz.								
Foam Polyethylene Insulation • Black Polyethylene Jacket																			
80°C 	**8212**		U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	16.5 19.0 32.0 32.0	7.5 8.6 14.5 14.5	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.143	3.63	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.242	6.15	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.6 1.0 2.1 3.0 4.5 6.6 8.9 10.1 10.9	2.0 3.3 6.9 9.8 14.8 21.6 29.2 33.1 35.8
											100% Sweep tested. 5 MHz to 450 MHz.								
Foam Polyethylene Insulation • Black PVC Jacket																			
80°C 	**9274**	NEC: CM CEC: CM	500 1000	152.4 304.8	16.5 32.0	7.5 14.5	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.143	3.63	BC Braid 95% Shield Coverage 3.5Ω/M′ 11.5Ω/km	.240	6.10	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.6 1.0 2.1 3.0 4.5 6.6 8.9 10.1 10.9	2.0 3.3 6.9 9.8 14.8 21.6 29.2 33.1 35.8
											100% Sweep tested. 5 MHz to 450 MHz.								
20 AWG Solid .032″ Bare Copper Conductor • 95% Bare Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 75°C) 	**1426A**	NEC: CM	U-1000	U-304.8	38.0	17.3	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145	3.68	BC Braid 95% Shield Coverage 2.6Ω/M 8.5Ω/km	.242	6.15	75	83%	16.3	53.5	1 10 50 100 200 400 700 900 1000	.3 .9 1.9 2.6 3.6 5.0 7.0 8.0 8.5	1.0 3.0 6.2 8.5 11.8 16.4 23.0 26.3 27.9

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

†Spools and/or UnReel® cartons are one piece, but length may vary ±5% from length shown.

Standard Analog Video Cable

RG-6/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
21 AWG Solid .028″ Bare Copper-covered Steel • Two Bare Copper Braids (97% Shield Coverage)																			
Polyethylene Insulation • Black Polyethylene Jacket																			
MATV Cable 80°C	**8215**		1000	304.8	74.0	33.6	21 AWG (solid) .028″ BCCS 32.0Ω/M′ 105.0Ω/km	.185	4.70	(2) BC Braids 97% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.332	8.43	75	66%	20.5	67.2	1 10 50 100 200 400 700 900 1000	.4 .8 1.9 2.7 4.1 5.9 8.1 9.4 9.8	1.3 2.6 6.2 8.9 13.4 19.4 26.6 30.8 32.1
											100% Sweep tested. 5 MHz to 450 MHz.								
18 AWG Solid .037″ Bare Copper • Two Bare Copper Braids (98% Shield Coverage)																			
Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**9290**	NEC: CM CEC: CM	1000 2000	304.8 609.6	60.0 120.0	27.3 54.5	18 AWG (solid) .037″ BC 7.5Ω/M′ 24.6Ω/km	.180	4.57	(2) BC Braids 98% Shield Coverage 2.0Ω/M′ 6.6Ω/km	.288	7.32	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.2 .7 1.7 2.5 3.6 5.3 7.2 8.3 8.8	.7 2.3 5.6 8.2 11.8 17.4 23.6 27.2 28.9
											100% Sweep tested. 5 MHz to 450 MHz.								
18 AWG Solid .040″ Bare Copper • Duofoil® + Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 80°C)	**9248**	NEC: CM CEC: CM	U-500 500 U-1000 1000 1640 3280	U-152.4 152.4 U-304.8 304.8 500.0 1000.0	17.0 18.0 33.0 33.0 55.8 108.2	7.7 8.2 15.0 15.0 25.3 49.2	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duofoil + 60% TC Braid 5.6Ω/M′ 18.4Ω/km	.270	6.86	75	82%	16.2	53.1	1 10 50 100 200 400 700 900 1000	.3 .7 1.5 2.0 2.8 4.0 5.3 6.1 6.5	1.0 2.3 4.9 6.6 9.2 13.1 17.4 20.0 21.3
											For Plenum versions of 9248, see 89248 or 82248. 100% Sweep tested. 5 MHz to 450 MHz.								
Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C	**89248**	NEC: CMP CEC: CMP FT6	500† 1000† 2000†	152.4 304.8 609.6	18.0 36.0 70.0	8.2 16.4 31.8	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.170	4.32	Duofoil + 65% TC Braid 5.1Ω/M′ 16.7Ω/km	.222	5.64	75	82%	16.2	53.1	1 10 50 100 200 400 700 900 1000	.3 .66 1.5 2.1 3.1 4.5 6.0 6.9 7.3	1.0 2.2 4.9 6.9 10.2 14.8 19.7 22.6 23.9
											100% Sweep tested. 5 MHz to 450 MHz.								
Suitable for Outdoor and Direct Burial applications.																			
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**82248**	NEC: CMP CEC: CMP FT6	U-1000† 1000†	U-304.8 304.8	32.0 33.0	14.5 15.0	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.170	4.32	Duofoil + 65% TC Braid 5.1Ω/M′ 16.7Ω/km	.222	5.64	75	82%	16.2	53.1	1 10 50 100 200 400 700 900 1000	.3 .7 1.6 2.2 3.0 4.6 6.6 7.7 8.2	1.0 2.3 5.2 7.2 9.8 15.1 21.6 25.3 26.9
											100% Sweep tested. 5 MHz to 450 MHz.								

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

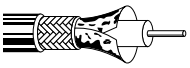
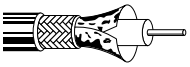
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Standard Analog Video Cable

RG-11/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
18 AWG Stranded (7x26) .048″ Tinned Copper • 97% Bare Copper Braid Shield																			
Flame-retardant Semi-foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**8238**	NEC: CM CEC: CM	500	152.4	59.0	26.8	18 AWG (7x26) .048″ TC 6.1Ω/M′ 20.0Ω/km	.285	7.24	BC Braid 97% Shield Coverage 1.2Ω/M′ 3.9Ω/km	.405	10.29	75	66%	20.5	67.2	1	.2	.6
			1000	304.8	117.0	53.2											10	.7	2.2
																	50	1.3	4.3
																	100	2.0	6.6
																	200	2.9	9.5
																	400	4.2	13.8
																	700	5.8	19.0
																	900	6.8	22.3
																	1000	7.1	23.3
Polyethylene Insulation • Non-contaminating Black PVC Jacket																			
60°C VW-1	**8261**		500	152.4	52.5	23.9	18 AWG (7x26) .048″ TC 6.1Ω/M′ 20.0Ω/km	.285	7.24	BC Braid 97% Shield Coverage 1.2Ω/M′ 3.9Ω/km	.405	10.29	75	66%	20.5	67.2	1	.2	.6
			1000	304.8	104.0	47.3											10	.7	2.2
																	50	1.3	4.3
																	100	2.0	6.6
																	200	2.9	9.5
																	400	4.2	13.8
																	700	5.8	19.0
																	900	6.8	22.3
																	1000	7.1	23.3
14 AWG Solid .064″ Bare Copper • Duofoil® + Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
80°C 	**9292**		1000	304.8	81.0	36.8	14 AWG (solid) .064″ BC 2.6Ω/M′ 8.5Ω/km	.280	7.11	Duofoil + 60% TC Braid 3.0Ω/M′ 9.8Ω/km	.405	10.29	75	84%	16.1	52.8	1	.2	.6
											For Plenum versions of 9292, see 89292.						10	.5	1.6
																	50	.9	3.0
																	100	1.3	4.3
																	200	1.6	5.3
																	400	2.3	7.6
											100% Sweep tested. 5 MHz to 450 MHz.						700	3.3	10.8
																	900	4.0	13.1
																	1000	4.3	14.1
Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C 	**89292**	NEC: CMP CATVP CEC: CMP FT6	500†	152.4	39.5	18.0	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.274	6.96	Duofoil + 63% TC Braid 3.0Ω/M′ 9.8Ω/km	.346	8.79	75	83%	16.2	53.1	1	.2	.5
			1000†	304.8	77.0	35.0											10	.4	1.3
																	50	1.0	3.3
																	100	1.5	4.9
											100% Sweep tested. 5 MHz to 450 MHz.						200	2.2	7.2
																	400	3.3	10.8
																	700	4.5	14.8
																	900	5.2	17.1
																	1000	5.5	18.0
14 AWG Solid .064″ Bare Copper • 97% Bare Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket																			
80°C	**8213**		500	152.4	44.0	20.0	14 AWG (solid) .064″ BC 2.6Ω/M′ 8.5Ω/km	.285	7.24	BC Braid 97% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.405	10.29	75	84%	16.1	52.8	1	.2	.6
			1000	304.8	87.0	39.5											10	.4	1.1
			2000	609.6	172.0	78.2											50	.9	3.0
																	100	1.3	4.3
																	200	1.9	6.2
																	400	2.9	9.5
											100% Sweep tested. 5 MHz to 450 MHz.						700	4.1	13.5
																	900	4.8	15.7
																	1000	5.2	17.1

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Precision Video Cable for Analog and Digital

Sub-Miniature RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
25 AWG Stranded (19x37) .021″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*																			
75°C	**1865A**	NEC: CMR CEC: CMG FT4	1000	304.8	16.0	7.3	25 AWG (19x37) .021″ BC 27.4Ω/M′ 89.9Ω/km	.094	2.39	Duofoil + 95% TC Braid 5.4Ω/M′ 17.7Ω/km	.150	3.81	75	82%	16.5	54.1	1	.5	1.5
																	3.6	1.0	3.1
																	10	1.6	5.2
																	71.5	3.7	12.1
																	135	5.0	16.4
																	270	7.1	23.3
																	360	8.2	26.9
											100% Sweep tested. 5 MHz to 3 GHz.						540	10.1	33.1
																	720	11.8	38.7
																	750	12.0	39.4
																	1000	13.9	45.6
																	1500	17.0	55.8
																	2250	20.8	68.2
																	3000	24.0	78.7
23 AWG Solid .023″ Bare Copper • Duofoil + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*																			
SDI/HDTV Digital Video 75°C	**1855A**	NEC: CMR CEC: CMG FT4	500▲ 1000 U-1000◆	152.4 304.8 U-304.8	9.0 18.0 18.0	4.1 8.2 8.2	23 AWG (solid) .023″ BC 20.1Ω/M′ 65.9Ω/km	.102	2.59	Duofoil + 95% TC Braid 7.6Ω/M′ 24.9Ω/km	.159	4.03	75	83%	16.3	53.5	1	.4	1.3
																	3.6	.8	2.6
																	10	1.2	3.9
																	71.5	3.1	10.0
																	135	3.8	12.5
																	270	5.4	17.7
											Also available in multiples, bundled. See 7787A through 7792A.						360	6.2	20.3
																	540	7.7	25.3
											100% Sweep tested. 5 MHz to 3 GHz.						720	9.5	31.1
																	750	9.6	31.5
																	1000	10.5	34.4
																	1500	13.0	42.6
																	2250	16.0	52.5
																	3000	18.5	60.7

▲500 ft. put-up available in Black only.
◆U-1000 ft. put-up available in Gray only.

BC = Bare Copperr • DCR = DC Resistance • HDPE = Foam High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

*Available in Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White or Black.

Precision Video Cable for Analog and Digital

RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
23 AWG Stranded (7x32) .023″ Bare Compacted Copper* • 95% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black Polyethylene Jacket																			
80°C	**8279**		500	152.4	14.5	6.6	23 AWG	.146	3.71	TC	.220	5.59	75	66%	21.0	68.9	1	.4	1.1
			1000	304.8	28.0	12.7	(7x32)			+ 95%							3.6	.6	2.0
							.023″			Shield							10.0	1.2	3.9
							BCC			Coverage							71.5	3.3	10.8
							19.1Ω/M′			4.5Ω/M′							135	4.7	15.4
							62.6Ω/km			14.8Ω/km							270	6.8	22.3
											100% Sweep tested. 5 MHz to 850 MHz.						360	8.0	26.2
																	540	9.9	32.5
																	720	11.6	38.0
																	750	11.9	39.0
																	1000	13.8	45.3
23 AWG Solid .022″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black Polyethylene Jacket																			
80°C	**9209**		U-500	U-152.4	15.0	6.8	23 AWG	.146	3.71	Duofoil	.220	5.59	75	66%	21.0	68.9	1	.4	1.2
			U-1000	U-304.8	29.0	13.2	(solid)			+ 95%							3.6	.5	1.8
							.022″			TC Braid							10.0	1.2	3.8
							BC			4.5Ω/M′							71.5	2.9	9.5
							20.4Ω/M′			14.8Ω/km							135	4.0	13.0
							66.9Ω/km										270	5.6	18.4
											100% Sweep tested. 5 MHz to 850 MHz.						360	6.6	21.5
																	540	8.3	27.2
																	720	9.7	31.7
																	750	9.9	32.5
																	1000	11.6	38.0
Flame-retardant Semi-foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**9209A**	NEC:	U-1000	U-304.8	35.0	15.9	23 AWG	.146	3.71	Duofoil	.220	5.59	75	66%	20.5	67.2	1	.4	1.2
Style 1354		CMR					(solid)			+ 95%							3.6	.5	1.8
(30V 75°C)		CEC:					.022″			TC Braid							10.0	1.2	3.8
		CMG FT4					BC			4.5Ω/M′							71.5	2.9	9.5
							20.4Ω/M′			14.8Ω/km							135	4.0	13.0
							66.9Ω/km										270	5.6	18.4
											100% Sweep tested. 5 MHz to 850 MHz.						360	6.6	21.5
																	540	8.6	28.3
																	720	10.1	33.2
																	750	10.4	34.1
																	1000	12.8	41.9

BC = Bare Copper • BCC = Bare Compacted Copperr • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

*Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.

Precision Video Cable for Analog and Digital

RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .032″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)◆																			
SDI/HDTV Digital Video 75°C	**1505A**	NEC: CMR CEC: CMG FT4	500▲	152.4	17.5	8.0	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145	3.68	Duofoil + 95% TC Braid 3.8Ω/M′ 12.5Ω/km	.234	5.94	75	83%	16.3	53.5	1	.3	1.0
			1000◆	304.8	36.0	16.4											3.6	.6	1.8
			5000◆	1524.0	165.4	75.2											10	.9	2.9
																	71.5	2.1	6.9
											For Plenum version of 1505A, see 1506A.						135	2.7	8.9
																	270	3.8	12.5
																	360	4.4	14.4
											Also available in bundled versions. See 7794A through 7798A.						540	5.5	18.0
																	720	6.4	21.0
											100% Sweep tested. 5 MHz to 3 GHz.						750	6.5	21.3
																	1000	7.6	24.9
																	1500	9.3	30.5
																	2250	11.6	38.0
																	3000	13.4	44.0

▲500 ft. put-up available in Black, Red or Blue only.
◆1000 ft. and 5000 ft. put-ups available in all ten colors: Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or White.

22 AWG Stranded (7x29) .031″ Bare Compacted Copper* • Double Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Matte Black, Red, Green, Blue, Yellow, White or Violet)																			
High-Flex SDI/HDTV Video Patch 75°C	**1505F** new	NEC: CM CEC: CM	1000	304.8	44.0	20.0	22 AWG (7x29) .031″ BCC 12.2Ω/M′ 40.0Ω/km	.145	3.68	TC Double Braid 95% Shield Coverage 2.4Ω/M′ 7.8Ω/km	.242	6.15	75	80%	17.0	55.7	1	.2	.7
																	3.6	.5	1.6
																	10	.9	2.9
																	71.5	2.5	8.2
																	135	3.5	11.5
																	270	5.1	16.7
																	360	6.0	19.7
											100% Sweep tested. 5 MHz to 3 GHz.						540	7.4	24.3
																	720	8.7	28.5
																	750	8.9	29.2
																	1000	10.5	34.4
																	1500	13.3	43.6
																	2250	16.9	55.4
																	3000	20.3	66.6

*Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.

20 AWG Solid .032″ Bare Copper • Duofoil + 95% Tinned Copper Braid Shield																			
Plenum • Foam FEP Insulation • Flamarrest® Jacket (Available in 10 colors)◗																			
SDI/HDTV Digital Video 75°C	**1506A**	NEC: CMP CEC: CMP FT6	500†▼	152.4	16.5	7.5	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.133	3.38	Duofoil + 95% TC Braid 3.8Ω/M′ 10.5Ω/km	.199	5.05	75	84%	16.1	52.8	1	.3	1.0
			1000†◗	304.8	33.0	15.0											3.6	.6	2.0
																	10	1.1	3.4
																	71.5	2.3	7.4
																	135	3.2	10.5
																	270	4.6	14.9
																	360	5.3	17.2
											100% Sweep tested. 5 MHz to 3 GHz.						540	6.4	21.0
																	720	7.3	23.9
																	750	7.5	24.6
																	1000	9.4	30.8
																	1500	12.8	42.0
																	2250	17.5	57.4
																	3000	21.9	71.8

Suitable for Outdoor and Direct Burial applications.
▼500 ft. put-up available in Black or Natural only.
◗1000 ft. put-up available in all ten colors: Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or Natural.

20 AWG Solid .031″ Bare Copper • 98% Tinned Copper Double Braid Shield																			
Polyethylene Insulation • Gray Non-contaminating PVC Jacket																			
60°C VW-1	**9231**	NEC: CMH CEC: CMH FT1	500	152.4	38.0	17.3	20 AWG (solid) .031″ BC 9.9Ω/M′ 32.5Ω/km	.198	5.03	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.305	7.75	75	66%	21.0	68.9	1	.3	1.0
			1000	304.8	76.0	34.5											3.6	.5	1.6
																	10.0	.8	2.6
																	71.5	2.0	6.6
																	135	3.5	11.5
											100% Sweep tested. 5 MHz to 850 MHz.						270	4.3	14.1
																	360	5.0	16.4
																	540	6.2	20.3
																	720	7.2	23.6
																	750	7.4	24.3
																	1000	9.1	29.8

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

†Spools are one piece, but length may vary ±10% from length shown.

Precision Video Cable for Analog and Digital

RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .031″ Bare Copper • 98% Tinned Copper Double Braid Shield *(continued)*																			
Polyethylene Insulation • Clear Polyethylene Jacket																			
Indoor Use 80°C	**9141**		1000	304.8	73.0	33.2	20 AWG (solid) .031″ BC 9.9Ω/M′ 32.5Ω/km	.200	5.06	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.305	7.75	75	66%	20.0	65.6	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .8 2.0 3.5 4.3 5.0 6.2 7.2 7.4 9.1	1.0 1.6 2.6 6.6 11.5 14.1 16.4 20.3 23.6 24.3 29.8
											100% Sweep tested. 5 MHz to 850 MHz.								
20 AWG Solid .031″ Bare Copper • 98% Tinned Copper Double Braid Shield																			
Polyethylene Insulation • Polyethylene Jacket (Available in Red, Yellow, Green, Light Blue, White, Orange or Black)																			
80°C	**8281**		500▲ 1000	152.4 304.8	37.0 74.0	16.8 33.6	20 AWG (solid) .031″ BC 9.9Ω/M′ 32.5Ω/km	.198	5.03	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.305	7.75	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .8 2.1 3.0 4.3 5.1 6.3 7.4 7.6 9.2	.8 1.8 2.6 6.9 9.8 14.1 16.6 20.7 24.3 24.9 30.2
											For Plenum version of 8281, see 88281. 100% Sweep tested. 5 MHz to 850 MHz.								
▲500 ft. put-up not available in White.																			
Flame-retardant Semi-foam Polyethylene Insulation • PVC Jacket (Available in 10 colors)◆																			
UL AWM Style 1354 (30V 80°C)	**8281B**	NEC: CMR CEC: CMG FT4	1000	304.8	85.0	38.6	20 AWG (solid) .031″ BC 9.9Ω/M′ 32.5Ω/km	.198	5.03	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.305	7.75	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .8 2.1 3.0 4.4 5.1 6.6 7.8 8.0 10.2	.8 1.8 2.6 6.9 9.8 14.4 16.6 21.5 25.4 26.2 33.5
											For Plenum version of 8281B, see 88281. 100% Sweep tested. 5 MHz to 850 MHz.								
◆8281B available in Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White or Black.																			
22 AWG Stranded (7x29) .031″ Bare Compacted Copper* • Double Tinned Copper Braid Shield																			
Polyethylene Insulation • PVC Jacket (Matte Red, Blue, Green, Gray or Black)																			
High-Flex 60°C	**8281F**		500◆ 1000	152.4 304.8	32.0 65.0	14.5 29.5	22 AWG (7x29) .031″ BCC 12.2Ω/M′ 40.0Ω/km	.193	4.90	TC Double Braid 98% Shield Coverage 1.7Ω/M′ 5.6Ω/km	.305	7.75	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .9 2.5 3.6 5.1 6.0 7.4 8.7 8.9 10.5	.9 1.7 2.9 8.0 11.6 16.7 19.7 24.3 28.5 29.2 34.4
											100% Sweep tested. 5 MHz to 850 MHz.								
◆500 ft. put-up available in Black only.																			
20 AWG Solid .031″ Bare Copper • 98% Tinned Copper Double Braid Shield																			
Plenum • FEP Insulation • Black Fluorocopolymer Jacket																			
150°C	**88281**	NEC: CMP CEC: CMP FT6	500† 1000†	152.4 304.8	46.0 86.0	20.9 39.1	20 AWG (solid) .032″ BC 9.9Ω/M′ 32.5Ω/km	.185	4.70	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.271	6.88	75	71%	19.0	62.4	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.2 .5 .8 2.3 3.3 5.1 6.1 8.0 9.7 10.0 12.3	.7 1.6 2.6 7.5 10.8 16.7 20.0 26.2 31.8 32.8 40.3
											100% Sweep tested. 5 MHz to 216 MHz.								
Suitable for Outdoor and Direct Burial applications.																			

BC = Bare Copper • DCR = DC Resistance • BCC = Bare Compacted Copper • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

*Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.
†Spools are one piece, but length may vary ±10% from length shown.

Precision Video Cable for Analog and Digital

RG-6/U and RG-11/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-6/U Type • 18 AWG Solid .040″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*																			
SDI/HDTV Digital Video 75°C	**1694A** new	NEC: CMR CEC: CMG FT4	500▲ 1000 4500	152.4 304.8 1371.6	23.0 45.0 200.5	10.5 20.5 91.1	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duofoil + 95% TC Braid 2.8Ω/M′ 9.2Ω/km	.275	6.99	75	82%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .5 .7 1.6 2.1 3.0 3.4 4.3 4.9 5.0 5.9 7.3 9.1 10.7	.8 1.5 2.4 5.2 6.9 9.7 11.3 13.9 16.1 16.4 19.3 24.0 30.0 35.0
											For Plenum version of 1694A, see 1695A. Also available in bundled versions. See 7710A through 7713A. 100% Sweep tested. 5 MHz to 3 GHz.								
▲500 ft. put-up available in Black only.																			
Plenum • Foam FEP Insulation • Flamarrest® Jacket (Available in 10 colors)**																			
SDI/HDTV Digital Video 75°C	**1695A** new	NEC: CMP CEC: CMP FT6	500†◆ 1000†	152.4 304.8	22.5 45.0	10.2 20.5	18 AWG (solid) . 040″ BC 6.4Ω/M′ 21.0Ω/km	.170	4.32	Duofoil + 95% TC Braid 2.8Ω/M′ 9.2Ω/km	.234	5.94	75	82%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .5 .8 1.8 2.4 3.4 4.0 5.2 6.1 7.3 7.5 9.2 11.6 13.7	.8 1.5 2.5 5.8 7.9 11.2 13.1 17.1 20.0 23.9 24.6 30.2 38.0 44.9
											100% Sweep tested. 5 MHz to 3 GHz.								
◆500 ft. put-up available in Black, Red, Yellow, Violet or Natural only.																			
RG-11/U Type • 14 AWG Solid .064″ Bare Copper • Duofoil + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*																			
SDI/HDTV Digital Video 75°C	**7731A**	NEC: CMR CEC: CMG FT4	500▼ 1000 4000	152.4 304.8 1219.2	48.0 94.0 467.0	21.8 42.8 212.3	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.280	7.11	Duofoil + 95% TC Braid 1.5Ω/M′ 4.9Ω/km	.405	10.3	75	85%	16.0	52.4	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .3 .5 1.1 1.5 2.1 2.5 3.1 3.6 3.7 4.3 5.5 6.9 8.2	.5 1.0 1.5 3.6 4.8 6.9 8.0 10.0 11.7 12.0 14.1 18.0 22.6 26.9
											100% Sweep tested. 5 MHz to 3 GHz.								
▼500 ft. put-up available in Red or Black only.																			
Plenum • Foam FEP Insulation • Fluorocopolymer Jacket (Available in 10 colors)**																			
SDI/HDTV Digital Video 150°C	**7732A** new	NEC: CMP CEC: CMP FT6	500▸ 1000 2000✱	152.4 304.8 609.6	45.0 88.0 176.0	20.5 40.0 80.0	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.274	6.96	Duofoil + 95% TC Braid 2.5Ω/M′ 8.2Ω/km	.348	8.84	75	83%	16.3	53.5	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .3 .4 1.2 1.8 2.6 3.1 3.9 4.6 4.7 5.5 6.9 9.2 10.2	.5 .9 1.3 4.1 5.8 8.5 10.2 12.8 15.0 15.4 18.0 22.7 30.2 33.5
											100% Sweep tested. 5 MHz to 3 GHz.								
▸500 ft. put-up available in Black or Natural only. ✱2000 ft. put-up available in Natural only. Suitable for Outdoor and Direct Burial applications.																			

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG-U cables not listed.

* Available in Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or White.
** Available in Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or Natural.
† Spools are one piece, but length may vary ±10% from length shown.

Brilliance VideoFLEX® Snake Cable for Precision Analog and Digital Video

Miniature and RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Miniature • 23 AWG Solid .023″ Bare Copper • Duofoil® + 95% Tinned Copper Braid (100% Shield Coverage)																				
Solid Copper, Gas-injected Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: See chart below)																				
SDI/HDTV Digital Video 75°C **(1855A Bundled)**	**7787A** new	NEC: CMR CEC: CMG FT4	3	500 1000	152.4 304.8	47.5 94.0	21.6 42.7	23 AWG (solid) .023″ BC 20.1Ω/M′ 65.9Ω/km	.102 Coax OD: .159	2.55 4.03	Duofoil + 95% TC Braid 7.6Ω/M′ 24.9Ω/km	.432	10.97	75	83%	16.5	54.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500	.4 .8 1.2 3.1 3.8 5.4 6.2 7.7 9.1 9.5 10.5 13.0	1.3 2.6 3.9 10.0 12.5 17.7 20.3 25.3 29.8 31.2 34.4 42.6
	7788A new	NEC: CMR CEC: CMG FT4	4	1000	304.8	111.0	50.5	same as above	.102 Coax OD: .159	2.55 4.03	same as above	.481	12.22							
	7789A new	NEC: CMR CEC: CMG FT4	5	500 1000	152.4 304.8	72.5 141.0	33.0 64.1	same as above	.102 Coax OD: .159	2.55 4.03	same as above	.539	13.69							
	7790A new	NEC: CMR CEC: CMG FT4	6	500 1000	152.4 304.8	88.5 175.0	40.2 79.5	same as above	.102 Coax OD: .159	2.55 4.03	same as above	.597	15.16		Sweep tested 5 MHz to 3 GHz.					
	7791A new	NEC: CMR CEC: CMG FT4	10	500 1000	152.4 304.8	155.5 303.0	70.7 137.7	same as above	.102 Coax OD: .159	2.55 4.03	same as above	.796	20.22							
	7792A new	NEC: CMR CEC: CMG FT4	12	500 1000	152.4 304.8	171.5 353.0	78.0 160.5	same as above	.102 Coax OD: .159	2.55 4.03	same as above	.825	20.96							
RG-59/U Type • 20 AWG Solid .032″ Bare Copper • Duofoil + 95% Tinned Copper Braid (100% Shield Coverage)																				
Gas-injected Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: See chart below)																				
SDI/HDTV Digital Video 75°C **(1505A Bundled)**	**7794A** new	NEC: CMR CEC: CMG FT4	3	500 1000	152.4 304.8	94.5 188.0	43.0 85.5	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145 Coax OD: .235	3.68 5.97	Duofoil + 95% TC Braid 3.8Ω/M′ 12.5Ω/km	.631	16.03	75	83%	16.3	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500	.3 .6 .9 2.1 2.7 3.8 4.4 5.5 6.4 6.5 7.6 9.3	1.0 1.8 2.9 6.9 8.9 12.5 14.4 18.0 21.0 21.3 24.9 30.5
	7795A new	NEC: CMR CEC: CMG FT4	4	500 1000	152.4 304.8	116.5 237.0	53.0 107.7	same as above	.145 Coax OD: .235	3.68 5.97	same as above	.706	17.93							
	7796A new	NEC: CMR CEC: CMG FT4	5	500 1000	152.4 304.8	150.0 293.0	68.2 133.2	same as above	.145 Coax OD: .235	3.68 5.97	same as above	.790	20.07		Sweep tested 5 MHz to 3 GHz.					
	7798A new	NEC: CMR CEC: CMG FT4	10	500 1000	152.4 304.8	319.5 625.0	145.2 284.1	same as above	.145 Coax OD: .235	3.68 5.97	same as above	1.166	29.62							

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

See Connector Reference Guide at www.belden.com for connector recommendations.

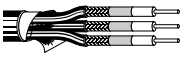
Color Code Chart

Cond.	Color	Cond.	Color	Cond.	Color
1	Red	5	Yellow	9	Violet
2	Green	6	Brown	10	Black
3	Blue	7	Orange	11	Pink
4	White	8	Gray	12	Tan

Brilliance VideoFLEX® Snake Cable for Precision Analog and Digital Video

RG-6/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-6/U Type • 18 AWG Solid .040″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																				
Gas-injected Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: See chart below)																				
SDI/HDTV Digital Video 60°C **(1694A Bundled)** 	**7710A**	NEC: CMR CEC: CMG FT4	3	500 1000	152.4 304.8	131.5 273.0	59.8 124.1	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180 Coax OD: .257	4.57 6.99	Duofoil + 95% TC Braid 2.8Ω/M′ 9.2Ω/km	.770	19.56	75	82%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2500 3000	.2 .5 .7 1.6 2.1 3.0 3.4 4.3 4.9 5.0 5.9 7.3 9.7 10.0	.8 1.5 2.4 5.2 6.9 9.7 11.3 13.9 16.1 16.4 19.3 24.0 31.8 32.8
	7711A	NEC: CMR CEC: CMG FT4	4	500 1000	152.4 304.8	174.0 339.0	79.1 154.1	same as above	.180 Coax OD: .257	4.57 6.99	same as above	.900	22.86							
	7712A	NEC: CMR CEC: CMG FT4	5	500 1000	152.4 304.8	209.5 440.0	95.2 200.0	same as above	.180 Coax OD: .257	4.57 6.99	same as above	.942	23.93							
	7713A	NEC: CMR CEC: CMG FT4	10	500 1000	152.4 304.8	450.0 878.0	204.5 399.1	same as above	.180 Coax OD: .257	4.57 6.99	same as above	1.386	35.20							

Sweep tested 5 MHz to 3 GHz.

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.
See Connector Reference Guide at www.belden.com for connector recommendations.

Color Code Chart

Cond.	Color	Cond.	Color
1	Red	**6**	Brown
2	Green	**7**	Orange
3	Blue	**8**	Gray
4	White	**9**	Violet
5	Yellow	**10**	Black

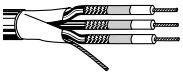
Bundled RGB Cable

Miniature and High-Flex Type

BRILLIANCE®

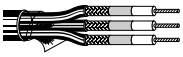
Miniature • 30 AWG Stranded (7x38) .012″ Tinned Copper • Duofoil® + 90% TC Braid (Coaxes) • 100% Overall Beldfoil® Shield

Foam HDPE Insulation • Overall Black PVC Jacket (Color Code: Red, Green, Blue, White, Yellow)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
UL AWM Style 1354 (30V 60°C) 	**1520A**	NEC: CL2	3	500 1000	152.4 304.8	25.0 50.0	11.4 22.7	30 AWG (7x38) .012″ TC 100.0Ω/M′ 328.0Ω/km	.056 Coax OD: .102	1.42 2.59	Coaxes: Duofoil + 90% TC Braid Overall: Beldfoil 9.5Ω/M′ 31.2Ω/km	.283	7.19	75	78%	17.3	56.7	1 5 10 30 50 100 200 400 700 900 1000	.8 1.5 2.2 4.0 5.4 8.2 12.5 18.9 26.5 30.8 32.8	2.6 4.9 7.2 13.1 17.7 26.9 41.0 62.0 86.9 101.0 107.6
	1521A	NEC: CL2	4	500 1000	152.4 304.8	30.0 60.0	13.6 27.3	same as above	.056 Coax OD: .102	1.42 2.59	same as above	.310	7.87							
	1522A	NEC: CL2	5	500 1000	152.4 304.8	34.0 68.0	15.5 30.9	same as above	.056 Coax OD: .102	1.42 2.59	same as above	.338	8.59	100% Sweep tested. 10 MHz to 40 MHz.						

High-Flex • 26 AWG Stranded (7x34) .019″ Bare Copper • Duofoil + 93% Tinned Copper Braid Shield

Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: Red, Green, Blue, White, Yellow)

60°C 	**1406B**		3	1000†	304.8	75.0	34.1	26 AWG (7x34) .019″ BC 41.5Ω/M′ 136.0Ω/km	.090 Coax OD: .146	2.29 3.71	Duofoil + 93% TC Braid 8.6Ω/M′ 28.2Ω/km	.388	9.86	75	78%	17.3	56.7	1 5 10 30 50 100 200 400 700 900 1000	.6 1.3 1.8 3.1 3.9 5.4 7.5 10.4 13.5 15.2 15.9	2.0 4.3 5.9 10.2 12.8 17.7 24.6 34.1 44.3 49.9 52.2
	1407B		4	1000†	304.8	100.0	45.5	same as above	.090 Coax OD: .146	2.29 3.71	same as above	.455	11.56							
	1417B		5	1000†	304.8	120.0	54.5	same as above	.090 Coax OD: .146	2.29 3.71	same as above	.477	12.12	100% Sweep tested. 10 MHz to 40 MHz.						

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

†Spools are one piece, but length may vary ±10% from length shown.

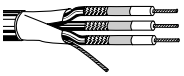
Color Code Chart

Cond.	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow

Bundled RGB Cable

CM and CMP Rated

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
26 AWG Stranded (7x34) .019″ Bare Copper • Duofoil® + 93% Tinned Copper Braid Shield • Overall Polyester Tape																				
Foam HDPE Insulation • Overall Black PVC Jacket • Inner PVC Jacket (Color Code: Red, Green, Blue, White, Yellow)																				
UL AWM Styles 1354 and 2668 (30V 60°C)	**1164B**	NEC: CM	3	500† 1000†	152.4 304.8	39.5 78.0	18.0 35.5	26 AWG (7x34) .019″ BC 41.5Ω/M′ 136.1Ω/km	.090 Coax OD: .146	2.29 3.71	Duofoil + 93% TC Braid 8.6Ω/M′ 28.2Ω/km	.388	9.86	75	78%	17.3	56.7	1 5 10 30 50 100 200 400 700 900 1000	.6 1.3 1.8 3.1 3.9 5.4 7.5 10.4 13.5 15.2 15.9	2.0 4.3 5.9 10.2 12.8 17.7 24.6 34.1 44.3 49.9 52.2
	1167B	NEC: CM	4	1000†	304.8	105.0	47.7	same as above	.090 Coax OD: .146	2.29 3.71	same as above	.455	11.56							
	1418B	NEC: CM	5	500† 1000†	152.4 304.8	61.0 118.0	27.7 53.6	same as above	.090 Coax OD: .146	2.29 3.71	same as above	.477	12.12							
														100% Sweep tested. 10 MHz to 40 MHz.						
RG-59/U Type • 22 AWG Stranded (7x30) .030″ Bare Copper • Duofoil + 95% TC Braid (Coaxes) • 100% Overall Beldfoil® Shield																				
Plenum • Foam FEP Insulation • Overall Natural Flamarrest® Jacket • Inner Fluorocopolymer Jacket (See chart below)																				
60°C 	**1824A**	NEC: CMP	3	500 1000	152.4 304.8	63.5 127.0	28.9 57.7	22 AWG (7x30) .030″ BC 15.3Ω/M′ 50.2Ω/km	.135 Coax OD: .200	3.43 5.08	Coaxes: Duofoil + 95% TC Braid 2.5Ω/km 8.3Ω/km Overall: Beldfoil 100% Shield Coverage 11.1Ω/M′ 36.4Ω/km	.475	12.07	75	81%	17.3	56.7	1 5 10 30 50 100 200 400 700 900 1000	.3 .6 .8 1.5 2.0 2.9 4.3 6.6 9.4 11.1 11.9	.8 1.9 2.7 4.9 6.4 9.5 14.2 21.6 30.9 36.4 39.0
	1825A	NEC: CMP	4	500 1000	152.4 304.8	84.5 167.0	38.4 75.9	same as above	.135 Coax OD: .200	3.43 5.08	same as above	.527	13.39							
	1826A	NEC: CMP	5	500 1000	152.4 304.8	101.5 201.0	46.1 91.4	same as above	.135 Coax OD: .200	3.43 5.08	same as above	.585	14.86	100% Sweep tested. 10 MHz to 40 MHz.						

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a more Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

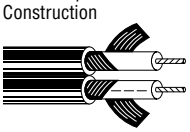
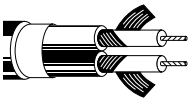
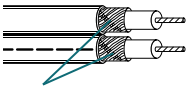
†Spools are one piece, but length may vary ±10% from length shown.

Color Code Chart

Cond.	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow

High-Flex SVHS Cable

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
30 AWG Stranded (7x38) .012″ Tinned Copper • Tinned Copper Serve (90% Shield Coverage)																				
Foam HDPE Insulation • Matte Black PVC Jacket (One Coax Printed and Striped for Identification)																				
Parallel Zip Construction 	**1807A**		2	U-500	U-152.4	8.0	3.6	30 AWG (7x38) .012″ TC 100.0Ω/M′ 328.0Ω/km	.058	1.47	TC Serve 90% Shield Coverage 7.5Ω/M′ 24.6Ω/km	.110 x .230	2.79 x 5.84	75	78%	17.3	56.7	1	.6	2.0
				500	152.4	8.5	3.9											5	1.4	4.6
				U-1000	U-304.8	15.0	6.8											10	2.1	6.9
				1000	304.8	19.0	8.6											30	3.8	12.5
																		50	5.1	16.7
																		100	7.6	24.9
												For Plenum version of 1807A, see 7700A.						200	11.3	37.1
																		400	16.9	55.4
																		700	23.3	76.4
																		900	26.9	88.2
																		1000	28.6	93.8
Foam HDPE Insulation • Matte Black PVC Jacket (Inner PVC Jackets Color Code: Black and Yellow)																				
Round Construction 	**1808A**		2	U-500	U-152.4	15.0	6.8	30 AWG (7x38) .012″ TC 100.0Ω/M′ 328.0Ω/km	.058	1.47	TC Serve 90% Shield Coverage 7.5Ω/M′ 24.6Ω/km	.255	.84	75	78%	17.3	56.7	1	.6	2.0
				500	152.4	15.5	7.0		Coax OD:									5	1.4	4.6
				U-1000	U-304.8	30.0	13.7		.100	2.54								10	2.1	6.9
				1000	304.8	31.0	14.1											30	3.8	12.5
																		50	5.1	16.7
																		100	7.6	24.9
												Available in Plenum versions by special order only.						200	11.3	37.1
																		400	16.9	55.4
																		700	23.3	76.4
																		900	26.9	88.2
																		1000	28.6	93.8
30 AWG Stranded (7x38) .012″ Tinned Copper • Tinned Copper "French Braid" (98% Shield Coverage)																				
Plenum • Foam FEP Insulation • Black Flamarrest® Jacket (One Coax Printed and Striped for Identification)																				
Parallel Zip Construction  French Braid	**7700A**	NEC: CMP	2	500	152.4	10.5	4.8	30 AWG (7x38) .012″ TC 100.0Ω/M′ 328.0Ω/km	.053	1.35	TC "French Braid" 98% Shield Coverage 7.4Ω/M′ 24.3Ω/km	.107 x .214	2.72 x 5.44	75	78%	17.3	56.7	1	.7	2.3
				1000	304.8	19.0	8.6											5	1.7	5.6
																		10	2.3	7.5
																		30	4.1	13.4
																		50	5.3	17.4
																		100	7.6	24.9
																		200	11.8	38.7
																		400	17.6	57.7
																		700	24.2	79.4
																		900	28.0	91.8
																		1000	29.8	97.7

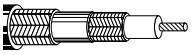
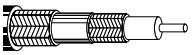
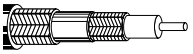
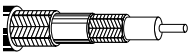
DCR = DC Resistance • TC = Tinned Copper • HDPE = High-density Polyethylene

Contact the Belden Wire & Cable Customer Service Department for a more Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

Video Triax Cable

RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
22 AWG Stranded (19x34) .031″ Bare Copper • Two Bare Copper Braids (95% Shield Coverage)																			
Foam Polyethylene Insulation • Belflex® Jacket (Red, Yellow, Green, Blue, Violet or Black. Polyethylene Insulation between Braids)																			
High-Flex 80°C 	**1857A**		500	152.4	42.5	19.3	22 AWG (19x34) .031″ BC 14.0Ω/M′ 45.9Ω/km	.143	3.63	(2) BC Braids 95% Coverage Inner: 2.5Ω/M′ 8.2Ω/km Outer: 1.6Ω/M′ 5.3Ω/km	.360	9.14	75	79%	17.0	55.8	1	.3	1.0
			1000	304.8	86.0	39.1											3.6	.5	1.6
																	10	.8	2.6
																	71.5	2.2	7.2
																	135	3.1	10.2
																	270	4.5	14.8
																	360	5.4	17.7
																	540	6.8	22.3
																	720	8.1	26.6
																	750	8.4	27.6
																	1000	10.1	33.1
																	1500	13.3	43.6
																	2250	17.6	57.7
																	3000	21.4	70.2
20 AWG Solid .032″ Bare Copper • Two Bare Copper Braids (95% Shield Coverage)																			
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket (Polyethylene Insulation between Braids)																			
80°C 	**8232**		500	152.4	30.0	13.6	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145	3.68	(2) BC Braids 95% Coverage Inner: 2.5Ω/M′ 8.2Ω/km Outer: 2.8Ω/M′ 9.2Ω/km	.315	8.00	75	83%	16.2	53.1	1	.3	1.0
			1000	304.8	60.0	27.3											3.6	.6	2.0
			2000	609.6	118.0	53.6											10	.9	3.0
																	71.5	2.1	6.9
																	135	3.0	9.8
																	270	4.2	13.8
																	360	4.8	15.7
																	540	5.9	19.4
																	720	7.0	23.0
																	750	7.1	23.3
																	1000	8.3	27.2
																	1500	10.5	34.4
																	2250	13.4	44.0
																	3000	15.9	52.2
Suitable for Outdoor and Direct Burial applications.											For Plenum version of 8232, see 88232. 100% Sweep tested. 5 MHz to 3 GHz.								
Gas-injected Foam HDPE Insulation • Black PVC Jacket (PVC Insulation between Braids)																			
75°C 	**8232A**	NEC: CMR CEC: CMG FT4	1000	304.8	69.0	31.4	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145	3.68	(2) BC Braids 95% Coverage Inner: 2.5Ω/M′ 8.2Ω/km Outer: 2.8Ω/M′ 9.2Ω/km	.315	8.00	75	83%	16.2	53.1	1	.3	1.0
																	3.6	.6	2.0
																	10	.9	3.0
																	71.5	2.1	6.9
																	135	3.0	9.8
																	270	4.2	13.8
																	360	4.8	15.7
																	540	5.9	19.4
																	720	7.0	23.0
																	750	7.1	23.3
																	1000	8.3	27.2
																	1500	10.5	34.4
																	2250	13.4	44.0
																	3000	15.9	52.2
											For Plenum version of 8232A, see 88232. 100% Sweep tested. 5 MHz to 3 GHz.								
Plenum • Foam FEP Insulation • Black FEP Jacket (FEP Insulation between Braids)																			
200°C 	**88232**	NEC: CMP CEC: CMG FT6	500†	152.4	31.0	14.1	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.140	3.56	(2) BC Braids 95% Coverage Inner: 2.6Ω/M′ 8.5Ω/km Outer: 2.6Ω/M′ 8.5Ω/km	.246	6.25	75	80%	16.9	55.4	1	.4	1.3
			1000†	304.8	61.0	27.7											3.6	.6	2.0
																	10	.8	2.6
																	71.5	2.2	7.2
																	135	3.1	10.2
																	270	4.5	14.8
																	360	5.3	17.4
																	540	6.6	21.6
																	720	7.7	25.3
																	750	7.9	25.9
																	1000	9.4	30.8
																	1500	12.1	39.7
																	2250	15.6	51.2
																	3000	18.7	61.3
											100% Sweep tested. 5 MHz to 3 GHz.								

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene

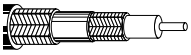
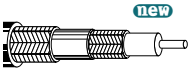
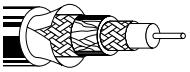
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

†Spools are one piece, but length may vary ±10% from length shown.

Video Triax Cable

RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .032″ Bare Copper • Two Bare Copper Braids (95% Shield Coverage) *(continued)*																			
Gas-injected Foam HDPE Insulation • Belflex® Jacket (Red, Yellow, Green, Blue, Violet or Black); Polyethylene Insulation between Braids																			
80°C 	**1856A**		500	152.4	41.0	18.6	20 AWG (solid) .032″ BC 10.6Ω/M′ 34.8Ω/km	.145	3.68	(2) BC Braids 95% Coverage Inner: 2.5Ω/M′ 8.2Ω/km Outer: 1.6Ω/M′ 5.3Ω/km	.360	9.14	75	83%	16.2	53.1	1	.3	1.0
			1000	304.8	83.0	37.7											3.6	.6	1.8
																	10	.8	2.7
																	71.5	2.2	7.2
																	135	3.0	9.8
																	270	4.2	13.8
																	360	4.8	15.7
											100% Sweep tested. 5 MHz to 3 GHz.						540	5.9	19.4
																	720	6.9	22.6
																	750	7.1	23.3
																	1000	8.8	28.9
																	1500	12.0	39.4
																	2250	16.4	53.8
																	3000	20.4	66.9
Gas-injected Foam HDPE Insulation • Belflex Jacket (Red, Yellow, Green, Blue, Violet or Black); PVC Insulation between Braids																			
75°C 	**1856B** new	NEC: CMR CEC: CMG FT4	1000	304.8	86.0	39.1	20 AWG (solid) .032″ BC 10.1Ω/M′ 33.1Ω/km	.145	3.68	(2) BC Braids 95% Coverage Inner: 2.5Ω/M′ 8.2Ω/km Outer: 1.6Ω/M′ 5.2Ω/km	.360	9.14	75	83%	16.2	53.1	1	.3	1.0
																	3.6	.6	1.8
																	10	.8	2.7
																	71.5	2.2	7.2
																	135	3.0	9.8
																	270	4.2	13.8
																	360	4.8	15.7
											100% Sweep tested. 5 MHz to 3 GHz.						540	5.9	19.4
																	720	6.9	22.6
																	750	7.1	23.3
																	1000	8.8	28.9
																	1500	12.0	39.4
																	2250	16.4	53.8
																	3000	20.4	66.9
Gas-injected Foam HDPE Insulation • Paper Tape Separator • Black Hypalon® Jacket (Polyethylene Insulation between Braids)																			
80°C VW-1 	**9267**		500	152.4	39.5	18.0	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145	3.68	(2) BC Braids 95% Coverage Inner: 2.5Ω/M′ 8.3Ω/km Outer: 2.6Ω/M′ 8.6Ω/km	.360	9.14	75	82%	16.3	53.5	1	.3	1.0
			1000	304.8	77.0	35.0											3.6	.6	2.0
																	10	.9	3.0
																	71.5	2.1	6.9
																	135	2.9	9.5
																	270	4.2	13.8
																	360	4.8	15.7
											100% Sweep tested. 5 MHz to 3 GHz.						540	6.0	19.7
																	720	6.7	22.0
																	750	6.9	22.6
																	1000	8.3	27.2
																	1500	10.5	34.4
																	2250	13.4	44.0
Suitable for Outdoor and Direct Burial applications.																	3000	15.9	52.2

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene

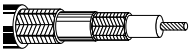
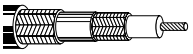
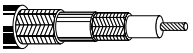
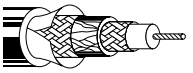
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

Hypalon is a DuPont trademark.

Video Triax Cable

RG-11/U Type
75 Ohms

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
15 AWG Stranded (19x27) .064″ Bare Copper • Two Bare Copper Braids (95% Shield Coverage)																			
Foam Polyethylene Insulation • Belflex® Jacket (Red, Yellow, Green, Blue, Violet or Black: Polyethylene Insulation between Braids)																			
High-Flex 80°C 	**1858A**		500 1000	152.4 304.8	81.0 158.0	36.8 71.8	15 AWG (19x27) .064″ BC 3.0Ω/M′ 9.8Ω/km	.312	7.92	(2) BC Braids 95% Coverage Inner: 1.6Ω/M′ 5.2Ω/km Outer: 1.4Ω/M′ 4.6Ω/km	.520	13.20	75	78%	17.3	56.8	1 3.6 10 71.5 135 270 360 540 720 750 1000	.1 .3 .5 1.2 1.8 2.6 3.1 3.9 4.7 4.8 5.7	.3 1.0 1.6 3.9 5.9 8.5 10.2 12.8 15.4 15.7 18.7
											100% Sweep tested. 5 MHz to 850 MHz.								
Plenum • Foam FEP Insulation • Black Fluorocopolymer Jacket (Fluorocopolymer Insulation between Braids)																			
125°C 	**1859A**	NEC: CMP CEC: CMP FT6	500 1000	152.4 304.8	66.5 134.0	30.2 60.9	15 AWG (19x27) .064″ BC 3.0Ω/M′ 9.8Ω/km	.285	7.24	(2) BC Braids 95% Coverage Inner: 1.4Ω/M′ 4.6Ω/km Outer: 1.4Ω/M′ 4.6Ω/km	.406	10.30	75	80%	16.5	54.1	1 3.6 10 71.5 135 270 360 540 720 750 1000	.1 .2 .5 1.3 1.9 3.0 3.6 4.5 5.4 5.6 6.6	.3 .7 1.6 4.3 6.2 9.8 11.8 14.8 17.7 18.4 21.6
											100% Sweep tested. 5 MHz to 850 MHz.								
Suitable for Outdoor and Direct Burial applications.																			
15 AWG Stranded (19x27) .064″ Bare Copper • Two Bare Copper Braids (90% Shield Coverage)																			
Foam Polyethylene Insulation • Yellow PVC Jacket (Polyethylene Insulation between Braids)																			
UL AWM Style 1641 (30V 80°C) VW-1 	**9192**	NEC: CL2X	1000	304.8	150.0	68.2	15 AWG (19x27) .064″ BC 3.0Ω/M′ 9.8Ω/km	.312	7.92	(2) BC Braids 90% Coverage Inner: 1.6Ω/M′ 5.2Ω/km Outer: 1.6Ω/M′ 5.2Ω/km	.520	13.20	75	78%	17.3	56.8	1 3.6 10 71.5 135 270 360 540 720 750 1000	.1 .3 .5 1.2 1.8 2.6 3.1 3.9 4.7 4.8 5.7	.3 1.0 1.6 3.9 5.9 8.5 10.2 12.8 15.4 15.7 18.7
											100% Sweep tested. 5 MHz to 850 MHz.								
Foam Polyethylene Insulation • Paper Tape Separator • Black Hypalon® Jacket (Polyethylene Insulation between Braids)																			
UL AWM Style 1641 (30V 60°C) VW-1 	**9232**		500 1000	152.4 304.8	42.5 145.0	19.3 65.9	15 AWG (19x27) .064″ BC 3.0Ω/M′ 9.8Ω/km	.312	7.92	(2) BC Braids 90% Coverage Inner: 1.6Ω/M′ 5.2Ω/km Outer: 1.7Ω/M′ 5.2Ω/km	.520	13.20	75	78%	17.3	56.8	1 3.6 10 71.5 135 270 360 540 720 750 1000	.1 .3 .5 1.2 1.8 2.6 3.1 3.9 4.7 4.8 5.7	.3 1.0 1.6 3.9 5.9 8.5 10.2 12.8 15.4 15.7 18.7
											100% Sweep tested. 5 MHz to 850 MHz.								
Suitable for Outdoor and Direct Burial applications.																			

BC = Bare Copper • DCR = DC Resistance

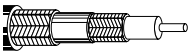
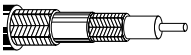
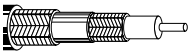
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

Hypalon is a DuPont trademark.

Video Triax Cable

RG-11/U Type

BRILLIANCE®

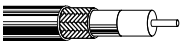
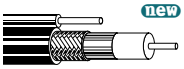
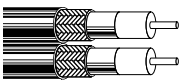
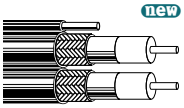
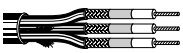
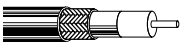
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
14 AWG Solid .064″ Bare Copper • Two Bare Copper Braids (95% Shield Coverage)																			
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket (Polyethylene Insulation between Braids)																			
80°C 	**8233**		500	152.4	63.0	28.6	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.285	7.24	(2) BC Braids 95% Coverage Inner: 1.6Ω/M′ 5.2Ω/km Outer: 1.4Ω/M′ 4.6Ω/km	.475	12.07	75	84%	16.1	52.8	1	.2	.7
			1000	304.8	122.0	55.5											3.6	.3	1.0
			2000	609.6	240.0	109.1											10	.4	1.3
											100% Sweep tested. 5 MHz to 3 GHz.						71.5	1.1	3.6
																	135	1.5	4.9
																	270	2.3	7.5
																	360	2.7	8.9
																	540	3.5	11.5
																	720	4.2	13.8
																	750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
Suitable for Outdoor and Direct Burial applications.																	3000	12.0	39.4
Gas-injected Foam HDPE Insulation • Black PVC Jacket (PVC Insulation between Braids)																			
80°C 	**8233A**	NEC: CMR CEC: CMG FT4	1000	304.8	142.0	64.5	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.285	7.24	(2) BC Braids 95% Coverage Inner: 1.6Ω/M′ 5.2Ω/km Outer: 1.4Ω/M′ 4.6Ω/km	.475	12.07	75	84%	16.1	52.8	1	.2	.7
			2000	609.6	240.0	109.1											3.6	.3	1.0
			4000	1219.2	574.0	260.9											10	.4	1.3
											100% Sweep tested. 5 MHz to 3 GHz.						71.5	1.1	3.6
																	135	1.5	4.9
																	270	2.3	7.5
																	360	2.7	8.9
																	540	3.5	11.5
																	720	4.2	13.8
																	750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
																	3000	12.0	39.4
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket (PE Insulation between Braids; Flooding Compound on Outer Braid)																			
Flooded 80°C 	**7803A** new		500	152.4	64.0	29.1	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.285	7.24	(2) BC Braids 95% Coverage Inner: 1.6Ω/M′ 5.2Ω/km Outer: 1.4Ω/M′ 4.6Ω/km	.475	12.07	75	84%	16.1	52.8	1	.2	.7
			1000	304.8	123.0	55.9											3.6	.3	1.0
			3000	914.4	381.0	173.2											10	.4	1.3
											100% Sweep tested. 5 MHz to 3 GHz.						71.5	1.1	3.6
																	135	1.5	4.9
																	270	2.3	7.5
																	360	2.7	8.9
																	540	3.5	11.5
																	720	4.2	13.8
																	750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
Suitable for Outdoor and Direct Burial applications.																	3000	12.0	39.4

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • PE = Polyethylene

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

DS-3 and DS-4 Interconnect and Cross-connect Cable

735A* Series

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation Stand. Signal (Mb/s)	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
26 AWG Solid .016″ (.40mm) Silver-plated Copper • Beldfoil® + 93% Tinned Copper Braid																					
Foam HDPE Insulation • Overall Gray PVC Jacket (Multiple coaxes feature inner Gray PVC jackets w/printed nos. for circuit ID)																					
	**735A1** new	NEC: CMR CEC: CMG FT4	1	500 1000	152.4 304.8	7.0 12.0	3.2 5.5	26 AWG (solid) .016″ SPC 41.0Ω/M′ 134.2Ω/km	.077	1.95	Beldfoil + 93% TC Braid 5.3Ω/M′ 17.3Ω/km	.129	3.38	75	76%	17.7	58.0	2 CEPT-1 CEPT-2 10 20 CEPT-3 DS-3 STS-1 89.472 100 CEPT-4 STS-3 200 DS-4 400	1.0 1.0 4.2 5.0 10.0 17.2 22.4 25.9 44.7 50.0 69.6 77.8 100.0 137.1 200.0	.6 .6 1.1 1.2 1.7 2.2 2.5 2.7 3.6 3.8 4.5 4.8 5.5 6.4 7.8	2.0 2.0 3.6 3.9 5.6 7.2 8.2 8.9 11.8 12.5 14.8 15.7 18.0 21.0 25.6
	**735A1T** new	NEC: CMR CEC: CMG FT4	1 w/T	500 1000	152.4 304.8	7.5 15.0	3.4 6.8	same as above	.077	1.95	same as above	.129 x .203	3.38 x 5.16								
	**735A2** new	NEC: CMR CEC: CMG FT4	2	500 1000	152.4 304.8	14.0 25.0	6.4 11.4	same as above	.077	1.95	same as above	.129 x .258	3.38 x 6.55								
Siamese versions feature zip cord design with printing on one leg.																					
	**735A2T** new	NEC: CMR CEC: CMG FT4	2 w/T	500 1000	152.4 304.8	15.0 27.0	6.8 12.3	same as above	.077	1.95	same as above	.129 x .332	3.38 x 8.43								
Siamese versions feature zip cord design with printing on one leg.																					
	**735A3** new	NEC: CMR CEC: CMG FT4	3	500 1000	152.4 304.8	26.5 50.0	12.0 22.7	same as above	.077 Coax OD: .129	1.95 3.38	same as above	.309	7.85								
	735A6 new	NEC: CMR CEC: CMG FT4	6	500 1000	152.4 304.8	45.5 92.0	20.7 41.8	same as above	.077 Coax OD: .129	1.95 3.38	same as above	.399	10.14								
	735A8	NEC: CMR CEC: CMG FT4	8	500 1000	152.4 304.8	63.0 121.0	28.6 55.0	same as above	.077 Coax OD: .129	1.95 3.38	same as above	.447	11.35								
	735A9	NEC: CMR CEC: CMG FT4	9	500 1000	152.4 304.8	69.5 133.0	31.6 60.5	same as above	.077 Coax OD: .129	1.95 3.38	same as above	.484	12.29								
	735A12 new	NEC: CMR CEC: CMG FT4	12	500 1000	152.4 304.8	94.5 187.0	43.0 85.0	same as above	.077 Coax OD: .129	1.95 3.38	same as above	.581	14.76								
	735A16 new	NEC: CMR CEC: CMG FT4	16	500 1000	152.4 304.8	123.5 250.0	56.1 113.6	same as above	.077 Coax OD: .129	1.95 3.38	same as above	.636	16.19								
	735A24 new	NEC: CMR CEC: CMG FT4	24	1000	304.8	405.0	184.1	same as above	.077 Coax OD: .129	1.95 3.38	same as above	.870	22.10								
Plenum • Foam FEP Insulation • Gray Flamarrest® Jacket																					
	**735A1P*** new	NEC: CMP CEC: CMP FT6	1	500 1000	152.4 304.8	8.0 15.0	3.6 6.8	same as above	.077	1.95	same as above	.129	3.38	75	76%	16.8	55.1	(same as above)			

100% Sweep tested.
RL: 30dB min. at 15 MHz to 95 MHz.

Non-plenum versions comply with Telcordia Specification GR-139-CORE.

100% Sweep tested.
RL: 30 dB min. at 15 MHz to 95 MHz.

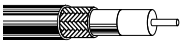
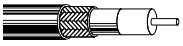
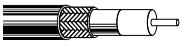
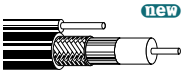
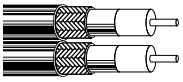
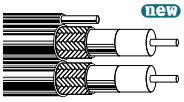
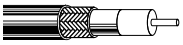
DCR = DC Resistance • HDPE = High-density Polyethylene • SPC = Silver-plated Copper • TC = Tinned Copper

See chart on page 6.56 for maximum transmission distances.

*Lucent Technologies reference specification. Belden equivalent. Minimum Return Loss @ 55 MHz to 95 MHz = 35dB.

DS-3 and DS-4 Interconnect and Cross-connect Cable

734A* and 734D* Series

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation Stand. Signal (Mb/s)	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .032″ (.81mm) Copper • Beldfoil® + 85% Tinned Copper Braid																					
Foam HDPE Insulation • Overall Gray PVC Jacket (Multiple coaxes feature inner Gray PVC jackets w/printed nos. for circuit ID)																					
	**734A1** new	NEC: CMR CEC: CMG FT4	1	500 1000	152.4 304.8	16.5 33.0	7.5 15.0	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.148	3.67	Beldfoil + 85% TC Braid 2.4Ω/M′ 7.9Ω/km	.235	5.97	75	80%	16.8	55.1	2	1.0	.3	.8
																		CEPT-1	1.0	.3	.9
																		CEPT-2	4.2	.5	1.6
																		10	5.0	.6	1.8
																		20	10.0	.8	2.6
																		CEPT-3	17.2	1.0	3.2
																		DS-3	22.4	1.1	3.7
																		STS-1	25.9	1.2	4.0
																		89.472	44.7	1.6	5.2
																		100	50.0	1.7	5.6
																		CEPT-4	69.6	2.0	6.5
																		STS-3	77.8	2.1	6.9
																		200	100.0	2.5	8.2
																		DS-4	137.1	2.9	9.5
																		400	200.0	3.6	11.8
	734A6 new	NEC: CMR CEC: CMG FT4	6	500 1000	152.4 304.8	141.0 290.0	64.1 131.8	same as above	.148 Coax OD: .235	3.67 5.97	same as above	.772	19.61	100% Sweep tested. RL: 30dB min. at 15 MHz to 95 MHz. Non-plenum versions comply with Telcordia Specification GR-139-CORE.							
	734A12 new	NEC: CMR CEC: CMG FT4	12	500 1000	152.4 304.8	283.0 551.0	128.4 250.5	same as above	.148 Coax OD: .235	3.67 5.97	same as above	1.026	26.06								
Plenum • Foam FEP Insulation • Gray Flamarrest® Jacket																					
	**734A1P*** new	NEC: CMP CEC: CMP FT6	1	500 1000	152.4 304.8	18.0 34.0	8.2 15.5	same as above	.148	3.67	same as above	.215	5.46	75	80%	17.3	56.7	(same as above) 100% Sweep tested. RL: 30dB min. at 15 MHz to 95 MHz.			
20 AWG Solid .032″ (.81mm) Silver-plated Copper Conductor • Beldfoil + 85% Tinned Copper Braid																					
Foam HDPE Insulation • Overall Gray PVC Jacket (Multiple coaxes feature inner Gray PVC jackets w/printed nos. for circuit ID)																					
	**734D1** new	NEC: CMR CEC: CMG FT4	1	500 1000	152.4 304.8	17.0 34.0	7.7 15.5	20 AWG (solid) .032″ SPC 10.0Ω/M′ 32.8Ω/km	.148	3.67	Beldfoil + 85% TC Braid 2.4Ω/M′ 7.9Ω/km	.235	5.97	75	80%	16.8	55.1	2	1.0	.3	.8
																		CEPT-1	1.0	.3	.9
																		CEPT-2	4.2	.5	1.6
																		10	5.0	.6	1.8
																		20	10.0	.8	2.6
																		CEPT-3	17.2	1.0	3.2
																		DS-3	22.4	1.1	3.7
																		STS-1	25.9	1.2	4.0
																		89.472	44.7	1.6	5.2
																		100	50.0	1.7	5.6
																		CEPT-4	69.6	2.0	6.5
																		STS-3	77.8	2.1	6.9
																		200	100.0	2.5	8.2
																		DS-4	137.1	2.9	9.5
																		400	200.0	3.6	11.8
	**734D1T** new	NEC: CMR CEC: CMG FT4	1 w/T	500 1000	152.4 304.8	19.0 37.0	8.6 16.8	same as above	.148	3.67	same as above	.235 x .309	5.97 x 7.85								
	**734D2** new	NEC: CMR CEC: CMG FT4	2	500 1000	152.4 304.8	35.5 65.0	16.1 29.5	same as above	.148	3.67	same as above	.235 x .470	5.97 x 11.95								
Siamese versions feature zip cord design with printing on one leg.																					
	**734D2T** new	NEC: CMR CEC: CMG FT4	2 w/T	500 1000	152.4 304.8	39.0 72.0	17.7 32.7	same as above	.148	3.67	same as above	.235 x .550	5.97 x 13.97								
Siamese versions feature zip cord design with printing on one leg.														100% Sweep tested. RL: 30dB min. at 15 MHz to 95 MHz. Non-plenum versions comply with Telcordia Specification GR-139-CORE.							
	734D6 new	NEC: CMR CEC: CMG FT4	6	500 1000	152.4 304.8	141.0 290.0	64.1 131.8	same as above	.148 Coax OD: .235	3.67 5.97	same as above	.772	19.61								
	734D12 new	NEC: CMR CEC: CMG FT4	12	500 1000	152.4 304.8	284.5 555.0	129.3 252.3	same as above	.148 Coax OD: .235	3.67 5.97	same as above	1.026	26.06								
Plenum • Foam FEP Insulation • Gray Flamarrest Jacket																					
	**734D1P*** new	NEC: CMP CEC: CMP FT6	1	500 1000	152.4 304.8	18.0 34.0	8.2 15.5	same as above	.148	3.67	same as above	.215	5.46	75	80%	17.3	56.7	(same as above) 100% Sweep tested. RL: 30dB min. at 15 MHz to 95 MHz.			

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • SPC = Silver-plated Copper • TC = Tinned Copper

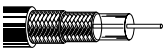
See chart on page 6.56 for maximum transmission distances.

*Lucent Technologies reference specification. Belden equivalent.

DS-3 and DS-4 Interconnect and Cross-connect Cable

728A* and 720A* Series

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation Stand. Signal (Mb/s)	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .031″ Bare Copper • Two Tinned Copper Braids (98% Shield Coverage)																					
Polyethylene Insulation • Gray Non-contaminating PVC Jacket																					
Double Braid	**9231**	NEC:	1	500	152.4	38.0	17.3	20 AWG	.198	5.03	TC Double	.305	7.75	75	66%	20.5	68.9	2	1.0	.3	.8
VW-1	(728A*)	CMH		1000	304.8	76.0	34.5	(solid)			Braid							CEPT-1	1.0	.3	.8
		CEC:						.031″			98% Shield							CEPT-2	4.2	.5	1.7
		CMH FT1						BC			Coverage							10	5.0	.6	1.8
								9.9Ω/M′			1.1Ω/M′							20	10.0	.8	2.6
								32.5Ω/km			3.6Ω/km							CEPT-3	17.2	1.0	3.2
																		DS-3	22.4	1.1	3.6
																		STS-1	25.9	1.2	3.8
											100% Sweep tested.							89.472	44.7	1.4	4.7
											RL: 30dB min. at 15 MHz to 95 MHz.							100	50.0	1.5	4.9
											Non-plenum versions comply with							CEPT-4	69.6	2.0	6.5
											Telcordia Specification GR-139-CORE.							STS-3	77.8	2.2	7.2
																		200	100.0	2.7	8.9
																		DS-4	137.1	3.1	10.2
																		400	200.0	3.7	12.1



720A* Series Belden 720A Coaxial Cable Series is available by special request.
Contact the Belden Customer Service Department for quotes. 1-800-BELDEN-1.

BC = Bare Copper • DCR = DC Resistance • TC = Tinned Copper

See table below for maximum transmission distances.

*Lucent Technologies reference specification. Belden equivalent.

Maximum Transmission Distances for DS-3 and DS-4 Cable

Data Rates:	DS-3 (44.736 Mb/s)		STS-1 (51.86 Mb/s)		DS-4Na (CEPT-4) (139.264 Mb/s)		STS-3 (155.520 Mb/s)		DS-4 (274.176 Mb/s)	
Belden Part No.	**Interconnect**	**X-Connect**	**Interconnect**	**X-Connect**	**Interconnect**	**X-Connect**	**Interconnect**	**X-Connect**	**Interconnect**	**X-Connect**
735A Series and 7351AP	225 ft. (68.6m)	21 ft. (6.4m)	210 ft. (64.0m)	20 ft. (6.1m)	125 ft. (38.1m)	13 ft. (4.0m)	120 ft. (36.6m)	11 ft. (3.4m)	90 ft. (27.4m)	8 ft. (2.4m)
734A and 734D Series	450 ft. (137.2m)	43 ft. (13.1m)	420 ft. (128.0m)	40 ft. (12.2m)	250 ft. (76.2m)	24 ft. (7.3m)	240 ft. (73.2m)	22 ft. (6.7m)	180 ft. (54.9m)	17 ft. (5.2m)
734A1P and 734D1P	435 ft. (132m)	43 ft. (13m)	410 ft. (125m)	40 ft. (12m)	240 ft. (73m)	24 ft. (7m)	225 ft. (68m)	22 ft. (8m)	170 ft. (52m)	17 ft. (5m)
728A	425 ft. (129.5m)	—	380 ft. (115.8m)	—	220 ft. (67.1m)	—	210 ft. (64.0m)	—	155 ft. (47.2m)	—
720A Series	225 ft. (68.6m)	25 ft. (7.6m)	230 ft. (70.1m)	23 ft. (7.0m)	140 ft. (42.7m)	14 ft. (4.3m)	130 ft. (39.6m)	13 ft. (4.0m)	100 ft. (30.5m)	9 ft. (2.7m)

DS = Digital Signal • STS = Synchronous Transmission Signal • CEPT = European Conference of Postal and Telecommunications Administrations

Please note: The signal loss budget for individual installations will affect the exact transmission distance.

Low Loss 50 Ohm Wireless RF Transmission Cable

RG-174 Type

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-174 Type • 25 AWG Solid .018″ Bare Copper • Duofoil® + 90% Tinned Copper Braid Shield																			
Solid Polyethylene Insulation • Black PVC Jacket																			
RF100A 80°C	**7805** new		100	30.5	2.4	1.1	25 AWG (solid) .018″ BC 32.0Ω/M′ 105.0Ω/km	.061	1.55	Duofoil + 90% TC Braid 9.1Ω/M′ 29.9Ω/km	.110	2.79	50	66%	31.2	102.4	30	3.8	12.4
			500	152.4	6.0	2.7											50	4.9	16.1
			1000	304.8	10.0	4.5											150	8.6	28.2
																	220	10.4	34.2
																	450	15.2	49.9
																	900	22.0	72.3
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1500	28.7	94.3
																	1800	31.7	104.0
																	2000	33.4	109.7
																	2500	37.8	124.2
																	3000	42.0	137.8
																	4500	52.3	171.5
																	5800	60.9	199.8
Mates with standard RG-174 connectors.																	6000	62.0	203.3
RG-174 Type • 24.5 AWG Solid .020″ Bare Copper • Duofoil + 90% Tinned Copper Braid Shield																			
Foam HDPE Insulation • Gray PVC Jacket																			
RF100LL 80°C	**7805R** new	NEC: CMR CEC: CMG FT4	100	30.5	2.4	1.1	24.5 AWG (solid) .020″ BC 27.3Ω/M′ 94.2Ω/km	.060	1.52	Duofoil + 90% TC Braid 9.4Ω/M′ 30.8Ω/km	.110	2.79	50	73.5%	26.2	86.0	30	3.5	11.5
			500	152.4	6.0	2.7											50	4.6	15.0
			1000	304.8	10.0	4.5											150	8.0	26.1
																	220	9.6	31.6
																	450	14.0	46.1
																	900	20.2	66.4
																	1500	26.6	87.3
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	29.5	96.7
																	2000	31.2	102.3
																	2500	35.4	116.3
																	3000	39.4	129.2
																	4500	50.0	164.2
																	5800	59.0	193.6
Mates with standard RG-174 connectors.																	6000	60.6	198.7

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Low Loss 50 Ohm Wireless RF Transmission Cable

RG-58 Type

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-58 Type • 19 AWG Solid .037″ Bare Copper • Duofoil® + 90% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket																			
RF195 80°C	**7806A** new		500	152.4	14.5	6.6	19 AWG (solid) .037″ BC 7.6Ω/M′ 24.9Ω/km	.110	2.79	Duofoil + 90% TC Braid 4.2Ω/M′ 13.8Ω/km	.195	4.95	50	77%	24.3	79.7	30	2.0	6.6
			1000	304.8	26.0	11.8											50	2.5	8.2
																	150	4.0	13.3
																	220	4.9	16.1
																	450	7.1	23.4
																	900	10.3	33.8
																	1500	13.7	44.8
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	15.2	49.7
																	2000	16.1	52.8
																	2500	18.3	60.1
																	3000	20.5	67.3
																	4500	26.5	86.8
Mates with standard RG-58 connectors.*																	5800	31.2	102.4
Suitable for Outdoor and Direct Burial applications.																	6000	32.0	105.0
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
RF195 80°C	**7806R** new	NEC: CMR CEC: CMG FT4	500	152.4	16.0	7.3	19 AWG (solid) .037″ BC 7.6Ω/M′ 24.9Ω/km	.110	2.79	Duofoil + 90% TC Braid 4.2Ω/M′ 13.8Ω/km	.195	4.95	50	77%	24.3	79.7	30	2.0	6.6
			1000	304.8	29.0	13.2											50	2.5	8.2
																	150	4.0	13.3
																	220	4.9	16.1
																	450	7.1	23.4
																	900	10.3	33.8
																	1500	13.7	44.8
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	15.2	49.7
																	2000	16.1	52.8
																	2500	18.3	60.1
																	3000	20.5	67.3
																	4500	26.5	86.8
																	5800	31.2	102.4
Mates with standard RG-58 connectors.*																	6000	32.0	105.0
RG-58 Type • 17 AWG Solid .044″ Bare Copper • Duofoil + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket																			
RF200 80°C	**7807A** new		500	152.4	15.0	6.8	17 AWG (solid) .044″ BC 3.3Ω/M′ 10.9Ω/km	.116	2.95	Duofoil + 95% TC Braid 4.2Ω/M′ 13.8Ω/km	.195	4.95	50	85%	23.5	77.1	30	1.6	5.4
			1000	304.8	27.0	12.3											50	2.1	7.0
																	150	3.7	12.1
																	220	4.5	14.6
																	450	6.5	21.2
																	900	9.2	30.1
																	1500	12.0	39.2
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	13.2	43.2
																	2000	14.0	45.8
																	2500	15.7	51.6
																	3000	17.5	57.3
																	4500	22.0	72.3
Mates with standard Land Mobile Radio type connectors.																	5800	25.2	82.7
Suitable for Outdoor and Direct Burial applications.																	6000	26.0	85.1
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
RF200 80°C	**7807R** new	NEC: CMR CEC: CMG FT4	500	152.4	15.5	7.0	17 AWG (solid) .044″ BC 3.3Ω/M′ 10.9Ω/km	.116	2.95	Duofoil + 95% TC Braid 4.2Ω/M′ 13.8Ω/km	.195	4.95	50	85%	23.5	77.1	30	1.6	5.4
			1000	304.8	29.0	13.2											50	2.1	7.0
																	150	3.7	12.1
																	220	4.5	14.6
																	450	6.5	21.2
																	900	9.2	30.1
																	1500	12.0	39.2
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	13.2	43.2
																	2000	14.0	45.8
																	2500	15.7	51.6
																	3000	17.5	57.3
																	4500	22.0	72.3
																	5800	25.2	82.7
Mates with standard Land Mobile Radio type connectors.																	6000	26.0	85.1

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

*Please consult Belden's website, www.belden.com, for complete listing.

Low Loss 50 Ohm Wireless RF Transmission Cable

RG-8X Type

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
RG-8X Type • 15 AWG Solid .057″ Bare Copper • Duobond® II + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket																			
RF240 80°C	**7808A** new		500	152.4	20.0	9.1	15 AWG (solid) .057″ BC 3.2Ω/M′ 10.5Ω/km	.150	3.81	Duobond II + 95% TC Braid 3.5Ω/M′ 11.5Ω/km	.240	6.10	50	86%	23.0	75.5	30	1.3	4.1
			1000	304.8	39.0	17.7											50	1.6	5.3
																	150	2.8	9.3
																	220	3.4	11.1
																	450	4.9	16.1
																	900	7.0	22.9
																	1500	9.1	30.0
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	10.1	33.2
																	2000	10.7	35.0
																	2500	12.0	39.5
																	3000	13.4	43.9
																	4500	16.7	54.7
Mates with standard RG-8X connectors.*																	5800	19.5	64.0
Suitable for Outdoor and Direct Burial applications.																	6000	19.8	65.0
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
RF240 80°C	**7808R** new	NEC: CMR CEC: CMG FT4	500	152.4	22.0	10.0	15 AWG (solid) .057″ BC 3.2Ω/M′ 10.5Ω/km	.150	3.81	Duobond II + 95% TC Braid 3.5Ω/M′ 11.5Ω/km	.240	6.10	50	86%	23.0	75.5	30	1.3	4.1
			1000	304.8	44.0	20.0											50	1.6	5.3
																	150	2.8	9.3
																	220	3.4	11.1
																	450	4.9	16.1
																	900	7.0	22.9
																	1500	9.1	30.0
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	10.1	33.2
																	2000	10.7	35.0
																	2500	12.0	39.5
																	3000	13.4	43.9
																	4500	16.7	54.7
																	5800	19.5	64.0
Mates with standard RG-8X connectors.*																	6000	19.8	65.0
Gas-injected Foam HDPE Insulation • Flooded Water-resistant Black Polyethylene Jacket																			
RF240 80°C	**7808WB** new		500	152.4	20.0	9.1	15 AWG (solid) .057″ BC 7.6Ω/M′ 24.9Ω/km	.150	3.81	Duobond II 95% TC Braid 4.2Ω/M′ 13.8Ω/km	.240	6.10	50	86%	23.0	75.5	30	1.3	4.1
			1000	304.8	39.0	17.7											50	1.6	5.3
																	150	2.8	9.3
																	220	3.4	11.1
																	450	4.9	16.1
																	900	7.0	22.9
																	1500	9.1	30.0
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	10.1	33.2
																	2000	10.7	35.0
																	2500	12.0	39.5
																	3000	13.4	43.9
																	4500	16.7	54.7
Mates with standard RG-8X connectors.*																	5800	19.5	64.0
Suitable for Outdoor and Direct Burial applications.																	6000	19.8	65.0

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

*Please consult Belden's website, www.belden.com, for complete listing.

Low Loss 50 Ohm Wireless RF Transmission Cable

Intermediate Type

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Intermediate Type • 13 AWG Solid .072″ Bare Copper • Duobond® II + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket																			
RF300 80°C	**7809A** new		500	152.4	30.5	13.9	13 AWG (solid) .072″ BC 2.0Ω/M′ 6.6Ω/km	.190	4.83	Duobond II + 95% TC Braid 2.7Ω/M′ 8.8Ω/km	.300	7.62	50	86%	23.0	75.5	30	1.0	3.4
			1000	304.8	59.0	26.8											50	1.3	4.2
																	150	2.2	7.3
																	220	2.7	8.9
																	450	3.9	12.9
																	900	5.6	18.3
																	1500	7.3	24.0
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	8.1	26.5
																	2000	8.6	28.2
																	2500	9.7	31.9
																	3000	10.8	35.4
																	4500	13.5	44.4
Mates with Land Mobile Radio type connectors. Suitable for Outdoor and Direct Burial applications.																	5800	15.8	51.8
																	6000	16.0	52.6
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
RF300 80°C	**7809R** new	NEC: CMR CEC: CMG FT4	500	152.4	34.0	15.5	13 AWG (solid) .072″ BC 2.0Ω/M′ 6.6Ω/km	.190	4.83	Duobond II + 95% TC Braid 2.7Ω/M′ 8.8Ω/km	.300	7.62	50	86%	23.0	75.5	30	1.0	3.4
			1000	304.8	65.0	29.5											50	1.3	4.2
																	150	2.2	7.3
																	220	2.7	8.9
																	450	3.9	12.9
																	900	5.6	18.3
																	1500	7.3	24.0
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	8.1	26.5
																	2000	8.6	28.2
																	2500	9.7	31.9
																	3000	10.8	35.4
																	4500	13.5	44.4
																	5800	15.8	51.8
Mates with Land Mobile Radio type connectors.*																	6000	16.0	52.6
Gas-injected Foam HDPE Insulation • Flooded Water-resistant Black Polyethylene Jacket																			
RF300 80°C	**7809WB** new		500	152.4	30.5	13.9	13 AWG (solid) .072″ BC 2.0Ω/M′ 6.6Ω/km	.190	4.83	Duobond II + 95% TC Braid 2.7Ω/M′ 8.8Ω/km	.300	7.62	50	86%	23.0	75.5	30	1.0	3.4
			1000	304.8	59.0	26.8											50	1.3	4.2
																	150	2.2	7.3
																	220	2.7	8.9
																	450	3.9	12.9
																	900	5.6	18.3
																	1500	7.3	24.0
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	8.1	26.5
																	2000	8.6	28.2
																	2500	9.7	31.9
																	3000	10.8	35.4
																	4500	13.5	44.4
Mates with Land Mobile Radio type connectors.* Suitable for Outdoor and Direct Burial applications.																	5800	15.8	51.8
																	6000	16.0	52.6

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

*Please consult Belden's website, www.belden.com, for complete listing.

Low Loss 50 Ohm Wireless RF Transmission Cable

RG-8 Type

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-8 Type • 10 AWG Solid .108″ Bare Copper-covered Aluminum • Duobond® II + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket																			
RF400 80°C	**7810A** new		500	152.4	42.5	19.3	10 AWG (solid) .108″ CCA 1.3Ω/M′ 4.4Ω/km	.285	7.24	Duobond II + 95% TC Braid 1.8Ω/M′ 5.8Ω/km	.405	10.29	50	86%	23.0	75.5	30	.7	2.1
			1000	304.8	86.0	39.1											50	.9	2.8
																	150	1.5	4.9
																	220	1.8	6.0
																	450	2.7	8.8
																	900	3.8	12.6
																	1500	5.1	16.6
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	5.6	18.5
																	2000	6.0	19.6
																	2500	6.7	22.0
																	3000	7.5	24.4
																	4500	9.5	31.1
Mates with 9913 and Land Mobile Radio type connectors.*																	5800	11.1	36.4
Suitable for Outdoor and Direct Burial applications.																	6000	11.4	37.3
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
RF400 80°C	**7810R*** new	NEC: CMR CEC: CMG FT4	500	152.4	48.5	22.0	10 AWG (solid) .108″ CCA 1.3Ω/M′ 4.4Ω/km	.285	7.24	Duobond II + 95% TC Braid 1.8Ω/M′ 5.8Ω/km	.405	10.29	50	86%	23.0	75.5	30	.7	2.1
			1000	304.8	98.0	44.5											50	.9	2.8
																	150	1.5	4.9
																	220	1.8	6.0
																	450	2.7	8.8
																	900	3.8	12.6
																	1500	5.1	16.6
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	5.6	18.5
																	2000	6.0	19.6
																	2500	6.7	22.0
																	3000	7.5	24.4
																	4500	9.5	31.1
																	5800	11.1	36.4
Mates with 9913 and Land Mobile Radio type connectors.*																	6000	11.4	37.3
Gas-injected Foam HDPE Insulation • Flooded Water-resistant Black Polyethylene Jacket																			
RF400 80°C	**7810WB** new		500	152.4	42.5	19.3	10 AWG (solid) .108″ CCA 1.3Ω/M′ 4.4Ω/km	.285	7.24	Duobond II + 95% TC Braid 1.8Ω/M′ 5.8Ω/km	.405	10.29	50	86%	23.0	75.5	30	.7	2.1
			1000	304.8	86.0	39.1											50	.9	2.8
																	150	1.5	4.9
																	220	1.8	6.0
																	450	2.7	8.8
																	900	3.8	12.6
																	1500	5.1	16.6
										100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.							1800	5.6	18.5
																	2000	6.0	19.6
																	2500	6.7	22.0
																	3000	7.5	24.4
																	4500	9.5	31.1
Mates with 9913 and Land Mobile Radio type connectors.*																	5800	11.1	36.4
Suitable for Outdoor and Direct Burial applications.																	6000	11.4	37.3

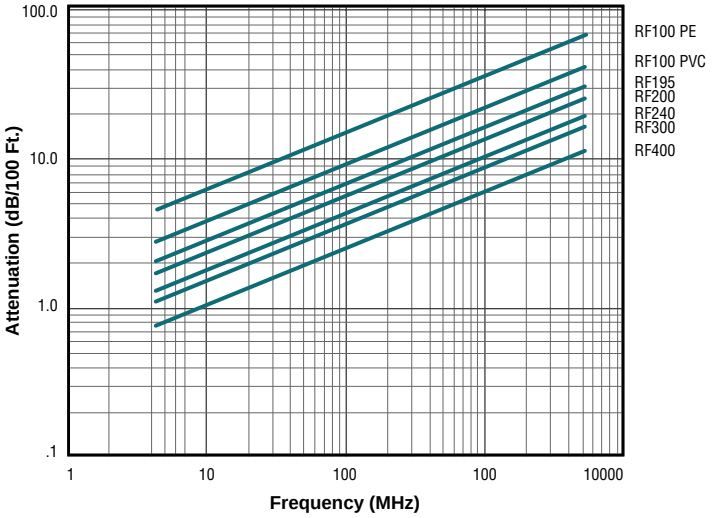
CCA = Copper-covered Aluminum • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

*Please consult Belden's website, www.belden.com, for complete listing.

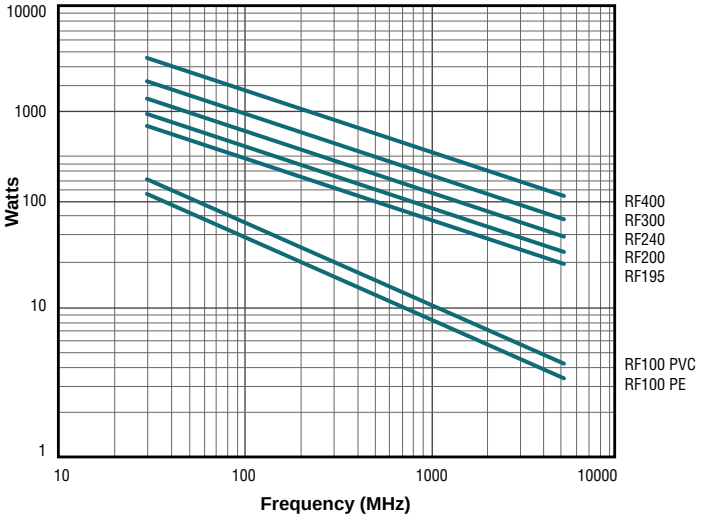
Low Loss 50 Ohm Wireless RF Transmission Coax

Electrical Characteristics

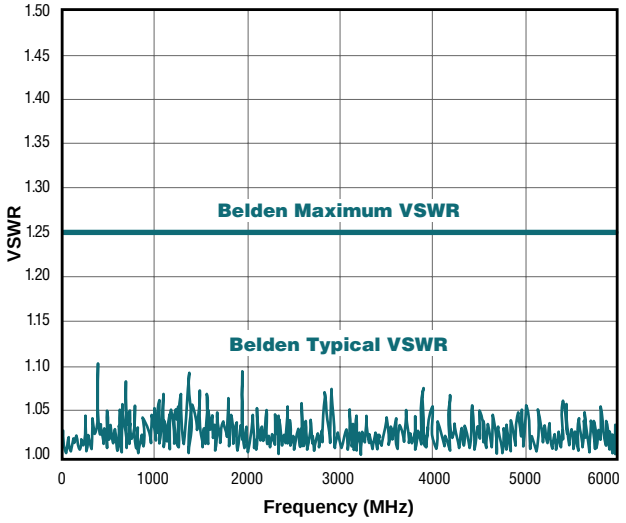
Attenuation



Power Rating



Guaranteed VSWR



Voltage Standing Wave Ratio is a measurement of the reflected power in a cable or instrument. The higher the VSWR the poorer the transmission characteristics of the cable.

Phase Stability

Phase Attribute	Typical Range (0.45 GHz to 6.0 GHz)	
	ppm/°C	Degree/GHz/m
Temperature (-40°C to +85°C)[1]	±9	±0.6
Bending & Flexing (25 cycles)[2]	NA	±1.1

1: Per IEC 60966-1 clause 8.8
2: Per IEC 60966-1 clause 8.6

RG Cable Replacement Guide

Part Number	Size	Replacing
7805	RF100A	RG-174/U
7805R	RF100LL	RG-174/U
7806A	RF195	RG-58/U
7807A	RF200	RG-58/U
7808A	RF240	RG-8X
7809A	RF300	RG-8X
7810A	RF400	RG-8U

50 Ohm Transmission and Computer Cable

RG-188A/U, RG-174/U and RG-58/U Type

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-174/U Type • 26 AWG Stranded (7x34) .019″ Bare Copper-covered Steel • 90% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**8216**		100	30.5	1.0	.5	26 AWG	.060	1.52	TC Braid	.110	2.79	50	66%	30.8	101.0	1	1.9	6.2
Style 1354			500	152.4	5.5	2.5	(7x34)			90% Shield							10	3.3	10.8
(30V 60°C)			1000 ††	304.8	9.0	4.1	.019″			Coverage							50	5.8	19.0
							BCCS			10.7Ω/M′							100	8.4	27.6
							97.0Ω/M′			35.1Ω/km							200	12.5	41.0
							318.2Ω/km										400	19.0	62.3
																	700	27.0	88.6
																	900	31.0	101.7
																	1000	34.0	111.5
RG-188A/U Type • 26 AWG Stranded (7x34) .007″ Silver-coated Copper-covered Steel • 96% Silver-coated Copper Braid Shield																			
TFE Teflon® Insulation • White TFE Tape Jacket																			
200°C	**83269**		100 †	30.5	2.8	1.3	26 AWG	.058	1.47	SCC Braid	.098	2.49	50	69.5%	29.0	95.1	1	1.2	3.9
VW-1			500 †	152.4	7.0	3.2	(7x34)			96% Shield	±.004	±.10					10	2.7	8.9
			1000 †	304.8	12.0	5.5	.007″			Coverage							50	5.6	18.4
							SCCCS			8.5Ω/M′							100	8.3	27.2
							91.2Ω/M′			27.9Ω/km							200	12.0	39.4
							299.2Ω/km										400	17.5	57.4
																	700	23.7	77.8
																	900	27.3	89.6
MIL-C-17D																	1000	29.0	95.1
RG-58/U Type • 20 AWG Solid .033″ Bare Copper • 78% Bare Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
75°C	**9201**		U-500	U-152.4	13.0	5.9	20 AWG	.116	2.95	BC Braid	.193	4.90	51.5	66%	28.5	93.5	1	.3	1.1
			500	152.4	15.5	7.0	(solid)			78% Shield							10	1.1	3.6
			U-1000	U-304.8	26.0	11.8	.033″			Coverage							50	2.5	8.2
			1000	304.8	25.0	11.4	BC			5.5Ω/M′							100	3.8	12.5
							10.0Ω/M′			18.0Ω/km							200	5.6	18.4
							33.1Ω/km										400	8.4	27.6
																	700	11.7	38.4
																	900	13.7	44.9
																	1000	14.5	47.6
RG-58/U Type • 20 AWG Solid .033″ Bare Copper • Duobond® II + 55% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**9310***		500	152.4	14.0	6.4	20 AWG	.114	2.90	Duobond II	.193	4.90	50	66%	30.8	101.0	1	.5	1.5
Style 1354			U-1000	U-304.8	23.0	10.5	(solid)			+ 55%							10	1.4	4.6
(30V 60°C)			1000	304.8	23.0	10.5	.033″			TC Braid							50	2.8	9.2
							BC			14.0Ω/M′							100	3.8	12.5
							10.0Ω/M′			45.9Ω/km							200	5.4	17.7
							33.1Ω/km										400	7.9	25.9
																	700	11.1	36.4
																	900	12.8	42.0
																	1000	13.9	45.6

BCCS = Bare Copper-covered Steel • DCR = DC Resistance • SCC = Silver-coated Copper • SCCCS = Silver-coated Copper-covered Steel • TC = Tinned Copper

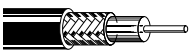
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

*See Belden's website, www.belden.com, for connector information.
† Spools may contain more than one piece. Length may vary ±10% from length shown.
†† Multi-piece spool (max. 3 pieces, min. length 100′). Length may vary ±10% from length shown.

Teflon is a DuPont trademark.

50 Ohm Transmission and Computer Cable

RG-58A/U Type

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-58A/U Type • 20 AWG Stranded (19x32) .037″ Tinned Copper • 96% Tinned Copper Braid Shield																			
Foam Polyethylene Insulation • Black or White PVC Jacket																			
UL AWM	**8219**	NEC:	U-500▲	U-152.4	14.0	6.4	20 AWG	.114	2.90	TC Braid	.194	4.93	53.5	73%	26.5	86.9	1	.4	1.2
Style 1354		CM	500	152.4	16.0	7.3	(19x32)			96% Shield							10	1.3	4.3
(30V 80°C)		CEC:	U-1000▲	U-304.8	27.0	12.3	.037″			Coverage							50	3.1	10.2
		CM	1000	304.8	27.0	12.3	TC			4.1Ω/M′							100	4.5	14.8
							8.8Ω/M′			13.4Ω/km							200	6.6	21.7
							28.9Ω/km										400	10.0	32.8
																	700	14.2	46.6
P-MSHA • SC-182/5*																	900	16.6	54.5
▲U-500 ft. and U-1000 ft. put-ups available in White only.																	1000	18.1	59.4
RG-58A/U Type • 20 AWG Stranded (19x32) .037″ Tinned Copper • Duobond® II + 55% Tinned Copper Braid Shield																			
Foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**9311****	NEC:	500	152.4	14.5	6.6	20 AWG	.114	2.90	Duobond II	.193	4.90	52	75%	26.0	85.3	1	.5	1.6
Style 1354		CM	U-1000	U-304.8	23.0	10.5	(19x32)			+ 55% TC							10	1.5	4.9
(30V 80°C)		CEC:	1000	304.8	23.0	10.5	.037″			Braid							50	2.9	9.5
		CM					TC			17.0Ω/M′							100	4.0	13.1
							8.8Ω/M′			55.8Ω/km							200	5.7	18.7
							28.9Ω/km										400	8.5	27.9
																	700	12.2	40.0
																	900	14.5	47.6
																	1000	15.8	51.8
RG-58A/U Type • 20 AWG Stranded (19x33) .035″ Tinned Copper • 95% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
75°C	**8259**		100	30.5	3.5	1.6	20 AWG	.116	2.95	TC Braid	.192	4.88	50	66%	30.8	101.0	1	.4	1.4
			U-500	U-152.4	13.5	6.1	(19x33)			95% Shield							10	1.5	4.9
			500	152.4	16.0	7.3	.035″			Coverage							50	3.7	12.1
			U-1000	U-304.8	27.0	12.3	TC			4.1Ω/M′							100	5.4	17.7
			1000	304.8	27.0	12.3	10.8Ω/M′			13.4Ω/km							200	8.1	26.6
							35.4Ω/km										400	12.4	40.7
																	700	17.7	58.1
																	900	21.1	69.2
																	1000	22.8	74.8
RG-58A/U Type • 20 AWG Solid .032″ Bare Copper • 95% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**8240**	NEC:	100	30.5	3.7	1.7	20 AWG	.116	2.95	TC Braid	.193	4.90	51.5	66%	28.5	93.5	1	.3	1.1
Style 1354		CMX	U-500	U-152.4	14.5	6.6	(solid)			95% Shield							10	1.1	3.6
(30V 80°C)		CEC:	500	152.4	16.0	7.3	.033″			Coverage							50	2.5	8.2
		CMX	U-1000	U-304.8	28.0	12.7	BC			4.1Ω/M′							100	3.8	12.5
			1000	304.8	28.0	12.7	10.0Ω/M′			13.4Ω/km	For Plenum versions of 8240, see 88240 or 82240.						200	5.6	18.4
							32.8Ω/km										400	8.4	27.6
																	700	11.7	38.4
																	900	13.7	44.9
																	1000	14.5	47.6
Plenum • FEP Insulation • Black FEP Jacket																			
200°C	**88240**	NEC:	500†	152.4	14.0	6.4	20 AWG	.107	2.72	TC Braid	.159	4.04	53.5	69.5%	26.4	86.6	1	.5	1.6
		CMP	1000†	304.8	26.0	11.8	(solid)			95% Shield							10	1.2	3.9
		CEC:					.032″			Coverage							50	3.0	9.8
		CMP FT6					BC			6.7Ω/M′							100	4.3	14.2
							10.2Ω/M′			22.0Ω/km							200	6.4	21.0
							33.5Ω/km										400	9.7	31.7
																	700	13.7	45.0
																	900	16.1	52.8
																	1000	17.3	56.6
Plenum • FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**82240**	NEC:	U-500†	U-152.4	12.5	5.7	20 AWG	.107	2.72	TC Braid	.159	4.04	53.5	69.5%	26.4	86.6	1	.5	1.6
		CMP	U-1000†	U-304.8	25.0	11.4	(solid)			95% Shield							10	1.2	3.9
		CEC:	1000†	304.8	25.0	11.4	.032″			Coverage							50	3.0	9.8
		CMP FT6					BC			6.7Ω/M′							100	4.3	14.2
							10.2Ω/M′			22.0Ω/km							200	6.4	21.0
							33.5Ω/km										400	9.7	31.7
																	700	13.7	45.0
																	900	16.1	52.8
																	1000	17.3	56.6

BC = Bare Copper • DCR = DC Resistance • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotation of RG/U cables not listed.

*Pennsylvania Department of Environmental Resource and United States Mine Safety and Health Administration certification. **See Belden's website, www.belden.com, for connector information.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

50 Ohm Transmission and Computer Cable

RG-8X and RG-8/U Type

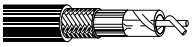
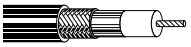
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-8X Type • 16 AWG Stranded (19x29) .058″ Bare Copper • 95% Bare Copper Braid Shield																			
Foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**9258**	NEC:	U-500	U-152.4	20.0	9.1	16 AWG	.155	3.94	BC Braid	.242	6.15	50	82%	24.8	81.4	1	.3	.8
Style 1354		CM	500	152.4	20.0	9.1	(19x29)			95% Shield							10	.9	2.9
(30V 80°C)		CEC:	U-1000	U-304.8	40.0	18.2	.058″			Coverage							50	2.1	6.9
		CM	1000▲	304.8	40.0	18.2	BC			3.3Ω/M′							100	3.1	10.2
							4.3Ω/M′			10.8Ω/km							200	4.5	14.8
							14.1Ω/km										400	6.6	21.7
																	700	9.1	29.9
																	900	10.7	35.1
▲1000 ft. put-up also available in White.																	1000	11.2	36.7
RG-8/U Type • 13 AWG Stranded (7x21) .085″ Bare Copper • 97% Bare Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
75°C	**8237**	NEC:	100	30.5	13.3	6.0	13 AWG	.285	7.24	BC Braid	.405	10.29	52	66%	28.5	93.5	1	.2	.5
		CMH	500	152.4	56.5	25.7	(7x21)			97% Shield							10	.6	1.8
		CEC:	1000	304.8	112.0	50.9	.085″			Coverage							50	1.3	4.3
		CMH FT1					BC			1.2Ω/M′							100	1.9	6.2
							1.9Ω/M′			3.9Ω/km							200	2.8	9.2
							6.2Ω/km										400	4.2	13.8
																	700	5.9	19.4
																	900	6.9	22.6
																	1000	7.4	24.3
JAN-C-17A																	4000	23.2	76.1
Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
UL AWM	**9251**	NEC:	500	152.4	58.0	26.4	13 AWG	.285	7.24	BC Braid	.405	10.29	52	66%	28.5	93.5	1	.2	.5
Style 1354		CMX	1000	304.8	115.0	52.3	(7x21)			97% Shield							10	.6	1.8
(30V 60°C)		CEC:					.085″			Coverage							50	1.3	4.3
		CMX					BC			1.2Ω/M′							100	1.9	6.2
							1.9Ω/M′			3.9Ω/km							200	2.8	9.2
							6.2Ω/km										400	4.2	13.8
																	700	5.9	19.4
																	900	6.9	22.6
																	1000	7.4	24.3
MIL-C-17D																	4000	23.2	76.1
RG-8/U Type • 11 AWG Stranded (7x19) .108″ Bare Copper • 97% Bare Copper Braid Shield																			
Foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**8214**	NEC:	100	30.5	14.2	6.5	11 AWG	.285	7.24	BC Braid	.403	10.24	50	78%	26	85.3	1	.1	.5
Style 1354		CM	500	152.4	61.0	27.7	(7x19)			97% Shield							10	.5	1.7
(30V 80°C)		CEC:	1000	304.8	121.0	55.0	.108″			Coverage							50	1.2	3.9
		CM					BC			1.1Ω/M′							100	1.7	5.6
							1.2Ω/M′			3.6Ω/km							200	2.6	8.5
							3.9Ω/km										400	3.9	12.8
																	700	5.6	18.4
																	900	6.5	21.3
																	1000	7.0	23.0
																	4000	21.5	70.5

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

50 Ohm Transmission and Computer Cable

RG-8/U Type

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-8/U Type • 10 AWG Solid .108″ Bare Copper • Duobond® II + 90% Tinned Copper Braid Shield																			
Semi-solid Polyethylene Insulation • Black PVC Jacket																			
Low Loss 75°C 	**9913**		100	30.5	14.0	6.4	10 AWG (solid) .108″ BC .9Ω/M′ 3.0Ω/km	.286	7.26	Duobond II + 90% TC Braid 1.8Ω/M′ 5.9Ω/km	.405	10.29	50	84%	24.6	80.7	1	.3	1.0
			250	76.2	31.3	14.2											10	.5	1.6
			500	152.4	57.5	26.1											50	1.1	3.6
			1000	304.8	114.0	57.8											100	1.6	5.1
											For Plenum version of 9913, see 89913.						200	2.2	7.2
																	400	3.1	10.1
																	700	4.1	13.3
																	900	4.6	15.1
																	1000	4.8	15.9
																	4000	9.6	31.5
RG-8/U Type • 10 AWG Stranded (7x19) .108″ Bare Copper • Duobond II + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Matte Black Belflex® Jacket																			
Low Loss High-Flex 80°C 	**9913F7**		100	30.5	12.4	5.6	10 AWG (7x19) .108″ BC 1.1Ω/M′ 3.7Ω/km	.285	7.24	Duobond II + 95% TC Braid 1.1Ω/M′ 3.6Ω/km	.405	10.29	50	83%	24.6	80.7	1	.4	1.3
			250	76.2	27.5	12.5											10	.6	2.1
			500	152.4	52.0	23.6											50	1.3	4.4
			1000	304.8	102.0	46.4											100	1.8	6.0
																	200	2.5	8.4
																	400	3.5	11.5
																	700	4.6	15.0
																	900	5.1	16.9
																	1000	5.4	17.7
																	4000	10.3	33.8
RG-8/U Type • 10 AWG Solid .108″ Bare Copper • Duobond II + 90% Tinned Copper Braid Shield																			
Plenum • Semi-solid FEP Insulation • Black Fluorocopolymer Jacket																			
150°C	**89913**	NEC: CMP CEC: CMP FT6	500†	152.4	63.0	28.6	10 AWG (solid) .108″ BC .9Ω/M′ 3.0Ω/km	.295	7.49	Duobond II + 90% TC Braid 1.8Ω/M′ 5.9Ω/km	.364	9.25	50	83%	25.0	82.0	1	.1	.3
			1000†	304.8	128.0	58.2											10	.4	1.3
																	50	1.0	3.3
																	100	1.6	5.2
																	200	2.3	7.5
																	400	3.4	11.1
																	700	5.0	16.4
																	900	6.0	19.7
																	1000	6.9	22.6
																	4000	17.0	55.8
RG-8/U Type • 10 AWG Solid .103″ Bare Copper • Duobond II + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
Low Loss UL AWM Style 1354 (30V 80°C)	**9914**	NEC: CMG CEC: CMG FT4	500	152.4	60.0	27.3	10 AWG (solid) .103″ BC 1.2Ω/M′ 3.9Ω/km	.285	7.24	Duobond II + 95% TC Braid 1.1Ω/M′ 3.6Ω/km	.403	10.24	50	82%	24.8	81.4	1	.4	1.3
			1000	304.8	119.0	54.1											10	.6	2.1
																	50	1.3	4.4
																	100	1.8	6.0
																	200	2.5	8.4
																	400	3.5	11.5
																	700	4.6	15.0
																	900	5.1	16.9
																	1000	5.4	17.7
																	4000	10.3	33.8
RG-8/U Type • 10 AWG Solid .108″ Bare Copper • Duofoil® + 90% Tinned Copper Braid Shield																			
Plenum • Foam FEP Insulation • Black Fluorocopolymer Jacket																			
Low Loss 125°C	**7733A**	NEC: CMP CEC: CMP FT6	500	152.4	53.5	24.3	10 AWG (solid) .108″ BC .9Ω/M′ 3.0Ω/km	.280	7.11	Duofoil + 90% TC Braid 1.8Ω/M′ 5.9Ω/km	.355	9.01	50	84%	24.2	79.4	1	.1	.3
			1000	304.8	105.0	47.7											10	.4	1.3
																	50	1.1	3.6
																	100	1.5	4.9
																	200	2.1	6.9
																	400	3.2	10.5
																	700	4.5	14.8
																	900	5.7	18.7
																	1000	5.9	19.4
																	4000	14.1	46.3

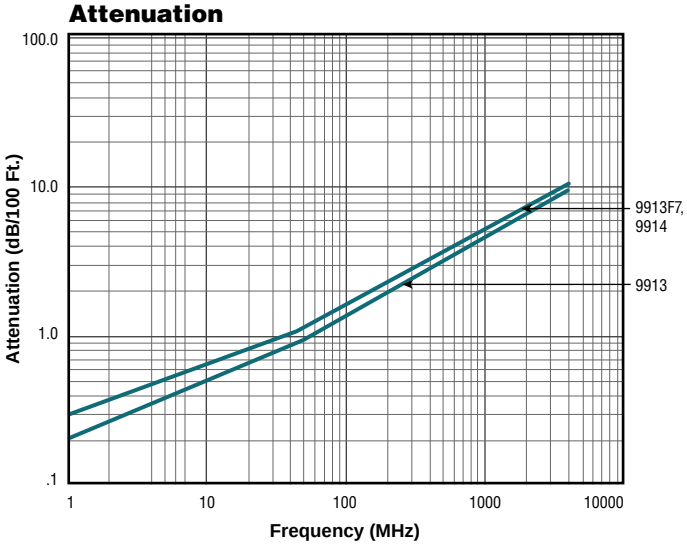
BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

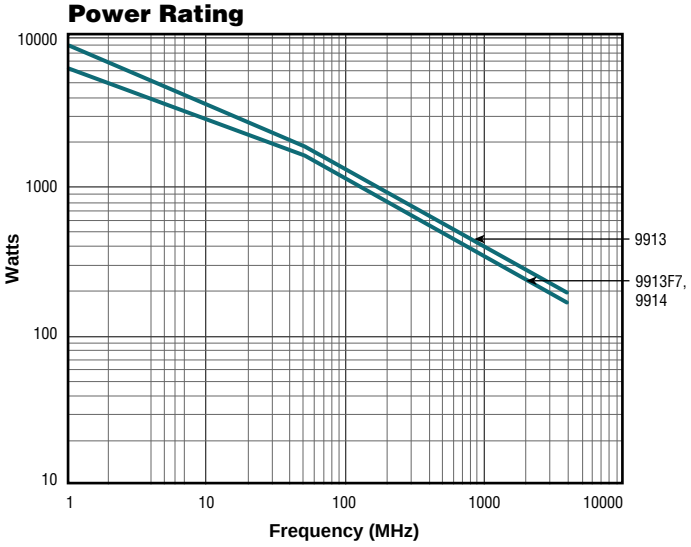
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

†Spools are one piece, but length may vary ±10% from length shown.

50 Ohm Transmission Cable

Electrical Characteristics of 9913, 9913F7 and 9914





Conformable® Coax Cable

50 Ohm Microwave Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
M17/151 Type • 29 AWG Solid .011″ Silver-coated Copper-covered Steel • Copper-Tin Composite Shield (100% Coverage)																			
TFE Teflon® Insulation • Unjacketed																			
UL AWM	**1674A***		50†	15.2	.2	.1	29 AWG	.034	.85	CT	.047	1.19	50	69.5%	29.5	96.8	500	25.0	82.0
Style 10245			100†	30.5	.4	.2	(solid)			Composite							1000	36.7	120.3
(30V 105°C)			500†	152.4	2.0	.9	.011″			100% Shield							2000	53.8	176.5
			1000†	304.8	5.0	2.3	SCCCS			Coverage							3000	67.3	220.8
							205.0Ω/M′			8.0Ω/M′							5000	89.2	292.8
							672.4Ω/km			26.2Ω/km							7000	107.5	352.6
																	10000	130.9	429.5
																	15000	163.8	537.4
																	18000	181.1	594.3
																	20000	192.0	630.0
M17/151 Type • 29 AWG Solid .011″ Silver-plated Copper • Copper-Tin Composite Shield (100% Coverage)																			
TFE Teflon Insulation • Unjacketed																			
UL AWM	**1674B***		100†	30.5	.4	.2	29 AWG	.034	.85	CT	.047	1.19	50	69.5%	29.5	96.8	500	25.0	82.0
Style 10245	new		500†	152.4	2.0	.9	(solid)			Composite							1000	36.7	120.3
(30V 105°C)			1000†	304.8	5.0	2.3	.011″			100% Shield							2000	53.8	176.5
							SPC			Coverage							3000	67.3	220.8
							81.2Ω/M′			8.0Ω/M′							5000	89.2	292.8
							266.4Ω/km			26.2Ω/km							7000	107.5	352.6
																	10000	130.9	429.5
																	15000	163.8	537.4
																	18000	181.1	594.3
																	20000	192.0	630.0
RG-405/U Type • 24 AWG Solid .020″ Silver-coated Copper-covered Steel • Copper-Tin Composite Shield (100% Coverage)																			
TFE Teflon Insulation • Unjacketed																			
UL AWM	**1671A***		50†	15.2	2.8	1.3	24 AWG	.062	1.57	CT	.085	2.16	50	69.5%	29.5	96.8	500	13.0	42.7
Style 10245			100†	30.5	3.3	1.5	(solid)			Composite							1000	19.4	63.5
(30V 105°C)			500†	152.4	8.0	3.6	.020″			100% Shield							2000	28.8	94.5
			1000†	304.8	14.0	6.4	SCCCS			Coverage							3000	36.4	119.3
							64.2Ω/M′			10.2Ω/M′							5000	48.7	159.9
							210.6Ω/km			33.5Ω/km							7000	59.1	194.0
																	10000	72.6	238.0
																	15000	91.6	300.4
																	18000	101.7	333.6
																	20000	108.0	354.3
TFE Teflon Insulation • PVC Jacket (Black or Clear)																			
UL AWM	**1671J***		100†	30.5	3.7	1.7	24 AWG	.062	1.57	CT	.127	3.23	50	69.5%	29.5	96.8	500	13.0	47.2
Style 10245			500†	152.4	9.5	4.7	(solid)			Composite							1000	19.4	63.5
(30V 105°C)			1000†	304.8	18.0	8.2	.020″			100% Shield							2000	28.8	94.5
							SCCCS			Coverage							3000	36.4	119.3
							64.2Ω/M′			10.2Ω/M′							5000	48.7	159.9
							210.6Ω/km			33.5Ω/km							7000	59.1	194.0
																	10000	72.6	238.0
																	15000	91.6	300.4
																	18000	101.7	333.6
																	20000	108.0	354.3
RG-405/U Type • 24 AWG Solid .020″ Silver-plated Copper • Copper-Tin Composite Shield (100% Coverage)																			
TFE Teflon Insulation • Unjacketed																			
UL AWM	**1671B**		100†	30.5	3.3	1.5	24 AWG	.062	1.57	CT	.085	2.16	50	69.5%	29.5	96.8	500	13.0	47.2
Style 10245	new		500†	152.4	8.0	3.6	(solid)			Composite							1000	19.4	63.5
(30V 105°C)			1000†	304.8	14.0	6.4	.020″			100% Shield							2000	28.8	94.5
							SPC			Coverage							3000	36.4	119.3
							25.7Ω/M′			10.2Ω/M′							5000	48.7	159.9
							84.3Ω/km			33.5Ω/km							7000	59.1	194.0
																	10000	72.6	238.0
																	15000	91.6	300.4
																	18000	101.7	333.6
																	20000	108.0	354.3

CT = Copper-Tin • DCR = DC Resistance • SCCCS = Silver-coated Copper-covered Steel • SPC = Silver-plated Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

*Protected by one or more of U.S. Patent Nos. 4,694,122 and 5,292,001. Patent held in the U.S., Singapore, Australia, Germany, France and England. Patent pending in Japan.

†50 ft. put-up: Exact 1 piece
100 ft. put-up: Exact 2 pieces (maximum), 25 feet minimum length
250 ft. put-up: Exact 3 pieces (maximum), 25 feet minimum length
500 ft. put-up: Exact 4 pieces (maximum), 25 feet minimum length
1000 ft. put-up: Exact 3 pieces (maximum), 328 feet minimum length

Teflon is a Dupont trademark.

Conformable® Coax Cable

50 Ohm Microwave Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-402/U Type • 19 AWG Solid .036″ Silver-coated Copper-covered Steel • Copper-Tin Composite Shield (100% Coverage)																			
TFE Teflon® Insulation • Unjacketed																			
UL AWM	**1673A***		50†	15.2	4.1	1.8	19 AWG	.116	2.95	CT	.138	3.51	50	69.5%	29.5	96.8	500	8.0	26.2
Style 10245			100†	30.5	4.7	2.1	(solid)			Composite							1000	12.0	39.5
(30V 105°C)			250†	76.2	8.8	4.0	.036″			100% Shield							2000	18.1	59.3
			500†	152.4	15.0	6.8	SCCCS			Coverage							3000	22.9	75.3
							20.5Ω/M′			4.5Ω/M′							5000	31.0	101.6
							67.2Ω/km			14.8Ω/km							7000	37.8	123.9
																	10000	46.6	152.8
																	15000	59.1	193.9
																	18000	65.8	215.9
																	20000	70.0	229.7
TFE Teflon Insulation • PVC Jacket (Black or Clear)																			
UL AWM	**1673J***		100†	30.5	5.1	2.3	19 AWG	.116	2.95	CT	.178	4.52	50	69.5%	29.5	96.8	500	8.0	26.2
Style 10245			500†	152.4	17.5	8.0	(solid)			Composite							1000	12.0	39.5
(30V 105°C)							.036″			100% Shield							2000	18.1	59.3
							SCCCS			Coverage							3000	22.9	75.3
							20.5Ω/M′			4.5Ω/M′							5000	31.0	101.6
							67.2Ω/km			14.8Ω/km							7000	37.8	123.9
																	10000	46.6	152.8
																	15000	59.1	193.9
																	18000	65.8	215.9
																	20000	70.0	229.7
RG-402/U Type • AWG 19 Solid .036″ Silver-plated Copper • Copper-Tin Composite Shield (100% Coverage)																			
TFE Teflon Insulation • Unjacketed																			
UL AWM	**1673B***		100†	30.5	4.7	2.1	19 AWG	.116	2.95	CT	.138	3.51	50	69.5%	29.5	96.8	500	8.0	26.2
Style 10245	new		250†	76.2	8.5	3.9	(solid)			Composite							1000	12.0	39.5
(30V 105°C)			500†	152.4	15.0	6.8	.036″			100% Shield							2000	18.1	59.3
							SPC			Coverage							3000	22.9	75.3
							7.9Ω/M′			4.5Ω/M′							5000	31.0	101.6
							25.9Ω/km			14.8Ω/km							7000	37.8	123.9
																	10000	46.6	152.8
																	15000	59.1	193.9
																	18000	65.8	215.9
																	20000	70.0	229.7
RG-401/U Type •14 AWG Solid .065″ Silver-plated Copper • Copper-Tin Composite Shield (100% Coverage)																			
TFE Teflon Insulation • Unjacketed																			
UL AWM	**1675A***		50†	15.2	4.1	1.8	14 AWG	.210	5.33	CT	.246	6.25	50	69.5%	29.6	97.1	400	3.8	12.6
Style 10245	new		100†	30.5	8.1	3.7	(solid)			Composite							500	4.4	14.4
(30V 105°C)			250†	76.2	20.3	9.2	.065″			100% Shield							1000	6.8	22.2
			500†	152.4	40.5	18.4	SPC			Coverage							2000	10.4	34.2
							2.5Ω/M′			8.0Ω/M′							3000	13.4	44.1
							8.2Ω/km			26.2Ω/km							5000	18.5	60.6
																	7000	22.8	74.7
																	10000	28.4	93.3
																	15000	36.6	120.1
																	18000	41.0	134.5
TFE Teflon Insulation • Clear PVC Jacket																			
UL AWM	**1675J***		50†	15.2	4.5	2.0	14 AWG	.210	5.33	CT	.286	7.26	50	69.5%	29.6	97.1	400	3.8	12.6
Style 10245	new		100†	30.5	9.0	4.1	(solid)			Composite							500	4.4	14.4
(30V 105°C)			250†	76.2	22.8	10.3	.065″			100% Shield							1000	6.8	22.2
			500†	152.4	45.0	20.5	SPC			Coverage							2000	10.4	34.2
							2.5Ω/M′			8.0Ω/M′							3000	13.4	44.1
							8.2Ω/km			26.2Ω/km							5000	18.5	60.6
																	7000	22.8	74.7
																	10000	28.4	93.3
																	15000	36.6	120.1
																	18000	41.0	134.5

CT = Copper-Tin • DCR = DC Resistance • SCCCS = Silver-coated Copper-covered Steel • SPC = Silver-plated Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

*Protected by one or more of U.S. Patent Nos. 4,694,122 and 5,292,001. Patent held in the U.S., Singapore, Australia, Germany, France and England. Patent pending in Japan.

†50 ft. put-up: Exact 1 piece
100 ft. put-up: Exact 2 pieces (maximum), 25 feet minimum length
250 ft. put-up: Exact 3 pieces (maximum), 25 feet minimum length
500 ft. put-up: Exact 4 pieces (maximum), 25 feet minimum length
1000 ft. put-up: Exact 3 pieces (maximum), 328 feet minimum length

Teflon is a DuPont trademark.

Conformable® Coax Cable

75 Ohm High-Frequency Video Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
29 AWG Solid .011″ Silver-coated Copper-covered Steel • Copper-Tin Composite Shield (100% Coverage)																			
TFE Teflon® Insulation • Unjacketed																			
UL AWM	**1672A***		500†	152.4	8.0	3.6	29 AWG	.062	1.57	CT	.085	2.21	75	69.5%	19.5	64.0	1	1.2	3.9
Style 10245			1000†	304.8	14.0	6.4	(solid)			Composite							10	2.4	7.9
(30V 105°C)							.011″			100% Shield							50	4.5	14.8
							SCCCS			Coverage							100	6.6	21.6
							205.0Ω/M′			10.2Ω/M′							200	10.0	32.8
							672.4Ω/km			33.5Ω/km							400	15.0	49.2
																	500	17.0	55.8
																	700	21.0	68.9
																	900	24.0	78.7
																	1000	26.0	85.3
TFE Teflon Insulation • PVC Jacket (Black or Clear)																			
UL AWM	**1672J***		100†▲	30.5	3.1	1.4	29 AWG	.062	1.57	CT	.127	3.23	75	69.5%	19.5	64.0	1	1.2	3.9
Style 10245			500†	152.4	9.5	4.3	(solid)			Composite							10	2.4	7.9
(30V 105°C)			1000†	304.8	17.0	7.7	.011″			100% Shield							50	4.5	14.8
							SCCCS			Coverage							100	6.6	21.6
							205.0Ω/M′			10.2Ω/M′							200	10.0	32.8
							672.4Ω/km			33.5Ω/km							400	15.0	49.2
																	500	17.0	55.8
																	700	21.0	68.9
																	900	24.0	78.7
▲100 ft. put-up available in Clear only.																	1000	26.0	85.3
29 AWG Solid .011″ Silver-plated Copper • Copper-Tin Composite Shield (100% Coverage)																			
TFE Teflon Insulation • Unjacketed																			
UL AWM	**1672B***		100†	30.5	3.3	1.5	29 AWG	.062	1.57	CT	.087	2.21	75	69.5%	19.5	64.0	1	1.2	3.9
Style 10245	new		500†	152.4	8.0	3.6	(solid)			Composite							10	2.4	7.9
(30V 105°C)			1000†	304.8	14.0	6.4	.011″			100% Shield							50	4.5	14.8
							SPC			Coverage							100	6.6	21.7
							81.2Ω/M′			10.2Ω/M′							200	10.0	32.8
							266.4Ω/km			33.5Ω/km							400	15.0	49.2
																	500	17.0	55.8
																	700	21.0	68.9
																	900	24.0	78.7
Non-ferrous design.																	1000	26.0	85.3

CT = Copper Tin • DCR = DC Resistance • SCCCS = Silver-coated Copper-covered Steel • SPC = Silver-plated Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

*Protected by one or more of U.S. Patent Nos. 4,694,122 and 5,292,001. Patent held in the U.S., Singapore, Australia, Germany, France and England. Patent pending in Japan.

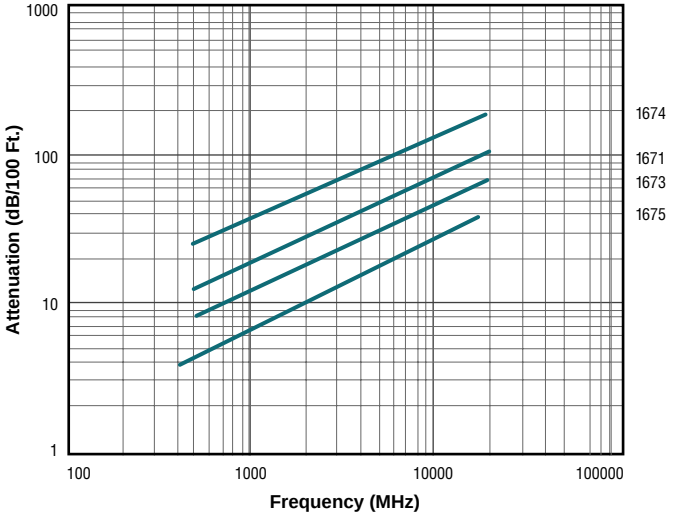
†50 ft. put-up: Exact 1 piece
100 ft. put-up: Exact 2 pieces (maximum), 25 feet minimum length
250 ft. put-up: Exact 3 pieces (maximum), 25 feet minimum length
500 ft. put-up: Exact 4 pieces (maximum), 25 feet minimum length
1000 ft. put-up: Exact 3 pieces (maximum), 328 feet minimum length

Teflon is a DuPont trademark.

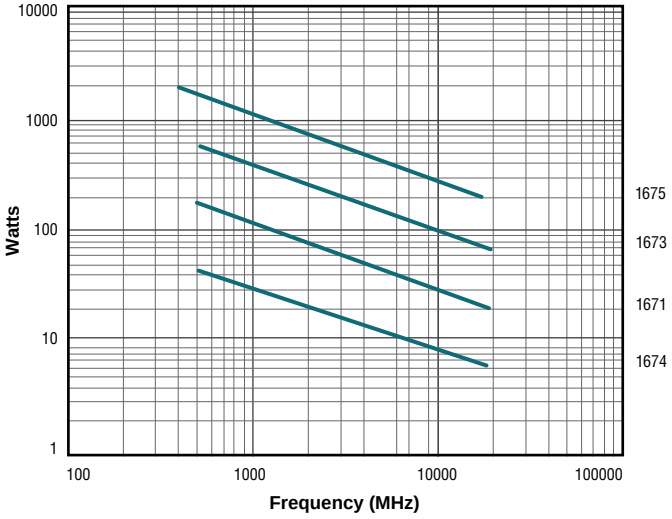
Conformable® Coax Cable

Electrical Characteristics

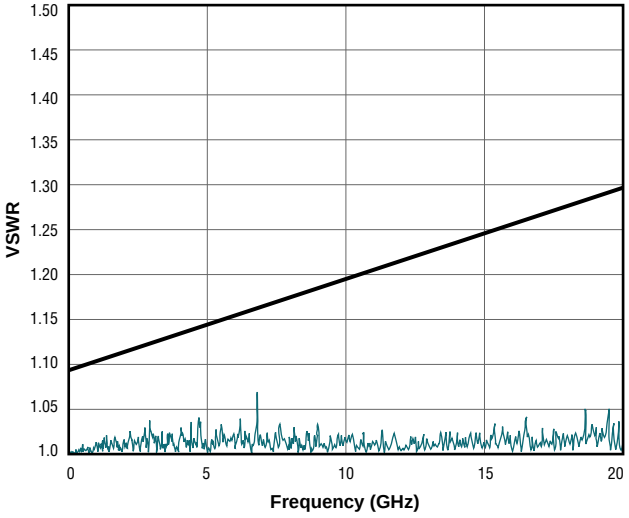
Attenuation



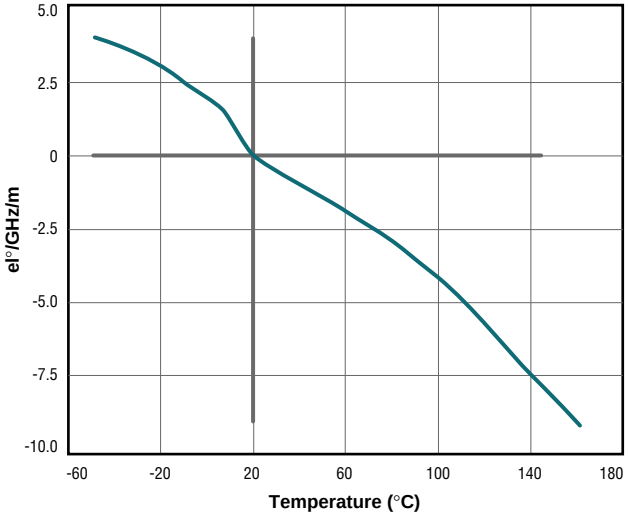
Power Rating



Guaranteed VSWR



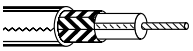
Phase Stability



Conformable Coax cable is an alternative to semi-rigid and flexible coax for “black box” applications involving internal, head-end wiring of electronic equipment, delay lines, and high-frequency applications.

MIL-C-17G QPL Cable

50 Ohm Coax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
30 AWG Stranded (7x38) .012″ Silver-coated Copper-covered Steel • Silver-coated Copper Braid Shield																			
TFE Teflon® Insulation • White FEP Jacket																			
200°C	**83265**		100†	30.5	.8	.4	30 AWG	.033	.84	SCC Braid	.071	1.80	50	69.5%	29.0	95.1	1	2.6	8.5
VW-1			500†	152.4	3.5	1.6	(7x38)			96% Shield							10	5.6	18.4
			1000†	304.8	7.0	3.2	.012″			Coverage							50	10.5	34.4
							SCCCS			14.6Ω/M′							100	14.0	45.9
							244.0Ω/M′			47.9Ω/km							200	19.0	62.3
							801.0Ω/km										400	28.0	91.9
																	700	37.0	121.4
																	900	42.5	139.4
M17/169-00001 (RG-178B/U). Non-SWR swept version of RG-178.																	1000	46.0	150.9
26 AWG Stranded (7x.006″) .020″ Silver-coated Copper-covered Steel • 95% Silver-coated Copper Braid Shield																			
TFE Teflon Insulation • White FEP Jacket																			
200°C	**83284**		100†	30.5	1.2	.5	26 AWG	.058	1.47	SCC Braid	.098	2.49	50	69.5%	29.0	95.1	1	1.2	3.9
VW-1			500†	152.4	6.0	2.7	(7x.006″)			95% Shield							10	2.7	8.9
			1000†	304.8	11.0	5.0	.020″			Coverage							50	5.6	18.4
							SCCCS			6.5Ω/M′							100	8.3	27.2
							84.1Ω/M′			27.9Ω/km							200	12.0	39.4
							275.9Ω/km										400	17.5	57.4
																	700	23.7	77.8
																	900	27.3	89.6
M17/172-00001 (RG-316/U). Non-SWR swept version of RG-316.																	1000	29.0	95.1
TFE Teflon Insulation • Brown FEP Jacket																			
200°C	**84316**		100†	30.5	1.2	.5	26 AWG	.058	1.47	SCC Braid	.098	2.44	50	69.5%	29.0	95.1	1	1.2	3.9
VW-1			500†	152.4	6.0	2.7	(7x.006″)			95% Shield							10	2.7	8.9
			1000†	304.8	11.0	5.0	.020″			Coverage							50	5.6	18.4
							SCCCS			6.5Ω/M′							100	8.3	27.2
							84.1Ω/M′			27.9Ω/km							200	12.0	39.4
							275.9Ω/km										400	17.5	57.4
																	700	23.7	77.8
																	900	27.3	89.6
M17/113-RG316																	1000	29.0	95.1
22 AWG Stranded (27x36) .030″ Tinned Copper • 95% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
UL AWM	**9252**	NEC:	1000	304.8	20.0	9.1	22 AWG	.096	2.44	TC Braid	.160	4.06	50	66%	30.8	101.0	1	.4	1.3
Style 1354		CMX					(27x36)			Shield							10	1.7	5.6
(30V 60°C)		CEC:					.030″			95% Shield							50	4.5	14.8
		CMX					TC			Coverage							100	7.0	23.0
							17.1Ω/M′			5.2Ω/M′							200	11.0	36.1
							56.1Ω/km			17.1Ω/km							400	16.5	54.1
																	700	23.5	77.1
																	900	27.3	89.6
M17/157-00001 (RG-122/U).Non-SWR swept version of RG-122.																	1000	29.0	95.1

DCR = DC Resistance • SCC = Silver-coated Copper • SCCCS = Silver-coated Copper-covered Steel • TC = Tinned Copper

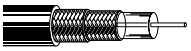
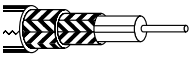
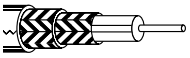
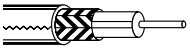
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

†Spools may contain more than one piece. Length may vary ±10% from length shown.

Teflon is a DuPont trademark.

MIL-C-17G QPL Cable

50 Ohm Coax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Stranded (19x33) .035″ Tinned Copper • 95% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
85°C	**9203**		500	152.4	15.5	7.0	20 AWG	.116	2.95	TC Braid	.195	4.95	50	66%	30.8	101.0	1	.4	1.4
			1000	304.8	26.0	11.8	(19x33)			95% Shield							10	1.4	4.6
							.035″			Coverage							50	3.3	10.8
							TC			4.1Ω/M′							100	4.9	16.1
							10.8Ω/M′			13.4Ω/km							200	7.3	24.0
							35.4Ω/km										400	11.5	37.7
																	700	17.0	55.8
																	900	20.0	65.6
M17/28-RG58																	1000	21.5	70.5
85°C	**8262**		U-500	U-152.4	14.0	6.4	20 AWG	.115	2.92	TC Braid	.195	4.90	50	66%	30.8	101.0	1	.4	1.4
			500	152.4	16.0	4.3	(19x33)			95% Shield							10	1.4	4.6
			U-1000	U-304.8	27.0	12.3	.035″			Coverage							50	3.3	10.8
			1000	304.8	27.0	12.3	TC			4.1Ω/M′							100	4.9	16.1
							10.8Ω/M′			13.4Ω/km							200	7.3	24.0
							35.4Ω/km										400	11.5	37.7
																	700	17.0	55.8
																	900	20.0	65.6
M17/155-00001 (RG-58C/U). Non-SWR swept version of RG-58.																	1000	21.5	70.5
19 AWG Solid .034″ Silver-coated Copper • Two Silver-coated Copper Braids (95% Shield Coverage)																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
UL AWM	**9273**	NEC:	100	30.5	4.7	2.1	19 AWG	.117	2.95	(2) SCC	.212	5.38	50	66%	30.8	101.0	1	.4	1.1
Style 1354		CMX	U-500	U-152.4	19.5	8.9	(solid)			Braids							10	1.2	3.9
(30V 60°C)		CEC:	500	152.4	22.0	10.0	.034″			95% Shield							50	2.8	9.2
		CMX	U-1000	U-304.8	39.0	17.7	SCC			Coverage							100	4.1	13.5
			1000	304.8	39.0	17.7	8.8Ω/M′			2.5Ω/M′							200	6.0	19.7
							28.9Ω/km			8.2Ω/km							400	8.8	28.9
																	700	12.0	39.4
																	900	13.8	45.3
M17/167-00001 (RG-223/U). Non-SWR swept version of RG-223.																	1000	14.5	47.6
18 AWG Solid .037″ Silver-coated Copper-covered Steel • Two Silver-coated Copper Braids (96% Shield Coverage)																			
Plenum • TFE Teflon® Insulation • Tinted Brown FEP Jacket																			
200°C	**84142**	NEC:	100†	30.5	6.2	2.8	18 AWG	.116	2.95	(2) SCC	.195	4.95	50	70%	29.0	95.1	1	.3	1.1
VW-1		CMP	500†	152.4	23.0	10.5	(solid)			Braids							10	1.1	3.6
		CEC:	1000†	304.8	48.0	21.8	.037″			96% Shield							50	2.7	8.9
		CMP FT6					SCCCS			Coverage							100	3.9	12.8
							19.3Ω/M′			2.3Ω/M′							200	5.6	18.4
							63.3Ω/km			7.5Ω/km							400	6.9	22.6
																	700	11.0	36.1
																	900	12.5	41.0
M17/60-RG142																	1000	13.5	44.3
200°C	**83242**	NEC:	100†	30.5	6.5	3.0	18 AWG	.116	2.95	(2) SCC	.195	4.95	50	70%	29.0	95.1	1	.3	1.1
VW-1		CMP	500†	152.4	23.0	10.5	(solid)			Braids							10	1.1	3.6
		CEC:	1000†	304.8	48.0	21.8	.037″			96% Shield							50	2.7	8.9
		CMP FT6					SCCCS			Coverage							100	3.9	12.8
							19.3Ω/M′			2.3Ω/M′							200	5.6	18.4
							63.3Ω/km			7.5Ω/km							400	6.9	22.6
																	700	11.0	36.1
																	900	12.5	41.0
M17/158-00001 (RG-142B/U).Non-SWR swept version of RG-142.																	1000	13.5	44.3
18 AWG Solid .037″ Silver-coated Copper-covered Steel • 95% Silver-coated Copper Braid Shield																			
Plenum • TFE Teflon Insulation • Tinted Brown FEP Jacket																			
200°C	**84303**	NEC:	500†	152.4	17.0	7.7	18 AWG	.116	2.95	SCC Braid	.170	4.31	50	70%	29.0	95.1	1	.3	1.1
VW-1		CL2P	1000†	304.8	32.0	14.5	(solid)			Shield							10	1.1	3.6
							.037″			95% Shield							50	2.7	8.9
							SCCCS			Coverage							100	3.9	12.8
							16.3Ω/M′			4.3Ω/M′							200	5.6	18.4
							53.5Ω/km			14.1Ω/km							400	8.2	26.9
																	700	11.0	36.1
																	900	12.5	41.0
M17/111-RG303																	1000	13.5	44.3

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MIL-C-17G QPL Cable

50 Ohm Coax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
15.5 AWG Solid .056″ Silver-coated Copper • Two Silver-coated Copper Braids (95% Shield Coverage)																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
85°C	**9861**		1000	304.8	91.0	41.4	15.5 AWG (solid) .056″ SCC 3.3Ω/M′ 10.8Ω/km	.185	4.70	(2) SCC Braids 95% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.332	8.43	50	66%	30.8	101.0	1	.3	.9
																	10	.8	2.7
																	50	1.9	6.2
																	100	2.7	8.9
																	200	4.1	13.5
																	400	5.9	19.4
																	700	8.0	26.2
																	900	9.1	29.9
M17/162-00001 (RG-212/U). Non-SWR swept version of RG-212.																	1000	9.8	32.1
13 AWG Stranded (7x21) .089″ Bare Copper • 97% Bare Copper Braid Shield																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
UL AWM	**8267**	NEC:	500	152.4	57.0	25.9	13 AWG (7x21) .089″ BC 1.7Ω/M′ 5.6Ω/km	.285	7.24	BC Braid 97% Shield Coverage 1.2Ω/M′ 3.9Ω/km	.405	10.29	50	66%	30.8	101.0	1	.2	.6
Style 1354		CMX	1000	304.8	113.0	51.4											10	.6	1.8
(30V 60°C)		CEC:															50	1.3	4.3
		CMX															100	1.9	6.2
																	200	2.7	8.9
																	400	4.1	13.5
																	700	6.5	21.3
																	900	7.6	24.9
																	1000	8.0	26.2
M17/163-00001 (RG-213/U). Non-SWR swept version of RG-213.																	4000	21.5	70.5
13 AWG Stranded (7x21) .089″ Silver-coated Copper • Two Silver-coated Copper Braids (97% Shield Coverage)																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
UL AWM	**8268**	NEC:	500	152.4	68.0	30.9	13 AWG (7x21) .089″ SCC 1.7Ω/M′ 5.6Ω/km	.285	7.24	(2) SCC Braids 97% Shield Coverage .7Ω/M′ 2.3Ω/km	.425	10.80	50	66%	30.8	101.0	1	.2	.6
Style 1354		CMX	1000	304.8	135.0	61.4											10	.6	1.8
(30V 60°C)		CEC:															50	1.3	4.3
		CMX															100	1.9	6.2
																	200	2.7	8.9
																	400	4.1	13.4
																	700	6.5	21.3
																	900	7.6	24.9
																	1000	8.0	26.2
M17/164-00001 (RG-214/U). Non-SWR swept version of RG-214.																	4000	20.0	65.6

BC = Bare Copper • DCR = DC Resistance • SCC= Silver-coated Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

†Spools may contain more than one piece. Length may vary ±10% from length shown.

MIL-C-17G QPL Cable

75 Ohm Coax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
30 AWG Stranded (7x38) .012″ Silver-coated Copper-covered Steel • Silver-coated Copper Braid Shield																			
TFE Teflon® Insulation • Tinted Brown FEP Jacket																			
200°C	**83264**		100†	30.5	1.2	.5	30 AWG	.062	1.58	SCC Braid	.100	2.54	75	69.5%	19.5	64.0	1	3.0	9.8
VW-1			500†	152.4	6.0	2.7	(7x38)			95% Shield							10	5.3	17.4
			1000†	304.8	11.0	5.0	.012″			Coverage							50	8.5	27.9
							SCCCS			8.5Ω/M′							100	10.0	32.8
							244.0Ω/M′			28.2Ω/km							200	12.5	41.0
							801.0Ω/km										400	16.0	52.5
																	700	19.7	64.6
																	900	22.3	73.2
M17/94-RG179																	1000	24.0	78.7
23 AWG Solid .023″ Bare Copper-covered Steel • 95% Bare Copper Braid Shield																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
60°C	**9204**	NEC:	500	152.4	22.0	10.0	23 AWG	.146	3.71	BC Braid	.241	6.12	75	66%	20.5	67.3	1	.6	2.0
VW-1		CMH	U-1000	U-304.8	38.0	17.3	(solid)			95% Shield							10	1.1	3.6
		CEC:	1000	304.8	38.0	17.3	.023″			Coverage							50	2.4	7.9
		CMH FT1					BCCS			2.6Ω/M′							100	3.4	11.2
							47.0Ω/M′			8.5Ω/km							200	4.9	16.1
							152.4Ω/km										400	7.0	23.0
																	700	9.7	31.8
																	900	11.1	36.4
M17/29-RG59																	1000	12.0	39.4
18 AWG Stranded (7x26) .048″ Tinned Copper • 97% Bare Copper Braid Shield																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
60°C	**9212**	NEC:	1000	304.8	105.0	47.7	18 AWG	.285	7.24	BC Braid	.405	10.29	75	66%	20.5	67.3	1	.2	.6
VW-1		CMH					(7x26)			97% Shield							10	.7	2.2
		CEC:					.048″			Coverage							50	1.3	4.3
		CMH FT1					TC			1.2Ω/M′							100	2.0	6.6
							6.1Ω/M′			3.9Ω/km							200	2.9	9.5
							20.0Ω/km										400	4.2	13.8
																	700	5.8	19.0
																	900	6.9	22.6
M17/6-RG11																	1000	7.2	23.6
18 AWG Stranded (7x26) .048″ Tinned Copper • Two Bare Copper Braid Shield (95% Shield Coverage)																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
60°C	**9850**	NEC:	1000	304.8	131.0	59.5	18 AWG	.285	7.24	(2) BC	.425	10.80	75	66%	20.5	67.3	1	.2	.6
VW-1		CMH					(7x26)			Braids							10	.7	2.2
		CEC:					.048″			95% Shield							50	1.3	4.3
		CMH FT1					TC			Coverage							100	2.0	6.6
							6.1Ω/M′			.8Ω/M′							200	2.9	9.5
							20.0Ω/km			2.6Ω/km							400	4.2	13.8
																	700	5.8	19.0
																	900	6.8	22.3
M17/77-RG216																	1000	7.1	23.3

BC = Bare Copper BCCS = Bare Copper-covered Steel • DCR = DC Resistance • TC = Tinned Copper

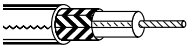
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

† Spools may contain more than one piece. Length may vary ±10% from length shown.

Teflon is a DuPont trademark.

MIL-C-17G QPL Cable

93 Ohm, 95 Ohm and 125 Ohm Coax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
93 Ohm • 22 AWG Solid .025″ Bare Copper-covered Steel • 95% Bare Copper Braid Shield																			
Semi-solid Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
UL AWM Style 1354 (30V 60°C) M17/30-RG62	**9862**	NEC: CMX CEC: CMX	1000	304.8	34.0	15.5	22 AWG (solid) .025″ BCCS 41.2Ω/M′ 135.1Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.9Ω/M′ 9.5Ω/km	.242	6.15	93	84%	13.5	44.3	1 10 50 100 200 400 700 900 1000	.3 .9 1.9 2.7 3.8 5.3 7.3 8.2 8.7	.8 2.8 6.2 8.9 12.5 17.4 23.9 26.9 28.5
93 Ohm • 22 AWG Solid .025″ Bare Copper-covered Steel • BC Outer Braid/TC Inner Braid (95% Shield Coverage)																			
Semi-solid Polyethylene Insulation • Black Polyethylene Jacket																			
85°C M17/90-RG71	**9169**		1000	304.8	46.0	20.9	22 AWG (solid) .025″ BCCS 41.2Ω/M′ 135.1Ω/km	.146	3.71	(2) Braids Inner: BC Outer: TC 95% Shield Coverage 1.5Ω/M′ 4.9Ω/km	.245	6.22	93	84%	13.5	44.3	1 10 50 100 200 400 700 900 1000	.3 .9 1.9 2.7 3.8 5.3 7.3 8.2 8.7	.8 2.8 6.2 8.9 12.5 17.4 23.9 26.9 28.5
95 Ohm • 30 AWG Stranded (7x38) .012″ Silver-coated Copper-covered Steel • Silver-coated Copper Braid Shield																			
TFE Teflon® Insulation • Tinted Brown FEP Jacket																			
200°C VW-1  M17/95-RG180	**83266**		1000†	304.8	20.0	9.1	30 AWG (7x38) .012″ SCCCS 244.0Ω/M′ 801.0Ω/km	.102	2.60	SCC Braid 91% Shield Coverage 6.5Ω/M′ 21.3Ω/km	.141	3.58	95	69.5%	15.0	49.2	1 10 50 100 200 400 700 900 1000	2.4 3.3 4.6 5.7 7.6 10.7 14.9 15.9 17.0	7.9 10.8 15.1 18.7 24.9 35.1 48.9 52.2 55.8
125 Ohm • 22 AWG Solid .025″ Bare Copper-covered Steel • 97% Bare Copper Braid Shield																			
Semi-solid Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
60°C M17/31-RG63	**9857**	NEC: CMH CEC: CMH FT1	1000	304.8	87.0	39.5	22 AWG (solid) .025″ BCCS 41.2Ω/M′ 135.1Ω/km	.285	7.24	BC Braid 97% Shield Coverage 1.2Ω/M′ 3.9Ω/km	.405	10.29	125	84%	9.7	31.8	1 10 50 100 200 400 700 900 1000	.2 .5 1.1 1.5 2.3 3.4 4.6 5.5 5.8	.6 1.7 3.6 4.9 7.5 11.2 15.1 18.0 19.0

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

Teflon is a DuPont trademark.

MIL-C-17G QPL Cable

Twinax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
Twinax • 24 AWG Stranded (19x.005″) .024″ Silver-coated High-Strength Copper Alloy • 93% SC High Strength CA Braid Shield																			
TFE Teflon® Insulation • Blue PFA Jacket (Color Code: White, Blue)																			
200°C	**81553**		500†	152.4	9.0	4.1	24 AWG	.084	2.13	SC High	.129	3.28	77	70%	19.0	62.4	1	1.2	3.9
			1000†	304.8	17.0	7.7	(19x.005″)			Strength							10	4.0	14.4
							.024″			CA Braid							50	9.2	30.2
							SC High			93% Shield							100	13.0	42.7
							Strength			Coverage							200	18.4	60.4
							CA			7.4Ω/M′							400	26.1	85.6
							24.5Ω/M′			24.3Ω/km							700	34.6	113.5
							80.4Ω/km										900	39.3	128.9
M17/176-00002																	1000	41.4	135.8
Twinax • 20 AWG Stranded (7x28) .038″ Tinned Copper • 85% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket (One conductor has bare strand for ID)																			
85°C	**9859**		1000	304.8	35.0	15.9	20 AWG	.158	4.01	TC Braid	.235	5.97	78	66%	19.7	64.6	1	.7	2.3
							(7x28)			85% Shield							10	2.3	7.5
							.038″			Coverage							50	5.2	17.1
							TC			5.3Ω/M′							100	7.5	24.6
							9.5Ω/M′			17.3Ω/km							200	11.0	36.1
							31.2Ω/km										400	16.0	52.5
M17/45-RG108																			

CA = Copper Alloy • DCR = DC Resistance • PFA = Perfluoroalkoxy • SC = Silver-coated • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

†Spools may contain more than one piece. Length may vary ±10% from length shown.

Teflon is a DuPont trademark.

Special Audio, Communication and Instrumentation Cable

Miniature Instrumentation and Low Triboelectric Noise Coax

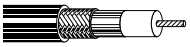
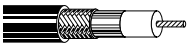
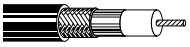
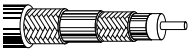
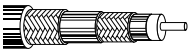
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
Miniature • 28 AWG Solid .013″ Tinned Copper • 90% Bare Copper Braid Shield																			
Polypropylene Insulation • Black PVC Jacket																			
105°C VW-1	**8700**	NEC: CMH CEC: CMH FT1	250	76.2	.8	.3	28 AWG (solid) .013″ TC 66.9Ω/M′ 219.5Ω/km	.023	.58	BC Braid 90% Shield Coverage 28.7Ω/M′ 94.2Ω/km	.054	1.37	32	66%	55.2	181.1	1 10 50 100 200 400 700 900 1000	2.5 7.7 17.2 24.5 34.8 50.0 66.0 75.0 79.0	8.2 25.3 56.4 80.4 114.2 164.0 216.0 246.0 259.2
Low Noise • RG-174/U Type • 26 AWG Stranded (7x34) .019″ Bare Copper-covered Steel • 90% Tinned Copper Braid Shield																			
Polyethylene Insulation • Conductive Layer • Black PVC Jacket																			
60°C 5mV peak-to-peak max. Not recommended for RF use.	**9239**		100 500 1000	30.5 152.4 304.8	1.0 5.0 8.0	.5 2.3 3.6	26 AWG (7x34) .019″ BCCS 97.0Ω/M′ 318.2Ω/km	.044	1.12	TC Braid 90% Shield Coverage 14.0Ω/M′ 45.9Ω/km	.101	2.57	50	62%	38	125	—	—	—
Low Noise • RG-59/U Type • 22 AWG Solid .025″ Bare Copper-covered Steel • 93% Bare Copper Braid Shield																			
Polyethylene Insulation • Conductive Layer • Black PVC Jacket																			
75°C VW-1 5mV peak-to-peak max. Not recommended for RF use.	**9224**		U-500 1000	U-152.4 304.8	19.5 38.0	8.9 17.3	22 AWG (solid) .025″ BCCS 54.0Ω/M′ 177.0Ω/km	.146	3.71	BC Braid 93% Shield Coverage 2.5Ω/M′ 8.2Ω/km	.242	6.15	75	65%	22	72	—	—	—
Low Noise • RG-58/U Type • 22 AWG Stranded (7x30) .030″ Tinned Copper • Duobond® II + 95% TC Braid (100% Shield Coverage)																			
Polyethylene Insulation • Black PVC Jacket																			
80°C VW-1 8mV peak-to-peak max. Not recommended for RF use.	**9223**		100 500 1000	30.5 152.4 304.8	3.4 15.5 26.0	1.5 7.0 11.8	22 AWG (7x30) .030″ TC 10.8Ω/M′ 35.4Ω/km	.112	2.84	Duobond II + 95% TC Braid 100% Shield Coverage 4.1Ω/M′ 13.5Ω/km	.195	4.95	50	56%	37	122	—	—	—

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

Computer and Instrumentation Cable

50 Ohm Ethernet Coax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Thin Ethernet • 20 AWG Stranded (19x32) .037″ Tinned Copper • Duobond® II + 93% Tinned Copper Braid Shield																			
Foam Polyethylene Insulation • Gray PVC Jacket																			
UL AWM Style 1354 (30V 60°C)	**9907**	NEC: CM CL2 CEC: CM	500 U-1000 1000 1640 U-2500 2500 3280	152.4 U-304.8 304.8 500.0 U-762.0 762.0 1000.0	12.5 25.0 25.0 39.4 60.0 62.5 82.0	5.7 11.4 11.4 17.9 27.3 28.4 37.3	20 AWG (19x32) .037″ TC 8.8Ω/M′ 28.9Ω/km	.102	2.59	Duobond II + 93% TC Braid 5.8Ω/M′ 19.0Ω/km	.185	4.70	50	80%	25.4	83.3	1 10 50 100 200 400 700 900 1000	.4 1.3 2.9 4.2 6.1 8.9 12.1 13.9 14.8	1.4 4.3 9.5 13.8 20.0 29.2 39.7 45.6 48.6
												For Plenum versions of 9907, see 89907 or 82907.							
DEC Part No. 17-01248-00																			
Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
150°C	**89907**	NEC: CMP CL2P CEC: CMP FT6	500† 1000 2500†	152.4 304.8 762.0	13.0 24.0 60.0	5.9 10.9 27.3	20 AWG (19x32) .037″ TC 8.8Ω/M′ 28.9Ω/km	.095	2.41	Duobond II + 93% TC Braid 5.8Ω/M′ 19.0Ω/km	.160	4.06	50	80%	26.0	85.3	1 10 50 100 200 400 700 900 1000	.4 1.3 2.9 4.2 6.1 9.2 12.9 15.0 16.0	1.4 4.3 9.5 13.7 20.0 30.2 42.3 49.2 52.5
																			
RG-58/U Type DEC Part No. 17-01246-00																			
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**82907**	NEC: CMP CL2P CEC: CMP FT6	500† U-1000† 1000† 2500†	152.4 U-304.8 304.8 762.0	12.5 23.0 24.0 57.5	5.7 10.5 10.9 26.1	20 AWG (19x32) .037″ TC 8.8Ω/M′ 28.9Ω/km	.095	2.41	Duobond II + 93% TC Braid 5.8Ω/M′ 19.0Ω/km	.160	4.06	50	80%	26.0	85.3	1 10 50 100 200 400 700 900 1000	.4 1.3 2.9 4.2 6.1 9.2 12.9 15.0 16.0	1.4 4.3 9.5 13.7 20.0 30.2 42.3 49.2 52.5
																			
RG-58/U Type																			
Thick Ethernet • 12 AWG Solid .086″ Bare Copper • Duobond IV* Quad Shield																			
Foam Polyethylene Insulation • Yellow PVC Jacket																			
UL AWM Style 1478 (30V 60°C)	**9880**	NEC: CL2 CM CEC: CM	500 1000 1640	152.4 304.8 500.0	66.0 131.0 219.0	30.0 59.5 99.9	12 AWG (solid) .086″ BC 1.4Ω/M′ 4.7Ω/km	.243	6.17	Duobond IV (Duobond II + 94% TC Braid + Duofoil® + 90% TC Braid) 1.5Ω/M′ 5.0Ω/km	.405	10.29	50	78%	26.0	85.0	1 5 10 50 100 200 400 700 900 1000	.2 .4 .5 1.2 1.7 2.6 3.9 5.5 6.5 6.9	.6 1.2 1.7 3.9 5.6 8.4 12.8 18.1 21.3 22.6
												For Plenum version of 9880, see 89880.							
DEC Part No. 17-00451-00 Ring-band stripes marked every 2.5 meters to aid users in tap placement.																			
Plenum • Foam FEP Insulation • Orange Fluorocopolymer Jacket																			
150°C	**89880**	NEC: CL2P CMP CEC: CMP FT6	500† 1000† 1640†	152.4 304.8 500.0	67.0 134.0 224.7	30.5 60.9 102.1	12 AWG (solid) .086″ BC 1.4Ω/M′ 4.7Ω/km	.245	6.22	Duobond IV (Duobond II + 90% TC Braid + Duofoil + 90% TC Braid) 1.5Ω/M′ 5.0Ω/km	.375	9.53	50	78%	26.0	85.0	1 5 10 50 100 200 400 700 900 1000	.2 .4 .5 1.2 1.7 2.5 3.8 5.6 6.8 7.2	.6 1.2 1.7 3.8 5.4 8.0 12.5 18.4 22.3 23.6
																			
DEC Part No. 17-00324-00 Ring-band stripes marked every 2.5 meters to aid users in tap placement. Suitable for Outdoor and Direct Burial applications.																			

BC = Bare Copper • DCR = DC Resistance • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.
For cable manufactured to latest government revision or other MIL-SPEC requirements, please contact your nearest Belden Regional Sales Office.

* Duobond IV = Duobond II + 94% tinned copper braid + Duofoil + 90% tinned copper braid.
(Plenum version is Duobond II + 90% tinned copper braid + Duofoil + 90% tinned copper braid.)

† Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Computer and Instrumentation Cable

75 Ohm Coax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
75 Ohm • 30 AWG Stranded (7x38) .012″ Silver-coated Copper-covered Steel • 95% Silver-coated Copper Braid Shield																			
TFE Teflon® Insulation • White TFE Tape Jacket																			
200°C VW-1	**83267**		100† 1000†	30.5 304.8	1.9 11.0	.9 5.0	30 AWG (7x38) .012″ SCCCS 244.0Ω/M′ 801.0Ω/km	.063	1.60	SCC Braid 95% Shield Coverage 8.6Ω/M′ 28.2Ω/km	.103	2.62	75	70%	19.5	64.0	1 10 50 100 200 400 700 900 1000	3.0 5.3 8.5 10.0 12.5 16.0 19.7 22.3 24.0	9.8 17.4 27.9 32.8 41.0 52.5 64.6 73.2 78.7
RG-187A/U Type • MIL-C-17D																			
75 Ohm • Dual RG-59/U Type • 23 AWG Solid .023″ Bare Copper-covered Steel • Bare Copper Braid Shield																			
Flame-retardant Semi-foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 20063 (300V 80°C)	**9555**	NEC: CM CEC: CM	500 1000 2000	152.4 304.8 609.6	41.0 83.0 162.0	19.6 37.7 73.6	23 AWG (solid) .023″ BCCS 50.0Ω/M′ 164.0Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.238 x .478	6.05 x 12.14	75	66%	20.5	67.3	1 10 50 100 200 400 700 900 1000	.6 1.1 2.4 3.4 4.9 7.0 9.7 11.1 12.0	2.0 3.6 7.9 11.2 16.1 23.0 31.8 36.4 39.4
											For Plenum version of 9555, see 89555.								
Plenum • FEP Insulation • Clear FEP Jacket																			
200°C	**89555**	NEC: CMP CEC: CMP FT6	500†† 1000††	152.4 304.8	46.5 90.0	21.1 40.9	23 AWG (solid) .023″ BCCS 50.0Ω/M′ 164.0Ω/km	.134	3.40	BC Braid 97% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.212 x .424	5.38 x 10.77	75	70%	19.5	64.0	1 10 50 100 200 400 700 900 1000	.5 1.1 2.5 3.5 5.1 7.5 10.4 12.0 12.7	1.6 3.6 8.2 11.5 16.7 24.6 34.1 39.4 41.7
Suitable for Outdoor and Direct Burial applications.																			
75 Ohm • RG-6/U Type • 18 AWG Solid Bare Copper-covered Steel • Duobond® IV* Quad Shield																			
Non-Plenum • Foam Polyethylene Insulation • Gray PVC Jacket																			
	3131A	NEC: CL2R, CMR CEC: CMR FT4	1000†† 2500	304.8 762.2	41.0 97.5	18.6 44.3	18 AWG (solid) .040″ Bare Copper Covered Steel 28.0Ω/M′ 91.8Ω/km	.180	4.57	Duobond IV Quad Shield 3.6Ω/M′ 11.8Ω/km	.298	7.57	75	82%	16.2	53.1	1 2 5 10 20 50 100 200 300 400	.35 .38 .45 .59 .86 1.37 1.97 2.82 3.48 4.04	1.15 1.25 1.48 1.94 2.82 4.49 6.46 9.25 11.40 13.30
											Sweep tested 5 MHz to 400 MHz. CPE jacket optional.								
Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
150°C	**3132A**	NEC: CMP, PLTC CEC: CMP FT6	1000††	304.8	36.0	16.4	18 AWG (solid) .040″ Bare Copper Covered Steel 28.0Ω/M′ 19.8Ω/km	.170	4.32	Duobond IV Quad Shield 3.6Ω/M′ 11.8Ω/km	.274	6.96	75	82%	16.3	53.5	1 2 5 10 20 50 100 200 300 400	.36 .38 .50 .65 .95 1.50 2.12 2.99 3.66 4.23	1.18 1.25 1.64 2.13 3.12 4.92 6.96 9.81 12.00 13.90
											Sweep tested 5 MHz to 400 MHz.								
Suitable for Outdoor and Direct Burial applications.																			
75 Ohm • RG-11/U Type • 14 AWG Solid Bare Copper-covered Steel • Duobond IV* Quad Shield																			
Non-Plenum • Foam Polyethylene Insulation • Gray PVC Jacket																			
	3094A	NEC: CL2R, CMR CEC: CMR FT4	500†† 1000†† 2000	152.4 304.8 609.6	31.0 62.0 120.0	14.1 28.2 54.5	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond IV Quad Shield 1.8Ω/M′ 5.9Ω/km	.407	10.34	75	82%	16.2	53.1	1 10 50 100 200 400	.30 .60 .90 1.20 1.70 2.40	1.00 2.00 3.00 3.90 5.90 7.90
											Sweep tested 5 MHz to 400 MHz. CPE jacket optional.								
Ring-band stripes marked every 2.6 meters to aid users in tap placement.																			

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance • SCC = Silver-coated Copper • SCCCS = Silver-coated Copper-covered Steel

Teflon is a DuPont trademark.

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

† Spools may contain more than one piece. Length may vary ±10% from length shown.
†† Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.
* Duobond IV Quad Shield = Duobond + 60% aluminum braid + Duofoil® + 40% aluminum braid.

Computer and Instrumentation Cable

75 Ohm and 93 Ohm Coax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
75 Ohm • RG-11/U Type • 14 AWG Solid Bare Copper-covered Steel • Duobond IV* Quad Shield *(continued)*																			
Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
150°C	**3095A**	NEC: CMP, PLTC CEC: CMP FT6	1000††	304.8	76.0	34.5	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond IV Quad Shield 1.8Ω/M′ 5.9Ω/km	.387	9.83	75	82%	16.5	54.1	1 10 50 100 200 400	.20 .39 1.20 1.70 2.50 3.50	.70 1.30 3.90 5.60 8.20 11.50
Suitable for Outdoor and Direct Burial applications. Ring-band stripes marked every 2.6 meters to aid users in tap placement.											Sweep tested 5 MHz to 400 MHz.								
93 Ohm • RG-62B/U Type • 24 AWG Stranded (7x32) .024″ Bare Copper-covered Steel • 95% Bare Copper Braid Shield																			
Semi-solid Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
UL AWM Style 1354 (30V 60°C)	**8255**	NEC: CMX CEC: CMX	500 1000	152.4 304.8	17.5 34.0	8.0 15.5	24 AWG (7x32) .024″ BCCS 59.0Ω/M′ 193.6Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.9Ω/M′ 9.5Ω/km	.242	6.15	93	84%	13.5	44.3	1 10 50 100 200 400 700 900 1000	.3 .9 2.0 2.9 4.2 6.1 8.6 10.1 11.0	1.0 3.0 6.6 9.5 13.8 20.0 28.2 33.1 36.1
MIL-C-17D																			
93 Ohm • RG-62/U Type • JAN-C-17A • 22 AWG Solid .025″ Bare Copper-covered Steel • 95% Bare Copper Braid Shield																			
Semi-solid Polyethylene Insulation • Black PVC Jacket																			
75°C	**8254**		U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	18.0 18.0 36.0 35.0	8.2 8.2 16.4 15.9	22 AWG (solid) .025″ BCCS 41.2Ω/M′ 135.1Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.9Ω/M′ 9.5Ω/km	.238	6.05	93	84%	13.5	44.3	1 10 50 100 200 400 700 900 1000	.3 .9 1.9 2.7 3.8 5.3 7.3 8.2 8.7	.8 2.8 6.2 8.9 12.5 17.4 23.9 26.9 28.5
93 Ohm • RG-62A/U Type • 22 AWG Solid .025″ Bare Copper-covered Steel • 95% Bare Copper Braid Shield																			
Semi-solid Polyethylene Insulation • Black High-density Polyethylene Jacket																			
Flooded Burial 80°C	**9228**		500 1000 2000 5000	152.4 304.8 609.6 1524.0	16.5 33.0 68.0 170.0	7.5 15.0 30.9 77.3	22 AWG (solid) .025″ BCCS 41.2Ω/M′ 135.1Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.9Ω/M′ 9.5Ω/km	.242	6.15	93	84%	13.5	44.3	1 10 50 100 200 400 700 900 1000	.3 .9 1.9 2.7 3.8 5.3 7.3 8.2 8.7	.8 2.8 6.2 8.9 12.5 17.4 23.9 26.9 28.5
Semi-solid Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1478 (30V 60°C)	**9268**	NEC: CM CL2 CEC: CM	500 U-1000 1000 2000	152.4 U-304.8 304.8 609.6	22.0 43.0 44.0 88.0	10.0 19.5 20.0 40.0	22 AWG (solid) .025″ BCCS 41.2Ω/M′ 135.1Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.9Ω/M′ 9.5Ω/km	.260	6.60	93	84%	13.5	44.3	1 10 50 100 200 400 700 900 1000	.3 .9 1.9 2.7 3.8 5.3 7.3 8.2 8.7	.8 2.8 6.2 8.9 12.5 17.4 23.9 26.9 28.5
IBM P/N 5252750 • Includes Mylar® tape as a moisture barrier for improved outdoor reliability.																			
UL AWM Style 1478 (30V 60°C)	**9269**	NEC: CM CL2 CEC: CM	U-500 500 U-1000▲ 1000 1640 2000 3280 5000	U-152.4 152.4 U-304.8 304.8 500.0 609.6 1000.0 1524.0	18.5 18.5 36.0 36.0 59.0 74.0 118.1 180.0	8.4 8.4 16.4 16.4 26.8 33.6 53.7 81.8	22 AWG (solid) .025″ BCCS 41.2Ω/M′ 135.1Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.9Ω/M′ 9.5Ω/km	.239	6.07	93	84%	13.5	44.3	1 10 50 100 200 400 700 900 1000	.3 .9 1.9 2.7 3.8 5.3 7.3 8.2 8.7	.8 2.8 6.2 8.9 12.5 17.4 23.9 26.9 28.5
IBM P/N 323921 P-MSHA SC-1823** ▲U-1000 put-up also available in Orange, Yellow, Blue, Beige or Chrome.											For Plenum version of 9269, see 89269, 87269 and 82269.								

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

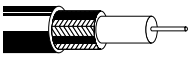
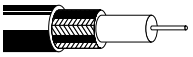
Mylar is a DuPont trademark.

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.
For cables manufactured to latest government revision or other MIL-SPEC requirements, please contact your nearest Belden regional Sales Office.

†† Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.
* Duobond IV Quad Shield = Duobond + 60% aluminum braid + Duofoil® + 40% aluminum braid.
** Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration Certification.

Computer and Instrumentation Cable

93 Ohm Coax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-62/U Type • 22 AWG Solid .025″ Bare Copper-covered Steel • 94% Bare Copper Braid Shield																			
Plenum • Semi-solid FEP Insulation • Black or White Tint FEP Jacket																			
200°C	**89269**	NEC:	100▲	30.5	5.2	2.4	22 AWG	.142	3.61	BC Braid	.200	5.08	93	85%	12.8	42.0	1	.3	1.0
		CMP	500†	152.4	18.0	8.2	(solid)			94% Shield							10	.9	3.0
		CEC:	1000†	304.8	36.0	16.4	.025″			Coverage							50	1.9	6.2
		CMP FT6					BCCS			3.4Ω/M′							100	2.7	8.9
							41.2Ω/M′			11.2Ω/km							200	3.8	12.5
							135.2Ω/km										400	5.3	17.4
																	700	7.3	23.9
▲100 ft. put-up available in Black only.																	900	8.2	26.9
Suitable for Outdoor and Direct Burial applications.																	1000	8.7	28.5
Plenum • FEP Insulation • Gray Fluorocopolymer Jacket																			
150°C	**87269**	NEC:	1000†	304.8	34.0	16.5	22 AWG	.142	3.61	BC Braid	.200	5.08	93	85%	12.8	42.0	1	.3	1.0
		CMP					(solid)			94% Shield							10	.9	3.0
		CEC:					.025″			Coverage							50	1.9	6.2
		CMP FT6					BCCS			3.4Ω/M′							100	2.7	8.9
							41.2Ω/M′			11.2Ω/km							200	3.8	12.5
							135.2Ω/km										400	5.3	17.4
																	700	7.3	23.9
																	900	8.2	26.9
Suitable for Outdoor and Direct Burial applications.																	1000	8.7	28.5
Plenum • Semi-solid FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**82269**	NEC:	1000†	304.8	34.0	15.5	22 AWG	.142	3.61	BC Braid	.200	5.08	93	85%	12.8	42.0	1	.3	1.0
		CMP					(solid)			94% Shield							10	.9	3.0
		CEC:					.025″			Coverage							50	1.9	6.2
		CMP FT6					BCCS			3.4Ω/M′							100	2.7	8.9
							41.2Ω/M′			11.2Ω/km							200	3.8	12.5
							135.2Ω/km										400	5.3	17.4
																	700	7.3	23.9
																	900	8.2	26.9
																	1000	8.7	28.5
Plenum • Foam FEP Insulation • White Tint FEP Jacket																			
200°C 	**86262**	NEC:	500†	152.4	18.0	8.2	22 AWG	.146	3.71	BC Braid	.204	5.18	93	85%	12.5	41.0	1	.3	1.8
		CMP	1000†	304.8	35.0	15.9	(solid)			94% Shield							10	.9	3.0
		CEC:					.025″			Coverage							50	1.9	6.2
		CMP FT6					BCCS			3.4Ω/M′							100	2.7	8.9
							41.2Ω/M′			11.2Ω/km							200	3.8	12.5
							135.2Ω/km										400	5.3	17.4
																	700	7.3	23.9
																	900	8.2	26.9
Suitable for Outdoor and Direct Burial applications.																	1000	8.7	28.5
Plenum • Foam FEP Insulation • Natural Flamarrest Jacket																			
75°C 	**82262**	NEC:	U-1000†	U-304.8	31.0	14.1	22 AWG	.146	3.71	BC Braid	.204	5.18	93	85%	12.5	41.0	1	.3	1.8
		CMP	1000†	304.8	33.0	15.0	(solid)			94% Shield							10	.9	3.0
		CEC:					.025″			Coverage							50	1.9	6.2
		CMP FT6					BCCS			3.4Ω/M′							100	2.7	8.9
							41.2Ω/M′			11.2Ω/km							200	3.8	12.5
							135.2Ω/km										400	5.3	17.4
																	700	7.3	23.9
																	900	8.2	26.9
Suitable for Outdoor and Direct Burial applications.																	1000	8.7	28.5

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Computer and Instrumentation Cable

78 Ohm, 95 Ohm and 100 Ohm Twinax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
78 Ohm • 20 AWG Stranded (7x28) .038″ Tinned Copper • 93% Tinned Copper Braid Shield																			
Polyethylene Insulation • Blue PVC Jacket (Color Code: Clear, Blue)																			
UL AWM Style 2092 (300V 60°C)	**9272**	NEC: CM CEC: CM	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.9 20.0 20.0 39.0 40.0	2.2 9.1 9.1 17.7 18.2	20 AWG (7x28) .038″ TC 9.5Ω/M′ 31.2Ω/km	.156	3.96	TC Braid 93% Shield Coverage 3.4Ω/M′ 11.2Ω/km	.244	6.20	78	66%	19.7	64.6	1 10 50 100 200 400	.6 2.1 5.0 7.5 11.0 16.0	2.0 6.9 16.4 24.6 36.1 52.5
												For Plenum version of 9272, see 89272. CPE jacket optional.							
Plenum • FEP Insulation • Blue FEP Jacket (Color Code: Clear, Blue)																			
200°C	**89272**	NEC: CMP CEC: CMP FT6	500† 1000†	152.4 304.8	19.0 39.0	8.6 17.7	20 AWG (7x28) .037″ TC 9.5Ω/M′ 31.2Ω/km	.148	3.76	TC Braid 93% Shield Coverage 3.9Ω/M′ 12.8Ω/km	.198	5.03	78	69.5%	18.4	60.4	1 10 50 100 200 400	.6 2.1 5.0 7.5 11.0 16.0	2.0 6.9 16.4 24.6 36.1 52.5
78 Ohm • 20 AWG Stranded (7x28) .038″ Tinned Copper • Beldfoil® + 55% Tinned Copper Braid Shield (100% Shield Coverage)																			
Polyethylene Insulation • Blue PVC Jacket (Color Code: Clear, Blue)																			
UL AWM Style 2464 (300V 80°C)	**9463**	NEC: CM CL2 CEC: CM	100 U-500 500 U-1000 1000▲ 6000▲ 10000◆	30.5 U-152.4 152.4 U-304.8 304.8 1828.7 3048.0	4.6 18.5 18.5 37.0 37.0 222.0 370.0	2.1 8.4 8.4 16.8 16.8 100.9 168.2	20 AWG (7x28) .038″ TC 9.5Ω/M′ 31.0Ω/km	.154	3.91	Beldfoil + 55% TC Braid 4.1Ω/M′ 13.4Ω/km	.238	6.05	78	66%	19.7	64.6	1 10 50 100 200 400	.6 2.1 3.6 7.5 11.0 16.0	2.0 6.9 11.8 24.6 36.1 52.5
												CPE jacket optional.							
P-MSHA SC-182/6* Allen Bradley P/N 1770-CD ▲1000 ft. and 6000 ft. put-ups also available in Brown, Orange and Violet. ◆10,000 ft. put-up available in Brown, Orange and Violet only.																			
95 Ohm • 18 AWG Stranded (7x26) .046″ Bare Copper** • Two Tinned Copper Braids (95% Shield Coverage)																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket (Color Code: Clear, Blue)																			
80°C VW-1	**9250**		500 1000	152.4 304.8	64.5 128.0	29.3 58.2	18 AWG (7x26) .046″ BC 6.6Ω/M′ 21.5Ω/km	.285	7.24	(2) TC Braids 95% Shield Coverage .9Ω/M′ 3.0Ω/km	.420	10.67	95	66%	16.0	52.5	1 10 20 50 100 400	.3 .9 1.3 2.1 3.0 6.3	1.0 3.0 4.3 6.9 9.8 20.7
												CPE jacket optional.							
RG-22B/U Type **1 conductor has tinned center strand.																			
100 Ohm • 20 AWG Stranded (7x28) .037″ One Tinned/One Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black High-density Polyethylene Jacket																			
Direct Burial 80°C	**9815**		500 1000 2000	152.4 304.8 609.6	33.5 69.0 134.0	15.2 31.4 60.9	20 AWG (7x28) .037″ (1) TC, (1) BC 9.5Ω/M′ 31.0Ω/km	.236	5.99	TC Braid 95% Shield Coverage 2.0Ω/M′ 6.6Ω/km	.330	8.38	100	66%	14.5	47.6	1 10 50 100 200 400	.4 1.1 2.5 4.1 6.4 10.2	1.3 3.6 8.2 13.5 21.0 33.5

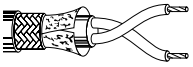
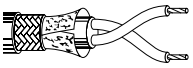
BC = Bare Copper • DCR = DC Resistance • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

*Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration Certification.
†Spools may contain more than one piece. Length may vary ±10% from length shown.

Computer and Instrumentation Cable

100 Ohm, 124 Ohm and 150 Ohm Twinax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
100 Ohm • 20 AWG Stranded (7x28) .037″ One Tinned/One Bare Copper • Duofoil® + 86% TC Braid Shield (100% Shield Coverage)																			
Polyethylene Insulation • Black PVC Jacket																			
75°C  IBM P/N 7362211	**9207**	NEC: CM CL2 CEC: CM	100 U-500 500 1000 1640 2000 3280 5000	30.5 U-152.4 152.4 304.8 500.0 609.6 1000.0 1524.0	7.1 34.0 33.5 68.0 111.5 136.0 219.8 350.0	3.2 15.5 15.2 30.9 50.7 61.8 99.9 159.1	20 AWG (7x28) .037″ (1) TC, (1) BC 9.5Ω/M′ 31.0Ω/km	.236	5.99	Duofoil +86% TC Braid 2.5Ω/M′ 8.2Ω/km	.330	8.38	100	66%	14.5	47.6	1 10 50 100 200 400	.3 1.2 2.8 4.1 6.4 10.2	1.0 3.9 9.2 13.5 21.0 33.5
												For Plenum versions of 9207, see 89207. CPE jacket optional.							
Plenum • FEP Insulation • Black FEP Jacket																			
200°C 	**89207**	NEC: CMP CEC: CMP FT6	100 500 † 1000 †	30.5 152.4 304.8	6.7 28.0 55.0	3.0 12.7 25.0	20 AWG (7x28) .037″ (1) TC, (1) BC 9.5Ω/M′ 31.2Ω/km	.201	5.11	Duofoil +85% TC Braid 2.5Ω/M′ 8.2Ω/km	.259	6.58	100	69.5%	14.0	46.0	1 10 50 100 200 300 400	.3 1.2 2.8 4.1 6.4 8.4 10.2	1.0 3.9 9.2 13.5 21.0 27.6 33.5
124 Ohm • 25 AWG Stranded (7x33) .021″ Tinned Copper • Beldfoil® with Stranded TC Drain Wire (100% Shield Coverage)																			
Polyethylene Insulation • Blue PVC Jacket (Color Code: Clear, Blue)																			
UL AWM Style 2092 (300V 60°C) Shorting Fold	**9271**	NEC: CM CEC: CM	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.7 14.0 14.0 27.0 28.0	1.7 6.4 6.4 12.3 12.7	25 AWG (7x33) .021″ TC 31.8Ω/M′ 104.3Ω/km	.170	4.32	Beldfoil 12.0Ω/M′ 39.4Ω/km	.240	6.10	124	66%	12.2	40.0	1 10 50 100 200 400	.6 1.7 3.6 5.0 6.9 9.6	2.0 5.6 11.8 16.4 22.6 31.5
												CPE jacket optional.							
124 Ohm • 16 AWG Solid .051″ Bare Copper • Duofoil + 90% Tinned Copper Braid Shield (100% Shield Coverage)																			
Foam Polyethylene Insulation • Black PVC Jacket (Color Code: Clear, Blue)																			
UL AWM Style 2448 (30V 60°C)	**9860**	NEC: CMX CEC: CMX	500 1000 2000	152.4 304.8 609.6	52.0 103.0 202.0	23.6 46.8 91.8	16 AWG (solid) .051″ BC 4.2Ω/M′ 13.8Ω/km	.322	8.18	Duofoil + 90% TC Braid 1.3Ω/M′ 4.3Ω/km	.440	11.18	124	78%	10.9	35.8	1 10 50 100 200 400	.2 .7 1.8 2.9 4.1 6.2	.6 2.3 5.9 9.5 13.5 20.3
												CPE jacket optional.							
150 Ohm • 22 AWG Stranded (19x34) .031″ Tinned Copper • Duofoil with Stranded TC Drain Wire (100% Shield Coverage)																			
Datalene® Insulation • Black PVC Jacket (Color Code: Black, Yellow)																			
UL AWM Style 2668 (30V 60°C) VW-1 Shorting Fold	**9182**	NEC: CMX CL2X CEC: CMX	U-500 500 1000	U-152.4 152.4 304.8	23.0 23.5 45.0	10.5 10.7 20.5	22 AWG (19x34) .031″ TC 14.0Ω/M′ 45.9Ω/km	.275	6.98	Duofoil 6.3Ω/M′ 20.7Ω/km	.345	8.76	150	78%	8.8	28.9	1 10 50 100 200 400	.4 1.2 2.7 4.3 6.2 8.8	1.3 3.9 8.7 14.1 20.3 28.9
												For Plenum version of 9182, see 89182. Dual version: YR41609. CPE jacket optional.							
Plenum • Foam FEP Insulation • Black FEP Jacket (Color Code: Black and Yellow)																			
	89182	NEC: CMP CL2P CEC: CMP FT6	100 500 †† 1000 ††	30.5 152.4 304.8	6.4 28.0 53.0	2.9 12.7 24.1	22 AWG (19x34) .031″ TC 14.0Ω/M′ 45.9Ω/km	.278	7.06	Duofoil 6.3Ω/M′ 20.7Ω/km	.307	7.80	150	78%	8.8	28.9	1 10 50 100 200 400	.4 1.2 2.7 4.3 6.2 8.8	1.3 3.9 8.7 14.1 20.3 28.9

BC = Bare Copper • DCR = DC Resistance • TC = Tinned Copper

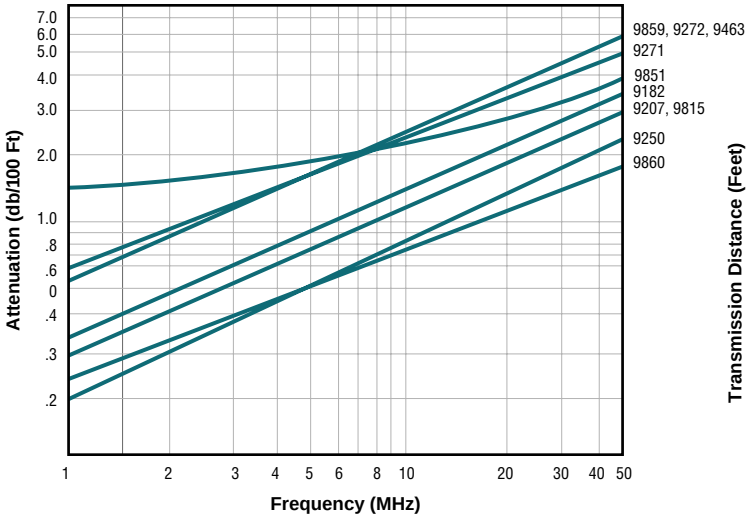
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

† Spools may contain more than one piece. Length may vary ±10% from length shown.
†† Spools are one piece, but length may vary ±10% from length shown.

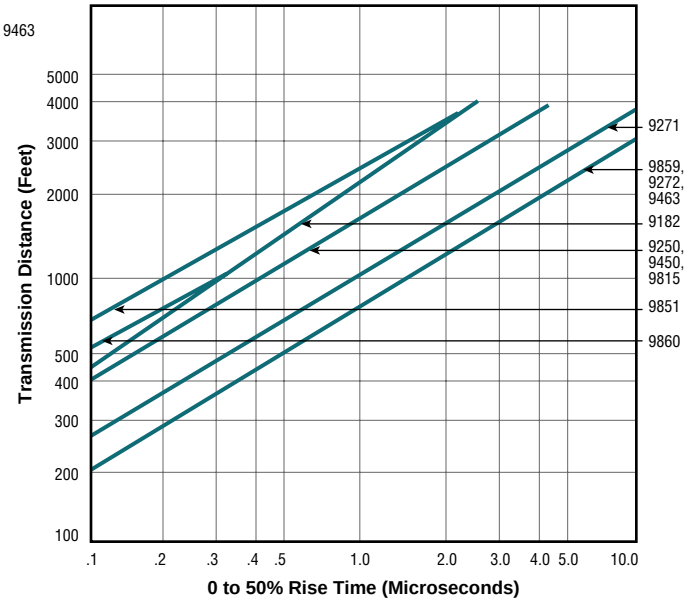
Computer and Instrumentation Cable

Electrical Characteristics — Twinax

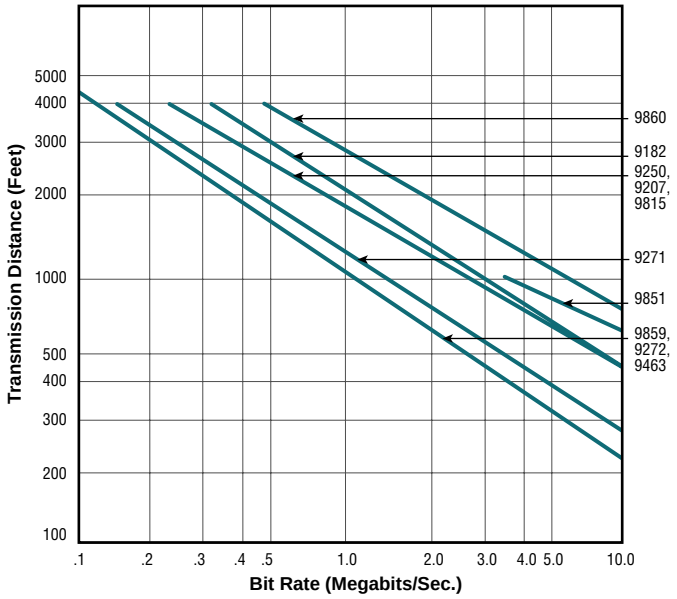
Attenuation



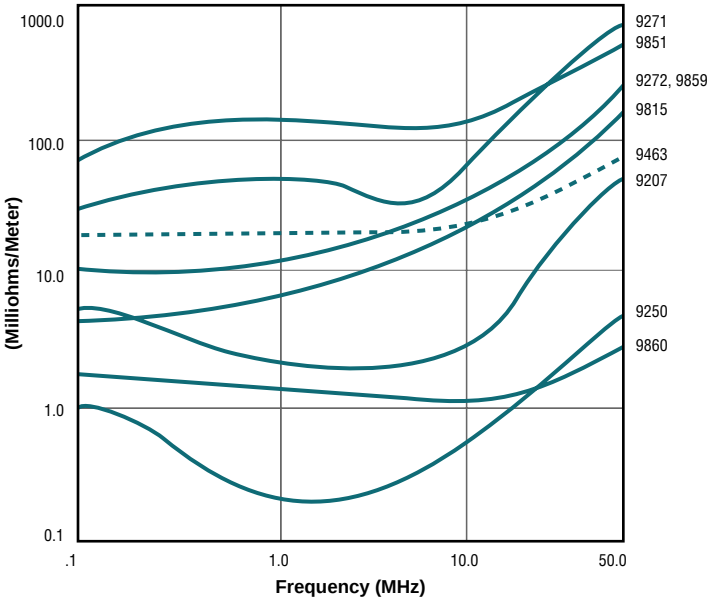
Rise Time



Bit Rate



Transfer Impedance



Computer and Instrumentation Cable

50 Ohm Triax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
RG-58A/U Type • 20 AWG Stranded (7x28) .037″ Tinned Copper • Two Tinned Copper Braids (96% Shield Coverage)																			
Polyethylene Insulation • Yellow PVC Jacket (Polyethylene Insulation between Braids)																			
75°C	**9222**		100	30.5	5.0	2.3	20 AWG	.114	2.90	(2) TC Braids	.240	6.10	50	66%	30.8	101.0	1	.5	1.6
			U-500	U-152.4	18.5	8.4	(7x28)			96% Shield							10	1.5	4.9
			500	152.4	18.5	8.4	.037″			Coverage							50	3.3	10.8
							TC			Inner:							100	4.9	16.1
							9.5Ω/M′			4.7Ω/M′							200	7.2	23.6
							31.0Ω/km			15.5Ω/km							400	12.0	39.4
										Outer:							700	18.0	57.1
										4.3Ω/M′							900	22.0	72.2
										14.1Ω/km							1000	24.0	78.7
RG-8/U Type • 11 AWG Stranded (7x19) .108″ Bare Copper • Two Bare Copper Braids (96% Shield Coverage)																			
Foam Polyethylene Insulation • Black Polyethylene Jacket (Polyethylene Insulation between Braids)																			
80°C	**9888**		500	152.4	72.5	33.0	11 AWG	.285	7.24	(2) BC	.480	12.19	50	78%	26.0	85.3	1	.1	.5
			1000	304.8	140.0	63.6	(7x19)			96% Shield							10	.5	1.7
							.108″			Coverage							50	1.2	3.9
							BC			Inner:							100	1.8	5.9
							1.2Ω/M′			1.2Ω/M′							200	2.7	8.9
							3.9Ω/km			3.9Ω/km							400	4.2	13.8
										Outer:							700	5.8	19.0
										2.1Ω/M′							900	6.7	22.0
										4.9Ω/km							1000	7.1	23.3

BC = Bare Copper • DCR = DC Resistance • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

Amateur Radio and CB Coaxial Cable Assemblies

RG-8/U Type • 50 Ohm

Description	Part No.	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
RG-8/U Type • 11 AWG Stranded (7x19) Bare Copper • Military-Type Braid Coverage • Fitted with PL-259 Connectors on Both Ends							
Foam Polyethylene Insulation • Black PVC Jacket							
	9354	50	15.24	5.5	2.5	.403	10.24
	9355	75	22.86	8.3	3.8	.403	10.24
	9356	100	30.48	10.9	5.0	.403	10.24

Coax is 8214. See page 6.65 for product details.

These cables are designed to be used with two-way systems, such as Citizens Band (CB), Commercial, Amateur, and Marine equipment applications. They provide a positive link between the transmitter and antenna or between the receiver and antenna.

They are capable of handling higher power requirements with lower signal losses. Packaged individually.

Technical Information

Attenuation vs. Frequency for Belden® Broadband Coaxial Products

Frequency Point (MHz)	Series 59				Series 6				Series 11			
	Nominal dB/100 Ft.	Nominal dB/100m	Maximum dB/100 Ft.	Maximum dB/100m	Nominal dB/100 Ft.	Nominal dB/100m	Maximum dB/100 Ft.	Maximum dB/100m	Nominal dB/100 Ft.	Nominal dB/100m	Maximum dB/100 Ft.	Maximum dB/100m
5	.75	2.46	.89	2.92	.54	1.77	.67	2.20	.34	1.12	.38	1.25
55	1.84	6.04	1.95	6.40	1.45	4.76	1.60	5.25	.91	2.99	.97	3.18
211	3.36	11.02	3.59	11.78	2.64	8.66	2.87	9.42	1.68	5.51	1.81	5.94
216	3.41	11.19	3.69	12.11	2.67	8.76	2.95	9.68	1.70	5.58	1.84	6.04
240	3.57	11.71	3.87	12.70	2.80	9.19	3.09	10.14	1.78	5.84	1.94	6.36
270	3.79	12.43	4.05	13.29	2.97	9.74	3.24	10.63	1.89	6.20	2.05	6.73
300	3.99	13.09	4.27	14.01	3.13	10.27	3.43	11.25	1.99	6.53	2.15	7.05
325	4.16	13.65	4.50	14.76	3.26	10.70	3.59	11.78	2.07	6.79	2.24	7.35
350	4.33	14.21	4.64	15.22	3.39	11.12	3.72	12.20	2.15	7.05	2.32	7.61
375	4.49	14.73	4.84	15.88	3.52	11.55	3.87	12.70	2.22	7.28	2.40	7.87
400	4.66	15.29	4.88	16.01	3.65	11.97	4.00	13.12	2.30	7.55	2.47	8.10
450	4.96	16.27	5.30	17.39	3.88	12.73	4.26	13.98	2.45	8.04	2.65	8.69
500	5.22	17.13	5.50	18.04	4.09	13.42	4.48	14.70	2.59	8.50	2.85	9.35
550	5.48	17.98	5.90	19.36	4.30	14.11	4.71	15.45	2.73	8.96	2.94	9.65
600	5.75	18.86	6.18	20.28	4.51	14.80	4.94	16.21	2.85	9.35	3.08	10.10
650	6.03	19.78	6.52	21.39	4.72	15.49	5.18	16.99	2.98	9.78	3.22	10.56
700	6.28	20.60	6.83	22.41	4.92	16.14	5.45	17.88	3.10	10.17	3.37	11.06
750	6.51	21.36	6.96	22.83	5.11	16.76	5.59	18.34	3.21	10.53	3.50	11.48
800	6.71	22.01	7.30	23.95	5.27	17.29	5.75	18.86	3.32	10.89	3.65	11.97
862	6.97	22.87	7.50	24.61	5.47	17.95	5.98	19.62	3.46	11.35	3.82	12.53
870	7.00	22.97	7.54	24.74	5.49	18.01	6.00	19.68	3.48	11.42	3.84	12.60
900	7.14	23.42	7.79	25.56	5.60	18.37	6.11	20.05	3.55	11.65	3.96	12.99
950	7.39	24.25	7.90	25.92	5.79	19.00	6.35	20.83	3.66	12.01	4.10	13.45
1000	7.68	25.20	8.09	26.54	5.99	19.65	6.54	21.46	3.77	12.37	4.23	13.88

7 Flat Cable

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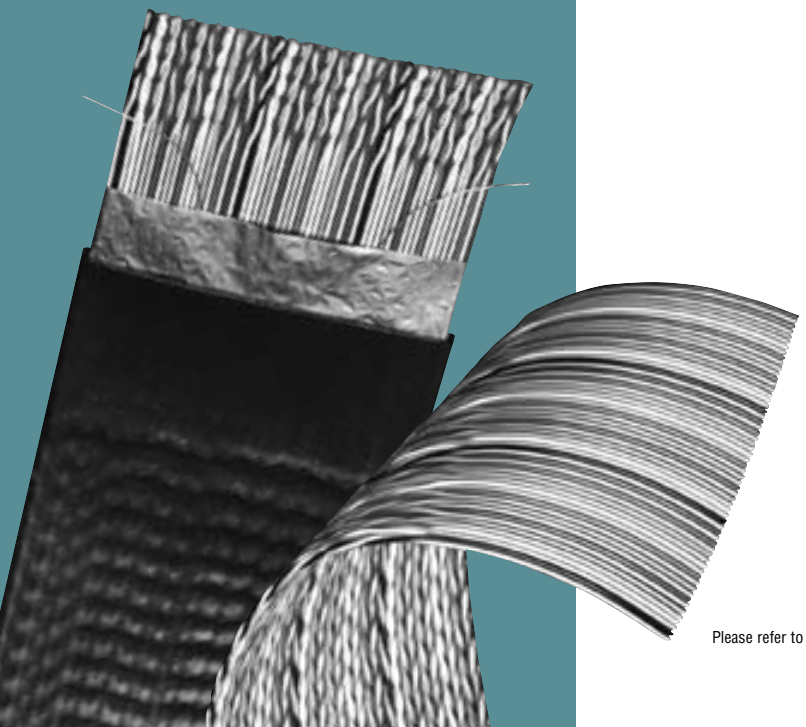


Please refer to “Terms of Use of Master Catalog” on page 16.30.

Introduction

Belden® flat cables are designed using the same expertise and design sophistication that made Belden a leader in round cable. Whatever your application, Belden is committed to offering quality flat cable products at a competitive price. Our extensive line includes Gray Ribbon, Rainbow, Vari-Twist® and Shielded and Jacketed Flat Cable options. Many of these are available off the shelf from local distributors. If you have a new or unusual application or you cannot find a flat cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Benefits of Flat Cable

- **Mass Termination** Terminating flat cable is done with the entire group of conductors as a unit, which is more efficient than working with individual conductors at one time.
- **Reliability** The simplicity of flat cable with its parallel conductor geometry eliminates many of the common sources of wiring error and malfunction. Registration of the conductors is one-to-one with the terminating connector or board so that proper contact assignment is almost automatic.
- **Space and Weight Reduction** The use of flat cable often eliminates much of the conventional wire weight and bulk. Such things as redundant insulating materials, fillers and tapes are not required. In addition, the composite flat cable construction is so mechanically strong that it is not necessary to have large conductors for strength. The copper cross-section can thus be reduced to what's required to carry the current load or to satisfy voltage drop requirements.
- **Flexibility** Flat cable is extremely flexible when bent in the plane of its thin cross-section. This flexibility has been utilized in applications where continuous or high flexing is necessary, e.g. drawers, doors, rotating arms, etc.
- **Greater Strength** Strength is enhanced by the fact that all conductors and insulation equally share tensile loads.
- **Consistent Electrical Characteristics** Because the conductor spacing is fixed and the geometry of the cable is constant, the electrical characteristics, such as impedance, capacitance, inductance, time delay, crosstalk and attenuation, are consistent.
- **Greater Current Carrying Capacity** Flat cables have greater surface-to-volume ratio than their round cable counterparts, consequently having higher efficiency in dissipating heat. This allows a higher current level for a given temperature rise and conductor cross-section.
- **Reduced Skewing Effects** Due to the conductors having the exact physical and electrical length, along with a continuous and consistent dielectric, time delays between signals within a given flat cable are minimized.
- **High-Density Interconnections** The cabling density achievable using flat cable is superior to that using conventional cable because of the high wire-to-cable cross-sectional density. Layers of flat cable are more effectively packed for higher conductor density than round cable.
- **Ease of Handling** Flat cable folds and bends readily, conforms to the mounting area, fastens easily with clamps, adhesive, or double-faced tape, and eliminates the installation and lacing difficulties associated with round wire cabling. Visible conductors in a fixed position within the dielectric simplify coding, inspection and circuit tracing.

Flat Cable Packaging

Packaging of flat cable is offered in one or more of the following configurations, as noted in the Physical Specifications table for each product:

100: 100′ put-up in a cardboard container. May contain more than one piece.

H100: A one-piece 100′ length, in a cardboard container.

H300: A one-piece 300′ length, in a cardboard container.

R300: A one-piece 300′ length put-up on a reel. It is designed for use by assemblers who use automated terminating equipment. An additional feature is the 9″ inner tail exposed through the flange. This enables users to terminate the cable end to a device, which is necessary for in-line testing.

Note: Material on this page obtained from and printed with the permission of the Institute for Interconnecting and Packaging Electronic Circuits (IPC).

Gray Ribbon 9L300XX Series

.025″ Pitch, 30 AWG, PVC

Product Description

Belden's miniaturized .025″ pitch extruded gray ribbon cable provides higher signal density, greater design flexibility, and an alternative to the expensive Teflon® transmission cables. The cable is manufactured to precise tolerances which allows for mass-termination to standard .050″ contact IDC connectors while assuring consistent and reliable electrical characteristics. With the miniaturization of the interconnects, significant reduction in components can be achieved. The cable is constructed of stranded 30 AWG (7x38) tinned copper conductors. Insulation material consists of Gray PVC, with a Red polarity stripe for proper circuit alignment. Standard conductor counts are 26 and 50; other sizes are available upon request. The cable is UL approved and CSA certified, and passes the VW-1 Vertical Wire Flame Test.

Color Code: Gray with Red polarity stripe.

Application: Internal interconnection or internal wiring of electronic equipment.

Physical Specifications

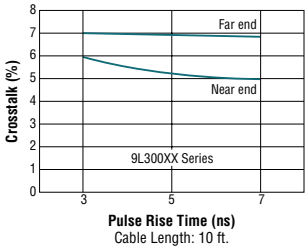
Conductor	30 AWG (7x38) Tinned Copper
Insulation	.0075″ Nom. Wall Gray PVC
Pitch	.025″ ±.002″
Temperature Rating	-40 to +105°C
Flammability Rating	UL: VW-1, CSA: FT1
UL Approval	File #E12683, Style 2678
CSA Approval	File #LL7874, CSA AWM I A 105°C 150V FT1
Packaging	H100, H300

Electrical Specifications

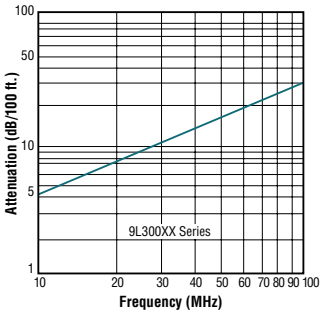
Voltage Rating	150V RMS
Current Rating	.5A
Conductor Resistance	108Ω/1000 ft.
Insulation Resistance	>1 x 10^{10}Ω • 10 ft. (3m)
Impedance*	70Ω
Capacitance* (@ 1 MHz)	24 pF/ft. (79 pF/m)
Inductance* (@ 1 MHz)	.14 µH/ft. (.46 µH/m)
Propagation Delay*	1.52 ns/ft. (4.96 ns/m)

*Test Configuration: G-S-G (ground-signal-ground).

Unbalanced Crosstalk



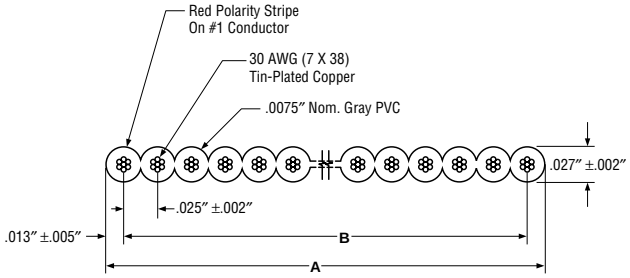
Attenuation



Part No.	No. of Cond.	Dimensions			
		Width "A"		Span "B"	
		Inch	mm	Inch	mm
9L30026	26	.650 ±.010	16.51 ±.25	.625 ±.007	15.88 ±.18
9L30050†	50	1.250 ±.011	31.75 ±.28	1.225 ±.009	31.12 ±.23

†Available in H100 packaging only.

Dimensions



Teflon is a DuPont trademark.

Gray Ribbon 2L280XX Series

1mm Pitch, 28 AWG, PVC

Product Description

Belden's 1mm (.03937″ pitch) extruded gray ribbon cable was designed for the disk drive market where the 2mm IDC connector is widely used. The cable provides improved space reduction, easy breakouts for circuit routing, and maintains the current carrying capacity required for these applications. In addition, the electrical performance meets those requirements specified by the SCSI-3 parallel interface document. The cable is constructed of stranded 28 AWG (7x36) tinned copper conductors. Insulation material consists of Gray PVC, with a Black polarity stripe for proper circuit alignment. Standard conductor counts are 26, 34, 40, 44 and 50; other sizes are available upon request. The cable is UL approved and CSA certified, and passes the VW-1 Vertical Wire Flame Test.

Color Code: Gray with Black polarity stripe.

Application: Internal interconnection or internal wiring of electronic equipment.

Physical Specifications

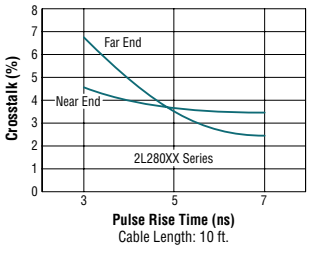
Conductor	28 AWG (7x36) Tinned Copper
Insulation	.010″ Nom. Wall Gray PVC
Pitch	1mm ± 0.51mm (.0394″ ± .002″)
Temperature Rating	-40 to +105°C
Flammability Rating	UL: VW-1; CSA: FT1
UL Approval	File #E12683, Style 2651
CSA Approval	File #LL7874, CSA AWM I A 105°C 300V FT1
Packaging	H100, R300

Electrical Specifications

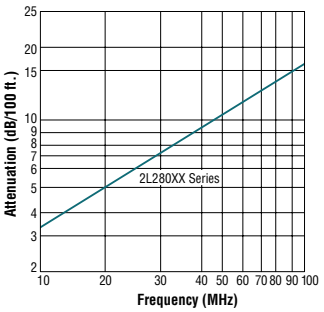
Voltage Rating	300V RMS
Current Rating	1A
Conductor Resistance	68Ω/1000 ft.
Insulation Resistance	>1 x 10^{10}Ω • 10 ft. (3m)
Impedance*	90Ω
Capacitance* (@ 1 MHz)	16.5 pF/ft. (54 pF/m)
Inductance* (@ 1 MHz)	.16 µH/ft. (.52 µH/m)
Propagation Delay*	1.47 ns/ft. (4.8 ns/m)

*Test Configuration: G-S-G (ground-signal-ground).

Unbalanced Crosstalk*



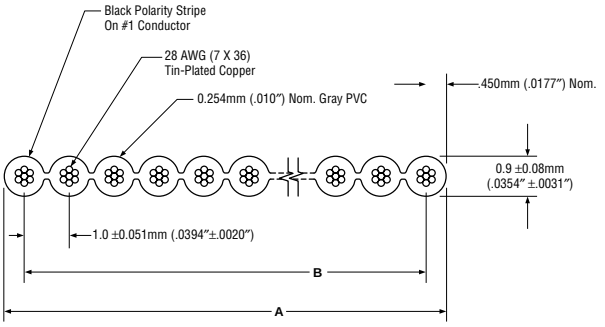
Attenuation*



Part No.	No. of Cond.	Dimensions			
		Width "A"		Span "B"	
		Inch	mm	Inch	mm
2L28026**	26	1.020 ±.008	25.9 ±.20	.984 ±.008	25.0 ±.20
2L28034**	34	1.335 ±.012	33.9 ±.30	1.299 ±.012	33.0 ±.30
2L28040**	40	1.571 ±.012	39.9 ±.30	1.535 ±.012	39.0 ±.30
2L28044**	44	1.728 ±.012	43.9 ±.30	1.693 ±.012	43.0 ±.30
2L28050	50	1.965 ±.012	49.9 ±.30	1.929 ±.012	49.0 ±.30

**Available in H100 packaging only.

Dimensions



Gray Ribbon 9L280XX Series

.050″ Pitch, 28 AWG, PVC (available in MIL-C-49055/1)

Product Description

Belden's (9L280XX Series) .050″ pitch extruded gray ribbon cable was designed for general purpose electronic interconnect applications. The cable provides reliable mass-termination to standard .100″ contact IDC connectors, flexibility, consistent electricals and break-outs can be made easily with the tear feature design. The cable is constructed of stranded 28 AWG (7x36) tinned copper conductors. Insulation material consists of Gray PVC, with a Red polarity stripe for proper circuit alignment. Various conductor counts are standard; other sizes are available upon request. The cable is UL approved and CSA certified, and passes the VW-1 Vertical Wire Flame Test.

Color Code: Gray with Red polarity stripe (standard), Gray with Black polarity stripe (MIL-C-49055/1).

Application: Internal interconnection or internal wiring of electronic equipment.

Physical Specifications

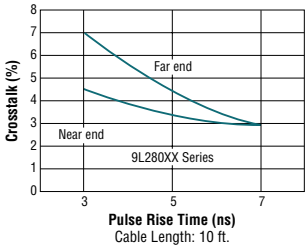
Conductor	28 AWG (7x36) Tinned Copper
Insulation	.010″ Nom. Wall Gray PVC
Pitch	.050″ ±.002″
Temperature Rating	-40 to +105°C
Flammability Rating	UL: VW-1; CSA: FT1
UL Approval	File #E12683, Style 2651
CSA Approval	File #LL7874, CSA AWM I A 105°C 300V FT1
Packaging	H100, H300, R300

Electrical Specifications

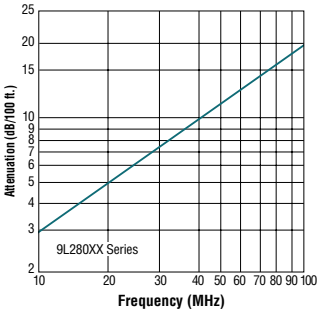
Voltage Rating	300V RMS
Current Rating	1A
Conductor Resistance	68Ω/1000 ft.
Insulation Resistance	>1 x 10^{10}Ω • 10 ft. (3m)
Impedance*	105Ω
Capacitance* (@ 1 MHz)	15 pF/ft. (49 pF/m)
Inductance* (@ 1 MHz)	.20 µH/ft. (.66 µH/m)
Propagation Delay*	1.40 ns/ft. (4.6 ns/m)

*Test Configuration: G-S-G (ground-signal-ground).

Unbalanced Crosstalk*



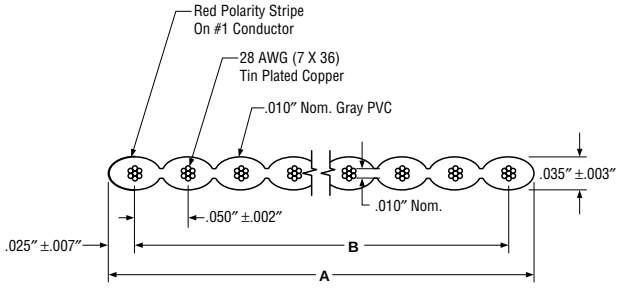
Attenuation*



Part No.		No. of Cond.	Dimensions			
			Width "A"		Span "B"	
Standard [UL & CSA]	MIL-C-49055/1 [QPL] (Designation)		Inch	mm	Inch	mm
9L28009	YP-3289 (M49055/1-01)	9	.45 ±.008	11.43 ±.20	.40 ±.008	10.16 ±.20
9L28010	YP-3290 (M49055/1-02)	10	.50 ±.008	12.70 ±.20	.45 ±.008	11.43 ±.20
9L28014†	YP-3291 (M49055/1-03)	14	.70 ±.008	17.78 ±.20	.65 ±.008	16.51 ±.20
9L28015**	YP-3292 (M49055/1-04)	15	.75 ±.008	19.05 ±.20	.70 ±.008	17.78 ±.20
9L28016	YP-3293 (M49055/1-05)	16	.80 ±.008	20.32 ±.20	.75 ±.008	19.05 ±.20
9L28020	YP-3294 (M49055/1-06)	20	1.00 ±.008	25.40 ±.20	.95 ±.008	24.13 ±.20
9L28024†	YP-3295 (M49055/1-07)	24	1.20 ±.008	30.48 ±.20	1.15 ±.008	29.21 ±.20
9L28025	YP-3296 (M49055/1-08)	25	1.25 ±.008	31.75 ±.20	1.20 ±.008	30.48 ±.20
9L28026	YP-3297 (M49055/1-09)	26	1.30 ±.008	33.02 ±.20	1.25 ±.008	31.75 ±.20
9L28034	YP-3298 (M49055/1-10)	34	1.70 ±.008	43.18 ±.20	1.65 ±.008	41.91 ±.20
9L28036**	— —	36	1.80 ±.012	45.72 ±.30	1.75 ±.012	44.45 ±.30
9L28037**	YP-3299 (M49055/1-11)	37	1.85 ±.012	46.99 ±.30	1.80 ±.012	45.72 ±.30
9L28040	YP-3300 (M49055/1-12)	40	2.00 ±.012	50.80 ±.30	1.95 ±.012	49.53 ±.30
9L28050	YP-3301 (M49055/1-13)	50	2.50 ±.012	63.50 ±.30	2.45 ±0.12	62.23 ±.30
9L28060	YP-3302 (M49055/1-14)	60	3.00 ±.012	76.20 ±.30	2.95 ±.012	74.93 ±.30
9L28064	YP-3303 (M49055/1-15)	64	3.20 ±.012	81.28 ±.30	3.15 ±.012	80.01 ±.30

**Available in H100 packaging only.
† Not available in R300 packaging.

Dimensions



Gray Ribbon 9L260XX Series

.050″ Pitch, 26 AWG, PVC (available in MIL-C-49055/1)

Product Description

Belden's (9L260XX series) .050″ pitch extruded gray ribbon cable was designed for general purpose electronic interconnect applications where higher current carrying capacities are required. The design also conforms to the electrical performance specifications outlined by the SCSI-3 parallel interface document. As with the 9L280XX series, the cable provides reliable mass-termination to standard .100″ contact IDC connectors, flexibility, consistent electricals and breakouts can be made easily with the tear feature design. In addition, the overall cable thickness is only .038″ ± .002″ allowing mateability with all standard IDC connectors. The cable is constructed of stranded 26 AWG (7x34) tinned copper conductors. Insulation material consists of Gray PVC, with a Blue polarity stripe for proper circuit alignment. Various conductor counts are standard; other sizes are available upon request. The cable is UL approved and CSA certified, and passes the VW-1 Vertical Wire Flame Test.

Color Code: Gray with Blue polarity stripe (standard), Gray with Black polarity stripe (MIL-C-49055/1).

Application: Internal interconnection or internal wiring of electronic equipment.

Physical Specifications

Conductor	26 AWG (7x34) Tinned Copper
Insulation	.010″ Nom. Wall Gray PVC
Pitch	.050″ ± .002″
Temperature Rating	-40 to +105°C
Flammability Rating	UL: VW-1; CSA: FT1
UL Approval	File #E12683, Style 2651
CSA Approval	File #LL7874, CSA AWM I A 105°C 300V FT1
Packaging	H100, H300, R300

Electrical Specifications

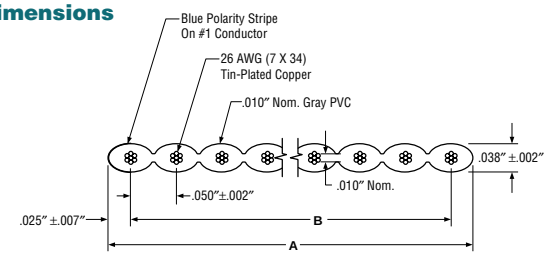
Voltage Rating	300V RMS
Current Rating	1.5A
Conductor Resistance	43Ω/1000 ft.
Insulation Resistance	>1 x 10^{10}Ω • 10 ft. (3m)
Impedance*	90Ω
Capacitance* (@ 1 MHz)	18 pF/ft. (55 µH/m)
Inductance* (@ 1 MHz)	.15 µH/ft. (.49 µH/m)
Propagation Delay*	1.48 ns/ft. (4.85 ns/m)

*Test Configuration: G-S-G (ground-signal-ground).

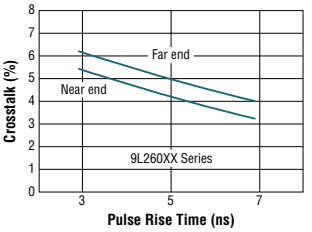
Part No.		No. of Cond.	Dimensions			
			Width "A"		Span "B"	
Standard [UL & CSA]	MIL-C-49055/1 [QPL] (Designation)		Inch	mm	Inch	mm
9L26010	YP-3305 (M49055/1-17)	10	.50 ±.008	12.70 ±.20	.45 ±.008	11.43 ±.20
9L26014††	YP-3306 (M49055/1-18)	14	.70 ±.008	17.78 ±.20	.65 ±.008	16.51 ±.20
9L26016**	YP-3308 (M49055/1-20)	16	.80 ±.008	20.32 ±.20	.75 ±.008	19.05 ±.20
9L26020††	YP-3309 (M49055/1-21)	20	1.0 ±.008	25.40 ±.20	.95 ±.008	24.13 ±.20
9L26025**	YP-3311 (M49055/1-23)	25	1.25 ±.008	31.75 ±.20	1.20 ±.008	30.48 ±.20
9L26026††	YP-3312 (M49055/1-24)	26	1.30 ±.008	33.02 ±.20	1.25 ±.008	31.75 ±.20
9L26034**	YP-3313 (M49055/1-25)	34	1.70 ±.008	43.18 ±.20	1.65 ±.008	41.91 ±.20
9L26040†	YP-3315 (M49055/1-27)	40	2.00 ±.012	50.80 ±.30	1.95 ±.012	49.53 ±.30
9L26044**	—	44	2.20 ±.012	55.88 ±.30	2.15 ±.012	54.61 ±.30
9L26068**	—	68	3.40 ±.012	86.36 ±.30	3.35 ±.012	85.09 ±.30

**Available in H100 packaging only.
† Not available in H300 packaging.
†† Not available in R300 packaging.

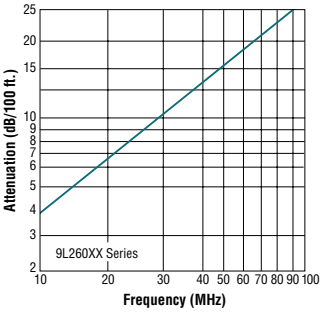
Dimensions



Unbalanced Crosstalk*



Attenuation*



Rainbow 9R280XX Series

.050″ Pitch, 28 AWG, Color-coded PVC

Product Description

Belden's .050″ pitch, color-coded PVC flat cable allows for quick identification and circuit tracing, along with easy breakouts for circuit routing. Designed for mass-termination with standard IDC connectors. The cable is constructed of stranded 28 AWG (7x36) tinned copper conductors, color-coded PVC preinsulated singles — laminated to a single clear PVC substrate. Fourteen various conductor counts are standard; other sizes are available upon request. The cable is UL approved (CSA available upon request) and passes the VW-1 Vertical Wire Flame Test.

Color Code: Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White, Black. Sequence is repeated as necessary.

Application: Internal interconnection or internal wiring of electrical equipment.

Physical Specifications

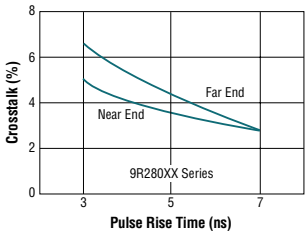
Conductor	28 AWG (7x36) Tinned Copper
Insulation	.010″ Nom. Wall Color-coded PVC
Substrate	.010″ Nom. Wall Clear PVC
Pitch	.050″ ±.005″
Temperature Rating	-20 to +105°C
Flammability Rating	UL: VW-1
UL Approval	File #E12663, Style 2884
CSA Approval	Available upon request
Packaging	100

Electrical Specifications

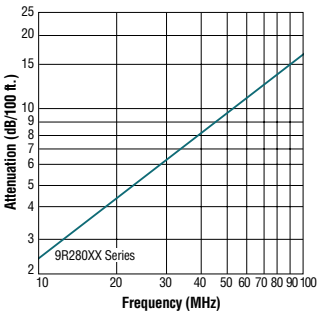
Voltage Rating	300V RMS
Current Rating	1A
Conductor Resistance	68Ω/1000 ft.
Insulation Resistance	>1 x 10^{10}Ω • 10 ft. (3m)
Impedance*	105Ω
Capacitance* (@ 1 MHz)	15 pF/ft. (49 pF/m)
Inductance* (@ 1 MHz)	.20 µH/ft. (.66 µH/m)
Propagation Delay*	1.4 ns/ft. (4.6 ns/m)

*Test Configuration: G-S-G (ground-signal-ground).

Unbalanced Crosstalk*

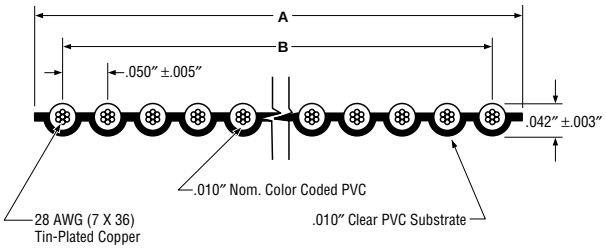


Attenuation*



Part No.	No. of Cond.	Dimensions			
		Width "A"		Span "B"	
		Inch	mm	Inch	mm
9R28010	10	.50	12.70	.45 ±.007	11.43 ±.18
9R28014	14	.70	17.78	.65 ±.007	16.51 ±.18
9R28016	16	.80	20.32	.75 ±.011	19.50 ±.28
9R28020	20	1.00	25.40	.95 ±.011	24.13 ±.28
9R28024	24	1.20	30.48	1.15 ±.011	29.21 ±.28
9R28025	25	1.25	31.75	1.20 ±.011	30.48 ±.28
9R28026	26	1.30	33.02	1.25 ±.011	31.75 ±.28
9R28034	34	1.70	43.18	1.65 ±.011	41.91 ±.28
9R28036	36	1.80	45.72	1.75 ±.015	44.45 ±.38
9R28037	37	1.85	46.99	1.80 ±.015	45.72 ±.38
9R28040	40	2.00	50.80	1.95 ±.015	49.53 ±.38
9R28050	50	2.50	63.50	2.45 ±.015	62.23 ±.38
9R28060	60	3.00	76.20	2.95 ±.015	74.93 ±.38
9R28064	64	3.20	81.28	3.15 ±.020	80.01 ±.51

Dimensions



Rainbow 8R280XX Series

.050″ Pitch, 28 AWG, Color-coded FEP (High Temperature)

Product Description

Belden's .050″ pitch, color-coded FEP flat cable allows for high and low temperature, low out-gassing and chemical resistant applications, improved electricals, and provides quick identification and circuit tracing, along with easy breakouts for circuit routing. Designed for mass-termination with standard IDC connectors, the cable is constructed of stranded 28 AWG (7x36) silver-plated copper conductors, color-coded FEP pre-insulated singles — laminated to a single clear FEP substrate. Thirteen various conductor counts are standard; other sizes are available upon request. The cable is UL approved and passes the IEEE 383, 70,000 BTU Flame Test.

Color Code: Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White, Black. Sequence is repeated as necessary.

Application: Internal wiring of appliances or electronic equipment. May be additionally marked "For 300V Peak Electronic Use Only."

Physical Specifications

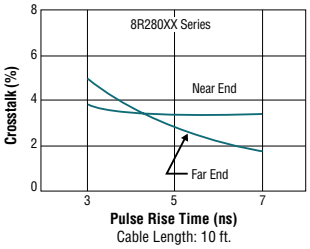
Conductor	28 AWG (7x36) Silver-plated Copper
Insulation	.010″ Nom. Wall Color-coded FEP
Substrate	.010″ Nom. Wall Clear FEP
Pitch	.050″ ±.005″
Temperature Rating	-70 to +150°C
Flammability Rating	UL: VW-1; IEEE: 383 70,000 BTU
UL Approval	File #E12683, Style 20468
Packaging	100

Electrical Specifications

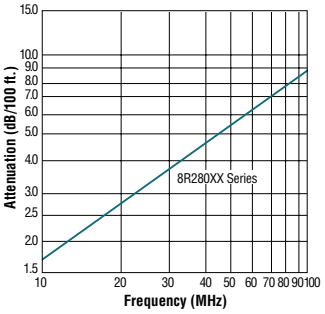
Voltage Rating	150V RMS
Current Rating	1A
Conductor Resistance	68Ω/1000 ft.
Insulation Resistance	>1 x 10^{11}Ω • 10 ft. (3m)
Impedance*	120Ω
Capacitance* (@ 1 MHz)	10.5 pF/ft. (34.4 pF/m)
Inductance* (@ 1 MHz)	.18 µH/ft. (.59 µH/m)
Propagation Delay*	1.3 ns/ft. (4.3 ns/m)

*Test Configuration: G-S-G (ground-signal-ground).

Unbalanced Crosstalk*

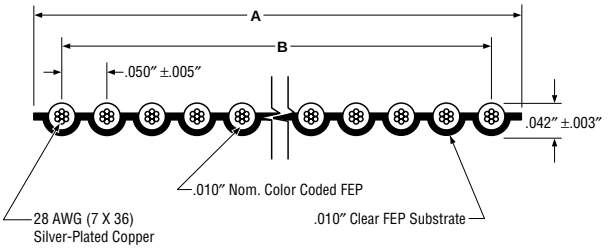


Attenuation*



Part No.	No. of Cond.	Dimensions			
		Width "A"		Span "B"	
		Inch	mm	Inch	mm
8R28010	10	.50	12.70	.45 ±.007	11.43 ±.18
8R28014	14	.70	17.78	.65 ±.007	16.51 ±.18
8R28016	16	.80	20.32	.75 ±.011	19.05 ±.28
8R28020	20	1.00	25.40	.95 ±.011	24.13 ±.28
8R28025	25	1.25	31.75	1.20 ±.011	30.48 ±.28
8R28026	26	1.30	33.02	1.25 ±.011	31.75 ±.28
8R28034	34	1.70	43.18	1.65 ±.011	41.91 ±.28
8R28036	36	1.80	45.72	1.75 ±.015	44.45 ±.38
8R28037	37	1.85	46.99	1.80 ±.015	45.72 ±.38
8R28040	40	2.00	50.80	1.95 ±.015	49.53 ±.38
8R28050	50	2.50	63.50	2.45 ±.015	62.23 ±.38
8R28060	60	3.00	76.20	2.95 ±.015	74.93 ±.38
8R28064	64	3.20	81.28	3.15 ±.020	80.01 ±.51

Dimensions



Vari-Twist® 9V280XX Series

.050″ Pitch, 28 AWG, PVC

Product Description

Belden's PVC Vari-Twist 9V280XX series was designed to reduce crosstalk in the balanced mode by twisting the pairs, but can be mass-terminated in the programmed flat sections with any standard IDC connector. To further reduce crosstalk, each adjacent pair is twisted in the opposite direction. The standard twist length is 18 inches followed by a 2 inch flat section of .050″ spaced conductors. The cable consists of stranded 28 AWG (7x36) tinned copper, color-coded PVC preinsulated singles — laminated to a single clear PVC substrate. Eleven various conductor/pair counts are standard; other sizes are available upon request. The cable is UL approved (CSA available upon request) and passes the VW-1 Vertical Wire Flame Test.

Upon your request, Vari-Twist can also be manufactured to your own specific requirements whether that be longer or shorter twist sections and/or flat sections.

Color Code: Each pair consists of a Tan conductor paired with a color-coded conductor. *Color Sequence Each Terminating Section:* Brown/Tan, Red/Tan, Orange/Tan, Yellow/Tan, Green/Tan, Blue/Tan, Violet/Tan, Gray/Tan, White/Tan, Black/Tan. Sequence is repeated as necessary.

Application: Internal interconnection or internal wiring of electronic equipment.

Physical Specifications

Conductor	28 AWG (7x36) Tinned Copper
Insulation	.010″ Nom. Wall Color-coded PVC
Substrate	.010″ Nom. Wall Clear PVC
Pitch	
Twisted Pair Centers:	.100″ Nom.
Conductor Centers in Flat:	.050″ ±.005″
Pairs	1/2″ Nom. Lay Adjacent Pairs have Opposite Direction Lay
Construction	18″ of Twisted Pairs 2″ of Flat Section
Temperature Rating	-20 to +105°C
Flammability Rating	UL: VW-1
UL Approval	File #E12683, Style Dual Rated 2693 & 2697
CSA Approval	Available Upon Request
Packaging	H100

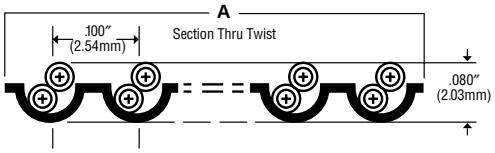
Electrical Specifications

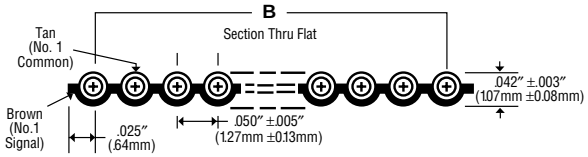
Voltage Rating	300V RMS
Current Rating	1A
Conductor Resistance	68Ω/1000 ft.
Insulation Resistance	>1 x 10^{10}Ω • 10 ft. (3m)
Impedance (Balanced)	115Ω
Impedance* (Unbalanced)	100Ω
Capacitance* (@ 1 MHz)	16 pF/ft. (52 pF/m)
Inductance* (@ 1 MHz)	.24 µH/ft. (.79 µH/m)
Propagation Delay*	1.6 ns/ft. (5.25 ns/m)

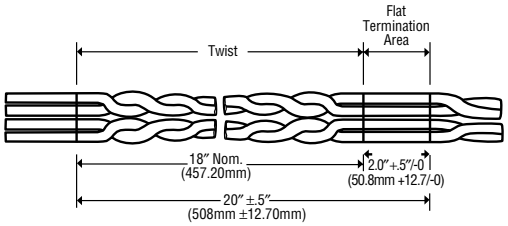
*Test Configuration: G-S (ground-signal), unbalanced.

Part No.	No. of Pairs	Dimensions			
		Width "A"		Span "B"	
		Inch	mm	Inch	mm
9V28010	5	.50	12.70	.45 ±.012	11.43 ±.30
9V28014	7	.70	17.78	.65 ±.012	16.51 ±.30
9V28016	8	.80	20.32	.75 ±.012	19.05 ±.30
9V28020	10	1.00	25.40	.95 ±.015	24.13 ±.38
9V28026	13	1.30	33.02	1.25 ±.015	31.75 ±.38
9V28034	17	1.70	43.18	1.65 ±.015	41.91 ±.38
9V28036	18	1.80	45.72	1.75 ±.017	44.45 ±.43
9V28040	20	2.00	50.80	1.95 ±.017	49.53 ±.43
9V28050	25	2.50	63.50	2.45 ±.017	62.23 ±.43
9V28060	30	3.00	76.20	2.95 ±.020	74.93 ±.51
9V28064	32	3.20	81.28	3.15 ±.020	80.01 ±.51

Dimensions



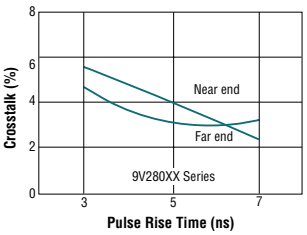




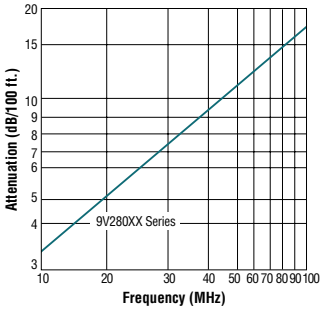
NOTE: the transition area is included in the twisted section to assure a full 2 Inches of .050″ termination area.

Unbalanced Crosstalk*

(See page 7.14 for Balanced Crosstalk)



Attenuation*



Vari-Twist® 8V280XX Series

.050″ Pitch, 28 AWG, FEP (High Temperature)

Product Description

Belden's FEP Vari-Twist 8V280XX series allows for high and low temperature, low out-gassing, and chemical resistant applications, improved electricals, and provides quick identification and circuit tracing. The cable was designed to reduce crosstalk in the balanced mode by twisting the pairs but can be mass-terminated in the programmed flat sections with any standard IDC connector. To further reduce crosstalk, each adjacent pair is twisted in the opposite direction. The standard twist length is 18 inches followed by a 2 inch flat section of .050″ spaced conductors. The cable consists of stranded 28 AWG (7x36) silver-plated copper, color-coded FEP preinsulated singles — laminated to a single clear FEP substrate. Eight various conductor/pair counts are standard; other sizes are available upon request. The cable is UL approved and passes the IEEE 383 70,000 BTU Flame Test.

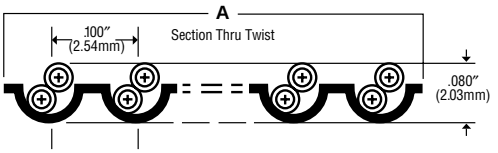
Upon your request, Vari-Twist can also be manufactured to your own specific requirements whether that be longer or shorter twist sections and/or flat sections.

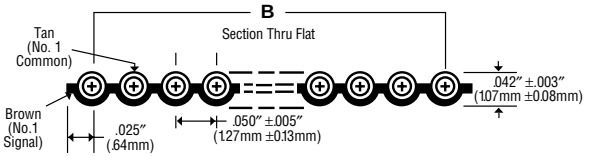
Color Code: Each pair consists of a Tan conductor paired with a color-coded conductor. *Color Sequence Each Terminating Section:* Brown/Tan, Red/Tan, Orange/Tan, Yellow/Tan, Green/Tan, Blue/Tan, Violet/Tan, Gray/Tan, White/Tan, Black/Tan. Sequence is repeated as necessary.

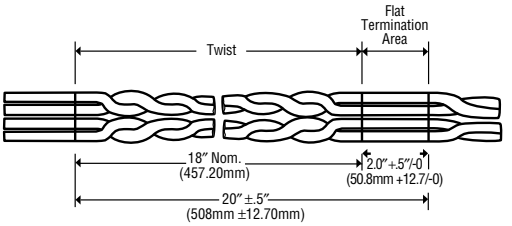
Application: Internal wiring of appliances or electronic equipment. May be additionally marked "For 300V Peak Electronic Use Only."

Part No.	No. of Pairs	Dimensions			
		Width "A"		Span "B"	
		Inch	mm	Inch	mm
8V28010	5	.50	12.70	.45 ±.012	11.43 ±.30
8V28014	7	.70	17.78	.65 ±.012	16.51 ±.30
8V28020	10	1.00	25.40	.95 ±.015	24.13 ±.38
8V28026	13	1.30	33.02	1.25 ±.015	31.75 ±.38
8V28034	17	1.70	43.18	1.65 ±.015	41.91 ±.38
8V28036	18	1.80	45.72	1.75 ±.017	44.45 ±.43
8V28040	20	2.00	50.80	1.95 ±.017	49.53 ±.43
8V28060	30	3.00	76.20	2.95 ±.020	74.93 ±.51

Dimensions







NOTE: the transition area is included in the twisted section to assure a full 2 Inches of .050″ termination area.

Physical Specifications

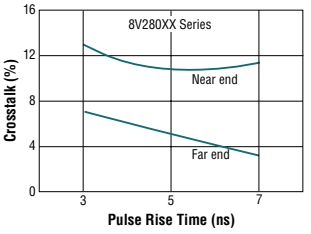
Conductor	28 AWG (7x36) Silver-plated Copper
Insulation	.010″ Nom. Wall Color-coded FEP
Substrate	.010″ Nom. Wall Clear FEP
Pitch	
Twisted Pair Centers:	.100″ Nom.
Conductor Centers in Flat:	.050″ ±.005″
Pairs	1/2″ Nom. Lay Adjacent Pairs have Opposite Direction Lay
Construction	18″ of Twisted Pairs 2″ of Flat Section
Temperature Rating	-70 to +150°C
Flammability Rating	UL: VW-1; IEEE 383 70,000 BTU
UL Approval	File #E12683, Style 20468
Packaging	100

Electrical Specifications

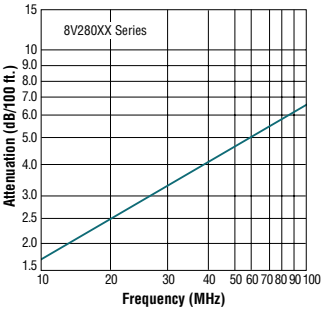
Voltage Rating	150V RMS
Current Rating	1A
Conductor Resistance	68Ω/1000 ft.
Insulation Resistance	>1 x 10^{11}Ω • 10 ft. (3m)
Impedance (Balanced)	145Ω
Impedance* (Unbalanced)	130Ω
Capacitance* (@ 1 MHz)	10.6 pF/ft. (34.78 pF/m)
Inductance* (@ 1 MHz)	.22 µH/ft. (.72 µH/m)
Propagation Delay*	1.32 ns/ft. (4.33 ns/m)

*Test Configuration: G-S (ground-signal), unbalanced.

Unbalanced Crosstalk*



Attenuation*



Shielded Jacketed 9L283XX Series

.050″ Pitch, 28 AWG, PVC

Product Description

Belden's shielded jacketed 9L283XX series was designed to help meet the FCC EMI/RFI requirements. In addition, the cable provides shielding from external electrical interference along with excellent crosstalk attenuation. The thin extruded jacket allows for greater flexibility, ease of termination, and reduced space requirements, while providing exterior protection from the environment. The core cable is Belden's 9L280XX PVC series allowing easy termination to any standard IDC connector. All cables are 100% shielded with a Duofoil® shield (aluminum/polyester/aluminum) and can be terminated with the two 28 AWG drain wires. Thirteen various conductor counts are standard; other sizes are available upon request. The cable is UL approved and CSA certified, and passes the VW-1 Vertical Wire Flame Test.

Color Code: Gray with Red polarity stripe.

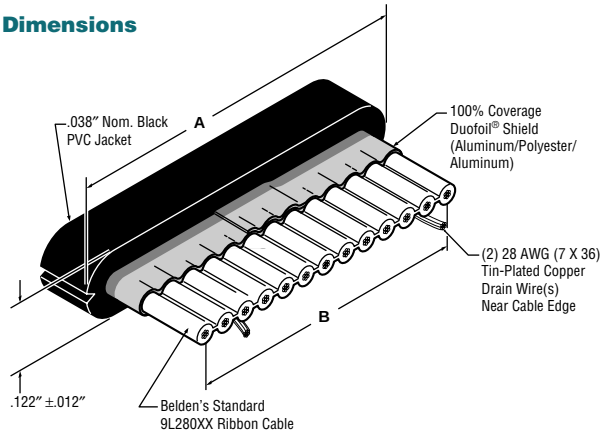
Application: External interconnection or internal wiring of electronic equipment.

Part No.	No. of Cond.	Dimensions			
		Width "A"		Span "B"	
		Inch	mm	Inch	mm
9L28309	9	.55	13.97	.40 ±.008	10.16 ±.20
9L28310	10	.60	15.24	.45 ±.008	11.43 ±.20
9L28315	15	.85	21.59	.70 ±.008	17.78 ±.20
9L28320	20	1.10	27.94	.95 ±.008	24.13 ±.20
9L28325	25	1.35	34.29	1.20 ±.008	30.48 ±.20
9L28326	26	1.40	35.56	1.25 ±.008	31.75 ±.20
9L28334	34	1.80	45.72	1.65 ±.008	41.91 ±.20
9L28336	36	1.90	48.26	1.75 ±.012	44.45 ±.30
9L28337	37	1.95	49.53	1.80 ±.012	45.72 ±.30
9L28340	40	2.10	53.34	1.95 ±.012	49.53 ±.30
9L28350	50	2.60	66.04	2.45 ±.012	62.23 ±.30
9L28360	60	3.10	78.74	2.95 ±.012	74.93 ±.30
9L28364	64	3.30	83.82	3.15 ±.012	80.01 ±.30

Physical Specifications

Conductor	28 AWG (7x36) Tinned Copper
Insulation	.010″ Nom. Wall Gray PVC
Pitch	.050″ ±.002″
Shielding	Duofoil Shield (Aluminum/Polyester/Aluminum)
Drain Wires	Two 28 AWG (7x36) Tinned Copper
Jacket	.038″ Nom. Wall Black PVC
Temperature Rating	-20 to +105°C
Flammability Rating	UL: VW-1; CSA: FT1
UL Approval	File #E12683, Style 20081
CSA Approval	File #LL7874, CSA AWM II A 105°C 300V FT1
Packaging	100

Dimensions

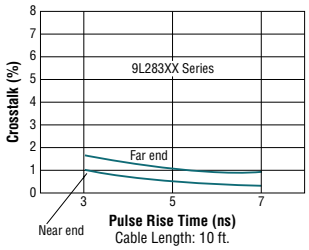


Electrical Specifications

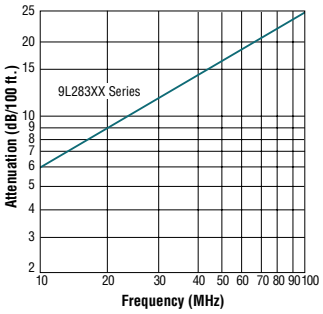
Voltage Rating	300V RMS
Current Rating	1A
Conductor Resistance	68Ω/1000 ft.
Insulation Resistance	>1 x 10^{10}Ω • 10 ft. (3m)
Impedance*	45Ω
Capacitance* (@ 1 MHz)	50 pF/ft. (164 pF/m)
Inductance* (@ 1 MHz)	.11 µH/ft. (.36 µH/m)
Propagation Delay*	1.70 ns/ft. (5.6 ns/m)

*Test Configuration: G-S-G (ground-signal-ground), with shield grounded.

Unbalanced Crosstalk*



Attenuation*



Shielded Jacketed Vari-Twist® 9V283XX Series

.050″ Pitch, 28 AWG, PVC

Product Description

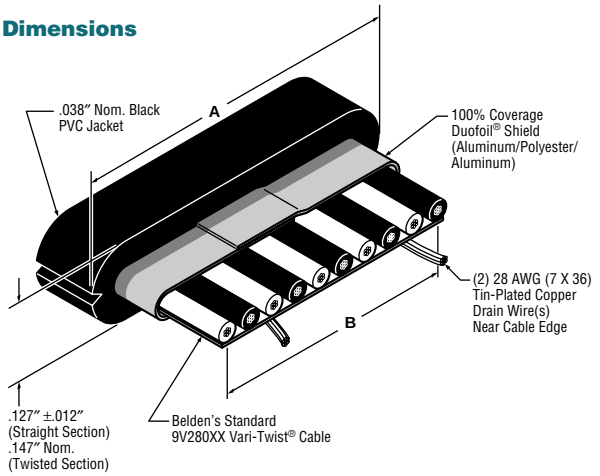
Belden's shielded jacketed 9V283XX series was designed to help meet the FCC EMI/RFI requirements. In addition, the cable provides shielding from external electrical interference along with excellent crosstalk attenuation. As with the 9V280XX series, the cable supplies the electrical benefits of twisted pairs, but can be mass-terminated in the programmed flat sections. The thin extruded jacket allows for greater flexibility, ease of termination, reduced space requirements, and identification of the flat sections while providing exterior protection from the environment. The core cable is Belden's 9V280XX PVC series to allow easy termination to any standard IDC connector. All cables are 100% shielded with a Duofoil® shield (aluminum/polyester/aluminum) and can be terminated with the two 28 AWG drain wires. Ten various conductor/pair counts are standard; other sizes are available upon request. The cable is UL approved (CSA available upon request) and passes the VW-1 Vertical Wire Flame Test.

Color Code: Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White, Black, with common Tan. Repeat.

Application: External interconnection or internal wiring of electronic equipment.

Part No.	No. of Pairs	Dimensions			
		Width "A"		Span "B"	
		Inch	mm	Inch	mm
9V28310	5	.60	15.24	.45 ±.012	11.43 ±.30
9V28314	7	.80	20.32	.65 ±.012	16.51 ±.30
9V28316	8	.90	22.86	.75 ±.012	19.05 ±.30
9V28320	10	1.10	27.94	.95 ±.015	24.13 ±.38
9V28326	13	1.40	35.56	1.25 ±.015	31.75 ±.38
9V28334	17	1.80	45.72	1.65 ±.015	41.91 ±.38
9V28336	18	1.90	48.26	1.75 ±.017	44.45 ±.43
9V28340	20	2.10	53.34	1.95 ±.017	49.53 ±.43
9V28350	25	2.60	66.04	2.45 ±.017	62.23 ±.43
9V28360	30	3.10	78.74	2.95 ±.020	74.93 ±.51

Dimensions



Physical Specifications

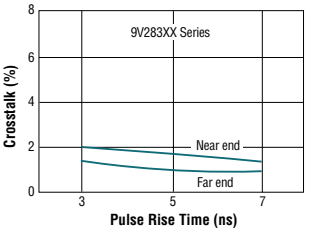
Conductor	28 AWG (7x36) Tinned Copper
Insulation	.010″ Nom. Wall Color-coded PVC
Substrate	.010″ Nom. Wall Clear PVC
Pitch	
Twisted Pair Centers:	.100″ Nom.
Conductor Centers in Flat:	.050″ ±.005″
Pairs	1/2″ Nom. Lay Adjacent Pairs have Opposite Direction Lay
Construction	18″ of Twisted Pairs 2″ of Flat Section
Shielding	Duofoil Shield (Aluminum/Polyester/Aluminum)
Drain Wires	Two 28 AWG (7x36) Tinned Copper
Jacket	.038″ Nom. Wall Black PVC
Temperature Rating	-20 to +105°C
Flammability Rating	UL: VW-1
UL Approval	File #E12683, Style 20081
CSA Approval	Available Upon Request
Packaging	100

Electrical Specifications

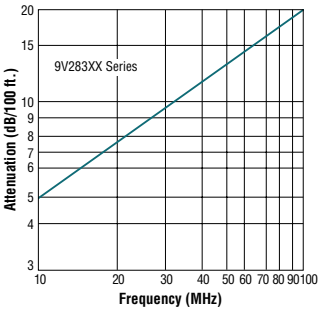
Voltage Rating	300V RMS
Current Rating	1A
Conductor Resistance	68Ω/1000 ft.
Insulation Resistance	>1 x 10^{10}Ω • 10 ft. (3m)
Impedance (Balanced)	100Ω
Impedance* (Unbalanced)	60Ω
Capacitance* (@ 1 MHz)	29 pF/ft. (95 pF/m)
Inductance* (@ 1 MHz)	.13 µH/ft. (.43 µH/m)
Propagation Delay*	1.6 ns/ft. (5.25 ns/m)

*Test Configuration: G-S-G (ground-signal-ground) with shield grounded.

Unbalanced Crosstalk*



Attenuation*



Technical Information

Flat Cable Crosstalk Testing

The following is a description of two methods Belden uses to test its flat cable for crosstalk. Because these methods are different, the results may be different even when the same type of cable is used in each test. In short, the reader is offered two different tests to determine which cable type has the best crosstalk characteristics. At times, the results of these two test methods do not agree. Therefore, it is best for the reader to determine which method most closely approximates actual cable application and use its results for cable comparisons.

Unbalanced Crosstalk

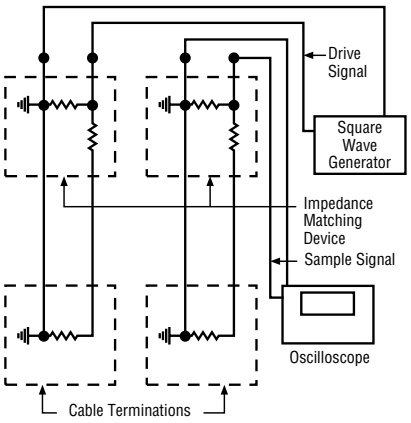
The unbalanced crosstalk of flat cables is measured as shown in Figure 1. One end of the cable drive is connected through an impedance matching device to a signal generator. The other end of the drive line is terminated in its characteristic impedance. The signal generator is capable of generating square wave pulses of varying leading edge rise times.

A test signal from the signal generator is inserted into the drive line. The cable is connected as follows: Ground-Drive line-Ground-Sample line-Ground or GSG mode. The sample line is also terminated at both ends in its characteristic impedance. The signal at each end of the sample line is measured. The signal at the signal generator end of the sample line is called the near end or reverse crosstalk. The signal at the opposite end of the sample line is called the far end or forward crosstalk. The actual crosstalk figures are given in % and are calculated as follows:

$$\% \text{ Crosstalk} = \frac{\text{Signal in sample line}}{\text{Signal in drive line}} \times 100\%$$

This type of crosstalk test is widely accepted in the flat cable industry. It is a very good method to determine the pulse crosstalk of all types of flat cables connected in the GSG mode. Crosstalk data for Belden flat cables tested using this method is given in the electrical data section of each cable.

Figure 1: Unbalanced Near End Crosstalk



Technical Information

Flat Cable Crosstalk Testing

Balanced Crosstalk

Twisted pair flat cables are not designed to be connected in the GSG mode. These cables provide positive crosstalk reduction over non-twisted pair cables when used in the balanced mode. The balanced crosstalk of twisted pair flat cables is measured as shown in Figure 2. One end of the cable drive pair is connected through a balanced impedance matching transformer to the network analyzer input. The other end of the cable drive pair is terminated in its characteristic impedance. One end of the sample pair is terminated in its characteristic impedance. The other end of the cable sample pair is connected through a balanced impedance matching transformer to the network analyzer output. Because impedance matching transformers are used, none of the wires in the drive or sample line share a common ground. The signal in each line is balanced to ground. For example, one wire of the line will carry the inverse of the signal in the other wire in the same line at any given moment. The signal from the tracking generator is a range of frequencies, typically from 10 MHz to 100 MHz. The signal at each end of the sample line is measured in units of dB of isolation using a spectrum analyzer. The crosstalk results of two cables, one with parallel non-twisted conductors (9L Series) and the other with twisted pair conductors (9V Series) is shown in Figure 3.

In conclusion, it is not the intent of this section to recommend one type of crosstalk testing over another. Rather, it is intended to demonstrate there are different cable types for the different cable applications.

Please choose the crosstalk testing method which most closely approximates your application.

Figure 2: Balanced Near End Crosstalk

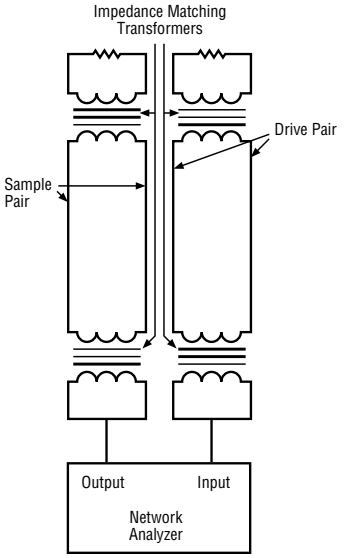
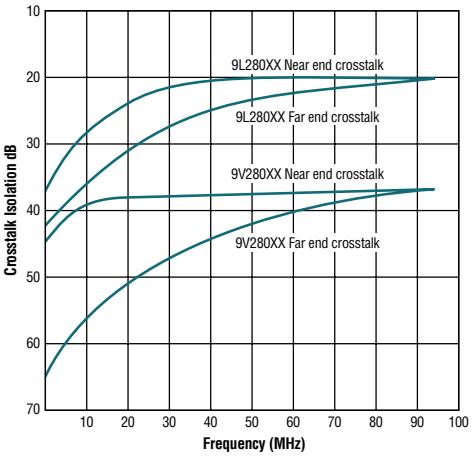


Figure 3: Balanced Crosstalk



Belden

8 Molded Cable Assemblies

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Please refer to "Terms of Use of Master Catalog" on page 16.30.

Introduction

Quality Construction

Belden® molded cable assemblies are designed for long life and reliable performance in a variety of input/output (I/O) and keyboard interface applications. Among the many features of the cable assemblies are these performance-enhancing attributes:

Shielding

Molded handles are 100% shielded (where used) to assist in FCC compliance while guarding against EMI and RFI. Shield continuity is maintained through the entire length of the assembly. The connector shield is connected to both the connector shell and the cable shield. This provides a low resistance ground path to optimize shield performance.

Handles

Straight or right angle handles are available for different connecting situations. Standard molding is PVC.

Connectors

Connectors consist of tin-plated shells with grounding indents on male connectors. Pins and sockets are constructed of brass or phosphor-bronze base with gold selectively plated over nickel.

Retention Systems

Belden offers several types of retention systems. They include:

- **Friction:** Pin/contact force holds connectors mated.
- **Screw:** Retaining screws mate with female screwlocks. Straight handle uses two screws; right angle handle uses one screw. Screws are #4-40 thread of plated steel with stainless steel clips.
- **Slide Lock:** Fingertip-operated slide mechanism holds mated connectors securely. Slide lock clip is stainless steel with plated screw, washer, and hex nut.
- **Spring Latch:** Stainless steel latch mates with latching blocks (special orders only).
- **Jack Screw:** Two captive jacks crews mate securely with female screwlocks. Zinc plated, #4-40 thread screws with large knurled heads for easy fingertip connect/disconnect.

Wiring Patterns

Standard wiring is point-to-point on most assemblies. Special wiring is available upon request.

Cables

For standard assemblies, Belden utilizes three standard cable configurations for tailoring a cable to a specific electrical environment. The cable configurations are as follows:

- **General Purpose Unshielded:** An economical assembly where electrical noise/interference is not a problem.
- **General Purpose Shielded:** An overall foil shielded assembly for use in situations where some noise/interference is experienced or anticipated.
- **Super Shield:** A foil plus braid shield provides extra protection in areas of moderate to heavy noise/interference.

Most of our molded cable assemblies are available from stock in a wide variety of handles, cables, colors, retention systems, and wiring patterns. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find molded cables in this catalog section that meet your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Molded Cable Assemblies Packaging

Unless otherwise indicated, molded cable assemblies are shipped in individual packages or plastic bags with printed part numbers, descriptions and an area to indicate the retail price.

D-Subminiature Assembly

Shielded 9-Position and 15-Position

9-Position Shielded D-Sub • Male Straight Handle One End • For keyboard-to-CRT use where 9-pin retractile is desired

Foil Shield (General Purpose) • **Retractile • Polypropylene Insulation • Black Polyurethane Jacket**

Part No.	No. of Cond.	Length of Body				Length of Tail				Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Retracted		Extended		Connector End		Other End			Type	Drain Wire						
		Inch	mm	Inch	mm	Inch	mm	Inch	mm				Inch	mm	Inch	mm	Inch	mm
49910A	9	12	305	60	1524	6	152	18	457	26 (19x38) Tinned Copper [.51]	Overall Foil	20 (42x36)	.006	.15	.065	1.65	.250	6.35
49911A	9	18	457	90	2286	6	152	18	457									

Polyurethane jacket provides superior retractile properties at a reasonable cost.
Molded handles are 100% shielded to assist in FCC compliance and guard against EMI/RFI.
All connectors are tin-plated with detents for a positive ground connection.
The end opposite the connector is stripped. Jack screw retention on male connector.

30V 60°C, UL AWM Style 20197

Contact View

9-Position Shielded D-Sub • Straight Handle Both Ends • For RS-449 applications

Foil Shield (General Purpose) • **Semi-rigid PVC Insulation • Chrome PVC Jacket**

Part No.	No. of Cond.	Standard Lengths		Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m				Type	Drain Wire						
49900A	9	5	1.5	Male/Male	NEC: CM	24 (7x32) Tinned Copper [.61]	Overall Foil	24 (7x32)	.010	.25	.032	.81	.244	6.20
49901A	9	10	3.0	Male/Male										
49902A	9	25	7.6	Male/Male										
49905A	9	5	1.5	Male/Female										
49906A	9	10	3.0	Male/Female										
49907A	9	25	7.6	Male/Female										

Molded handles are 100% shielded to assist in FCC compliance and guard against EMI/RFI. All connectors tin-plated and male connectors have detents for positive ground connection. Wiring is point-to-point with the shield to connector shell. Jack screw retention on both connectors.

300V 80°C, UL AWM Style 2464

Contact View

Contact View

15-Position Shielded D-Sub • Straight Handle Both Ends • For any 15-pin application exposed to high-noise environment

Foil Shield (General Purpose) • **Semi-rigid PVC Insulation • Chrome PVC Jacket**

49720A	15	5	1.5	Male/Male	NEC: CM	24 (7x32) Tinned Copper [.61]	Overall Foil	24 (7x32)	.010	.25	.032	.81	.284	7.21
49721A	15	10	3.0	Male/Male										
49725A	15	5	1.5	Male/Female										
49726A	15	10	3.0	Male/Female										

Molded handles are 100% shielded to assist in FCC compliance and guard against EMI/RFI. All connectors tin-plated and male connectors have detents for positive ground connection. Wiring is point-to-point with the shield to connector shell. Jack screw retention on both connectors.

300V 80°C, UL AWM Style 2464

Contact View

Contact View

Foil plus Braid Shield (Super Shield) • **Semi-rigid PVC Insulation • Chrome PVC Jacket**

49740A	15	5	1.5	Male/Male	NEC: CM	24 (7x32) Tinned Copper [.61]	Overall Foil + 65% Braid	None	.010	.25	.035	.89	.300	7.62
49745A	15	5	1.5	Male/Female										
49746A	15	10	3.0	Male/Female										
49747A	15	25	7.6	Male/Female										

Molded handles are 100% shielded to assist in FCC compliance and guard against EMI/RFI. All connectors tin-plated and male connectors have detents for positive ground connection. Wiring is point-to-point with the shield to connector shell. Jack screw retention on both connectors.

300V 80°C, UL AWM Style 2464

Contact View

Contact View

D-Subminiature Assembly

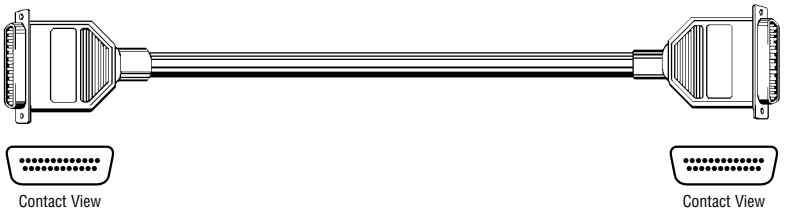
Shielded 25-Position

25-Position Shielded D-Sub • Straight Handle Both Ends • For RS-232 applications

Part No.	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield Type	Shield Drain Wire	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm
Foil Shield (General Purpose) • **Semi-rigid PVC Insulation • Chrome PVC Jacket**														
49668A	25	5	1.5	Male/Male	NEC: CM	24 (7x32) Tinned Copper [.61]	Overall Foil	24 (7x32)	.010	.25	.032	.81	.339	8.61
49669A	25	10	3.0	Male/Male										
49670A	25	25	7.6	Male/Male										
49671A new	25	50	15.2	Male/Male										
49673A	25	5	1.5	Male/Female										
49674A	25	10	3.0	Male/Female										
49675A	25	25	7.6	Male/Female										
49676A new	25	50	15.2	Male/Female										

Molded handles are 100% shielded to guard against EMI/RFI where indicated. All connectors are tin-plated and male connectors have detents to allow for a positive shield to ground connection. Wiring is point-to-point with shield to connector shell. Jack screw retention on both connectors.

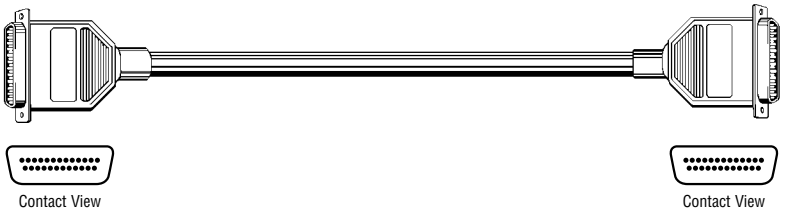
300V 80°C, UL AWM Style 2464



Foil plus Braid Shield (Super Shield) • **Semi-rigid PVC Insulation • Chrome PVC Jacket**														
49612A	25	25	7.6	Male/Male	NEC: CM	24 (7x32) Tinned Copper [.61]	Overall Foil + 65% Braid	None	.010	.25	.040	1.02	.370	9.40
49615A	25	5	1.5	Male/Female										
49616A	25	10	3.0	Male/Female										
49617A	25	25	7.6	Male/Female										

Molded handles are 100% shielded to guard against EMI/RFI where indicated. All connectors are tin-plated and male connectors have detents to allow for a positive shield to ground connection. Wiring is point-to-point with shield to connector shell. Jack screw retention on both connectors.

300V 80°C, UL AWM Style 2464



Foil plus Braid Shield (Super Shield) • **Semi-rigid PVC Insulation • Chrome PVC Jacket**														
49660A	25	5	1.5	Male/Male	NEC: CM	24 (7x32) Tinned Copper [.61]	Overall Foil + 65% Braid	None	.010	.25	.040	1.02	.370	9.40

Molded handles are 100% shielded to guard against EMI/RFI where indicated. All connectors are tin-plated and male connectors have detents to allow for a positive shield to ground connection. Wiring is point-to-point with shield to connector shell. Jack screw retention on both connectors.

300V 80°C, UL AWM Style 2464

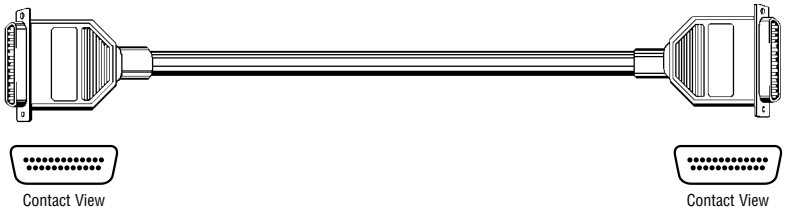
D-Subminiature Assembly

Unshielded 25-Position, Shielded 37-Position and 50-Position

Part No.	No. of Cond.	Standard Lengths		Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m				Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm
25-Position Unshielded D-Sub • Straight Handle Both Ends • For RS-232 applications														
Unshielded (General Purpose) • **Semi-rigid PVC Insulation • Chrome PVC Jacket**														
49653A	25	10	3.0	Male/Female	NEC: CM	24 (7x32) Tinned Copper [.61]	None	None	.010	.25	.040	1.02	.350	8.89

Molded handles are 100% shielded to guard against EMI/RFI where indicated. All connectors are tin-plated and male connectors have detents to allow for a positive shield to ground connection. Wiring is point-to-point with shield to connector shell. Jack screw retention on both connectors.

300V 80°C, UL AWM Style 2464



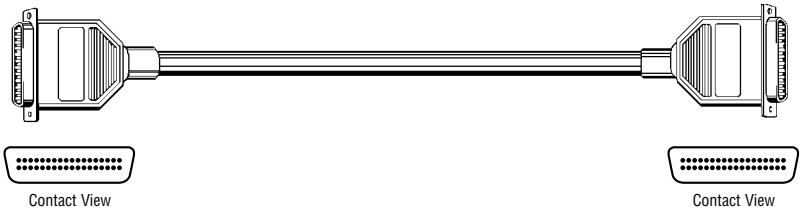
37-Position Shielded D-Sub • Straight Handle Both Ends • For RS-449 applications where assembly is exposed to high noise environment

Foil plus Braid Shield (Super Shield) • **Semi-rigid PVC Insulation • Chrome PVC Jacket**

49950A	36	5	1.5	Male/Male	NEC: CM	24 (7x32) Tinned Copper [.61] 18 Pairs	Overall Foil + 65% Tinned Copper Braid	None	.010	.25	.045	1.14	.480	12.19
49951A	36	10	3.0	Male/Male										
49952A	36	25	7.6	Male/Male										
49955A	36	5	1.5	Male/Female										
49956A	36	10	3.0	Male/Female										
49957A	36	25	7.6	Male/Female										
49958A	36	50	15.2	Male/Female										

Molded handles are 100% shielded to assist in FCC compliance and guard against EMI/RFI. All connectors are tin-plated and male connectors have detents to allow for a positive shield to ground connection. Wiring is point-to-point with shield to connector shell and pin #1. Jack screw retention on both connectors.

300V 80°C, UL AWM Style 2464



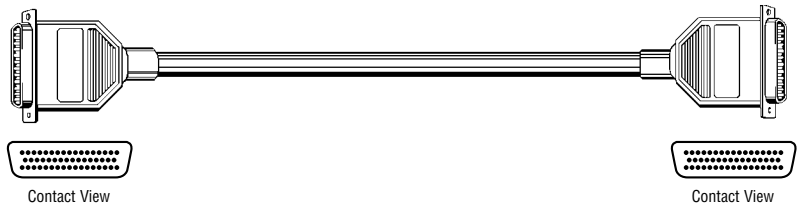
50-Position Shielded D-Sub • Straight Handle Both Ends • For high-density applications where assembly is exposed to high noise environment

Foil Shield (General Purpose) • **Polyethylene Insulation • Chrome PVC Jacket**

49760A	50	5	1.5	Male/Male	NEC: CM	26 (7x34) Tinned Copper [.48] 25 Pairs	Overall Foil + 91% Tinned Copper Braid	22 (7x30)	.010	.25	.049	1.24	.535	13.59
49761A	50	10	3.0	Male/Male										
49762A	50	25	7.6	Male/Male										
49765A	50	5	1.5	Male/Female										
49766A	50	10	3.0	Male/Female										
49767A	50	25	7.6	Male/Female										

Molded handles are 100% shielded to guard against EMI/RFI and assist in FCC compliance. All connectors are tin-plated and male connectors have detents to allow for a positive shield to ground connection. Wiring is point-to-point with shield to connector shell. Jack screw retention on both connectors.

30V 80°C, UL AWM Style 2919



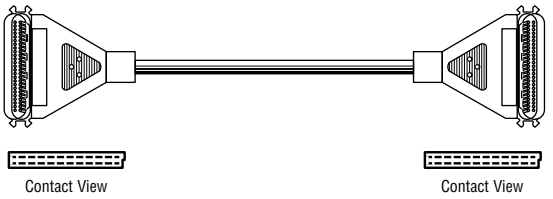
SCSI Cable Assembly

SCSI-1 and SCSI-2
Shielded Straight and Right-Angled Handles

Part No.	No. of Cond.	Standard Lengths		Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m				Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm
SCSI-1 Assemblies (26 AWG) • Shielded Straight Handles • For SCSI (Small Computer Systems Interface) applications														
Foil plus Braid Shield (Super Shield) • **Polyethylene Insulation • Chrome PVC Jacket**														
49801A new	50	6.6	2	Male/Male	NEC: CM	26 (7x34) Tinned Copper [.48] 25 Pairs	Overall Foil + 90% Braid	22 (7x30)	.010	.25	.049	1.24	.535	13.59
49802A	50	16.4	5	Male/Male										
49803A new	50	32.8	10	Male/Male										

Molded handles are 100% shielded to guard against EMI/RFI and assist in FCC compliance. These assemblies have tin-plated connectors and can be used in single-ended or differential configurations. Wiring is per SCSI standard.

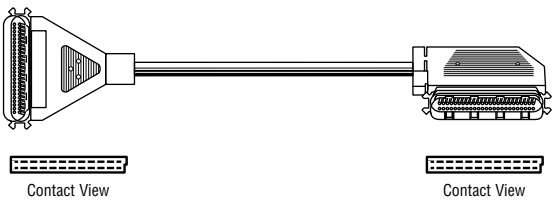
30V 80°C, UL AWM Style 2919



SCSI-1 Assemblies (26 AWG) • One Shielded Straight Handle, One Shielded Right-Angle Handle • For SCSI applications														
Foil plus Braid Shield (Super Shield) • **Polyethylene Insulation • Chrome PVC Jacket**														
49813A new	50	32.8	10	Male/Male	NEC: CM	26 (7x34) Tinned Copper [.48] 25 Pairs	Overall Foil + 90% Braid	22 (7x30)	.010	.25	.049	1.24	.535	13.59

Molded handles are 100% shielded to guard against EMI/RFI and assist in FCC compliance. These assemblies have tin-plated connectors and can be used in single-ended or differential configurations. Wiring is per SCSI standard.

30V 80°C, UL AWM Style 2919



SCSI-2 Assemblies (28 AWG) • Shielded Straight Handles • For SCSI (Small Computer System Interface) applications														
Foil plus Braid Shield (Super Shield) • **Polyethylene Insulation • Matte Black PVC Jacket**														
50000A	50	3.3	1	Male/Male		28 (7x36) Tinned Copper [.38] 25 Pairs	Overall Foil + 85% Braid	24 (7x32)	.010	.25	.032	.81	.425	10.80
50001A	50	4.9	1.5	Male/Male										

Molded handles are 100% shielded to guard against EMI/RFI and assist in FCC compliance. These assemblies have tin-plated connectors and can be used in single-ended or differential configurations. Wiring is per SCSI standard.

30V 80°C, UL AWM Style 2919

GPIB (General Purpose Interface Bus) Assembly

Unshielded and Shielded Connectors

Part No.	No. of Cond.	Standard Lengths		Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding)	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m				Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm
Unshielded GPIB • Molded PVC Connector • For use with electronic equipment that is IEEE-488 compatible														
Foil plus Braid Shield (Super Shield) • **Semi-rigid PVC Insulation** • **Gull Gray PVC Jacket**														
49642	23	3.3	1	Male/Female Each End	NEC: CM	6 Pairs: 26 (7x34) Tinned Copper 10 Singles: 26 (7x34) Tinned Copper 1 Single: 24 (7x32) Tinned Copper	Overall Foil + 90% Braid	26 (7x34)	.010	.25	.035	.89	.350	8.89
49643	23	6.6	2	Male/Female Each End										
49657	23	9.8	3	Male/Female Each End										
49644	23	13.1	4	Male/Female Each End										
49645	23	26.2	8	Male/Female Each End										

Molded connector is male/female design for easy stacking and comes with molded-in metric jack screws.

300V 80°C, UL AWM Style 2464

Shielded GPIB • Die Cast Connector • For use with electronic equipment that is IEEE-488 compatible														
Foil plus Braid Shield (Super Shield) • **Semi-rigid PVC Insulation** • **Gull Gray PVC Jacket**														
49635	23	3.3	1	Male/Female Each End	NEC: CM	6 Pairs: 26 (7x34) Tinned Copper 10 Singles: 26 (7x34) Tinned Copper 1 Single: 24 (7x32) Tinned Copper	Overall Foil + 90% Braid	26 (7x34)	.010	.25	.035	.89	.350	8.89
49636	23	6.6	2	Male/Female Each End										
49637	23	9.8	3	Male/Female Each End										
49638	23	13.1	4	Male/Female Each End										
49639	23	26.2	8	Male/Female Each End										

Die cast connector is male/female design for easy stacking and comes with molded-in metric jack screws.

300V 80°C, UL AWM Style 2464

Shielded GPIB • Molded PVC Connector • For use with electronic equipment that is IEEE-488 compatible														
Foil plus Braid Shield (Super Shield) • **Semi-rigid PVC Insulation** • **Gull Gray PVC Jacket**														
49733	23	1.6	.5	Male/Female Each End	NEC: CM	6 Pairs: 26 (7x34) Tinned Copper 10 Singles: 26 (7x34) Tinned Copper 1 Single: 24 (7x32) Tinned Copper	Overall Foil + 90% Braid	26 (7x34)	.010	.25	.035	.89	.350	8.89
49734	23	3.3	1	Male/Female Each End										
49735	23	6.6	2	Male/Female Each End										
49736	23	9.8	3	Male/Female Each End										
49737	23	13.1	4	Male/Female Each End										
49738	23	26.2	8	Male/Female Each End										

Molded connector is male/female design for easy stacking and comes with molded-in metric jack screws.

300V 80°C, UL AWM Style 2464

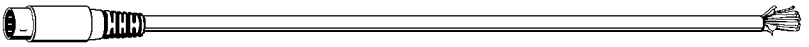
DIN* Cable Assembly

Shielded 3-Position, 5-Position and 8-Position

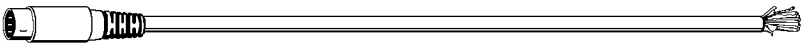
Part No.	No. of Cond.	Standard Lengths		UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m			Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm
3-Position Shielded DIN • Straight Handle One End • Used where a shielded conductor is desired and as a low cost alternative to a D-Sub													
Foil plus Braid Shield (Super Shield) • **PVC Insulation** • **Black PVC Jacket**													
49151A new	3	10	3.0	NEC: CM	26 (19x38) Tinned Copper [.51]	Overall Foil + 90% Tinned Copper Braid	26 (19x38)	.014	.36	.037	.94	.200	5.08
Foil and braid shielded for high-noise environments. Outer jacket stripped 1 inch. 300V 80°C, UL AWM Style 2464. Packaged: S-25													
5-Position Shielded DIN • Straight Handle One End • Used where a shielded conductor is desired and as a low cost alternative to a D-Sub													
Foil Shield (General Purpose) • **PVC Insulation** • **Black PVC Jacket**													
49152A	5	10	3.0	NEC: CM	26 (19x38) Tinned Copper [.51]	Overall Foil	26 (19x38)	.014	.36	.053	1.35	.251	6.38
49164A new	5	25	7.6										
Foil shielded for moderate-noise environments. Outer jacket stripped 1 inch. 300V 80°C, UL AWM Style 2464. Packaged: B-25, S-25													
Foil plus Braid Shield (Super Shield) • **PVC Insulation** • **Black PVC Jacket**													
49153A new	5	10	3.0	NEC: CM	26 (19x38) Tinned Copper [.51]	Overall Foil + 90% Tinned Copper Braid	26 (19x38)	.014	.36	.037	.94	.231	5.87
Foil and braid shielded for high-noise environments. Outer jacket stripped 1 inch. 300V 80°C, UL AWM Style 2464. Packaged: B-25, S-25													
8-Position Shielded DIN • Straight Handle One End • Used where a shielded conductor is desired and as a low cost alternative to a D-Sub													
Foil Shield (General Purpose) • **PVC Insulation** • **Black PVC Jacket**													
49154A	8	10	3.0	NEC: CM	26 (19x38) Tinned Copper [.51]	Overall Foil	26 (19x38)	.014	.36	.052	1.32	.266	6.76
Foil shielded for moderate-noise environments. Outer jacket stripped 1 inch. 300V 80°C, UL AWM Style 2464. Packaged: B-25, S-25													

Contact View

Contact View



Contact View



Contact View

*DIN Standard (Deutsche Industries Norm)

DIN* Cable Assembly

Shielded 5-Position and 8-Position Retractile

Part No.	No. of Cond.	Length of Body				Length of Tail				Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Retracted		Extended		Connector End		Other End										
		Inch	mm	Inch	mm	Inch	mm	Inch	mm		Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm
5-Position Shielded DIN • Straight Handle • Standard friction-fit connectors mate easily with many microcomputer keyboard ports																		
Foil plus Serve Shield (Super Shield) • **Retractile • PVC Insulation • Black PVC Jacket**																		
49103A	5	14.5	368.3	72.5	1841.5	12	304.8	18	457.20	26 (19x38) Tinned Copper [.51]	Foil + 95% Serve	26 (19x38)	.014	.36	.058	1.47	.260	6.60

Shielded connectors maintain shield integrity and assist in FCC compliance.
Utilizes 26 AWG conductor for low voltage drop. Ideal for higher noise situations.

300V 80°C, UL AWM Style 2464. Packaged: S-25

Contact View

NEC: CM

8-Position Shielded DIN • Straight Handle • Standard friction-fit connectors mate easily with many microcomputer keyboard ports																		
Foil Shield (General Purpose) • **Retractile • PVC Insulation • Black PVC Jacket**																		
49104A	8	14.5	368.3	72.5	1841.5	12	304.8	18	457.20	26 (19x38) Tinned Copper [.51]	Foil	26 (19x38)	.014	.36	.052	1.32	.266	6.76

Shielded connectors maintain shield integrity and assist in FCC compliance.
Utilizes 26 AWG conductor for low voltage drop. Ideal for higher noise situations.

300V 80°C, UL AWM Style 2464. Packaged: S-25

Contact View

NEC: CM

DIN Pin Configurations • Face Views

3-Position

4-Position**

5-Position @ 180°

5-Position** @ 240°

6-Position**

7-Position**

8-Position

**Available by special order

*DIN Standard (Deutsche Industries Norm)

Modular Keyboard Assembly

4-Position, 6-Position and 8-Position with Retractile Cables
Unshielded or Shielded Modular Plugs

Part No.	No. of Cond.	Length of Cord: Body Retracted Inch	Length of Cord: Body Retracted mm	Length of Cord: Body Extended Inch	Length of Cord: Body Extended mm	Length of Cord: Tail Length Inch	Length of Cord: Tail Length mm	Conductors AWG (stranding) [Dia. in mm]	Shield Type	Shield Drain Wire	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm
4-Position Modular Plugs • Used to rapidly interconnect electronic computers and business machines																
Unshielded (General Purpose) • **Retractile • Polypropylene Insulation • Black or CRT White Polyurethane Jacket**																
49440	4	15	381	67.5	1714.50	1	25.40	26 (19x38) Tinned Copper [.51]	None	None	.006	.15	.030	.76	.093 x .198	2.36 x 5.03
Positive locking latch prevents connector from vibrating loose. Polarized connector prevents improper insertion. No tools required for installation. 30V 60°C, UL AWM Style 20197. Packaged: B-25, S-25																
6-Position Modular Plugs • Used to rapidly interconnect electronic computers and business machines																
Unshielded (General Purpose) • **Retractile • Polypropylene Insulation • Black Polyurethane Jacket**																
49441	6	15	381	67.5	1714.50	1	25.40	26 (19x38) Tinned Copper [.51]	None	None	.006	.15	.030	.76	.093 x .258	2.36 x 6.55
Positive locking latch prevents connector from vibrating loose. Polarized connector prevents improper insertion. No tools required for installation. 30V 60°C, UL AWM Style 20197. Packaged: B-25, S-25																
Foil Shield* • **Retractile • Polypropylene Insulation • Black or CRT White Polyurethane Jacket**																
49403	5	15	381	67.5	1714.50	1	25.40	26 (19x38) Tinned Copper [.51]	Overall Foil	26 (19x38)	.006	.15	.030	.76	.097 x .255	2.46 x 6.48
Positive locking latch prevents connector from vibrating loose. Polarized connector prevents improper insertion. No tools required for installation. A longitudinal aluminum/polyester shield protects against ESD and EMI. 30V 60°C, UL AWM Style 20197. Packaged: B-25, S-25																
8-Position Modular Plugs • Used to rapidly interconnect electronic computers and business machines																
Unshielded (General Purpose) • **Retractile • Polypropylene Insulation • Black or CRT White Polyurethane Jacket**																
49442	8	15	381	67.5	1714.50	1	25.40	26 (19x38) Tinned Copper [.51]	None	None	.006	.15	.030	.76	.100 x .314	2.54 x 7.98
Positive locking latch prevents connector from vibrating loose. Polarized connector prevents improper insertion. No tools required for installation. 30V 60°C, UL AWM Style 20197. Packaged: B-25, S-25																
Foil Shield* • **Retractile • Polyurethane Insulation • Black Polypropylene Jacket**																
49402	7	15	381	67.5	1714.50	1	25.40	26 (19x38) Tinned Copper [.51]	Foil	26 (19x38)	.006	.15	.030	.76	.100 x .314	2.54 x 7.98
Positive locking latch prevents connector from vibrating loose. Polarized connector prevents improper insertion. No tools required for installation. A longitudinal aluminum/polyester shield protects against ESD and EMI. 30V 60°C, UL AWM Style 20197. Packaged: S-25																

Contact View

Contact View

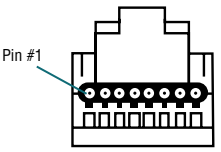
Modular Plug Wiring Schemes

Cross wiring is standard on non-shielded constructions

1.....4
2.....3
3.....2
4.....1

Straight wiring is standard on shielded constructions

1.....1
2.....2
3.....3
4.....4



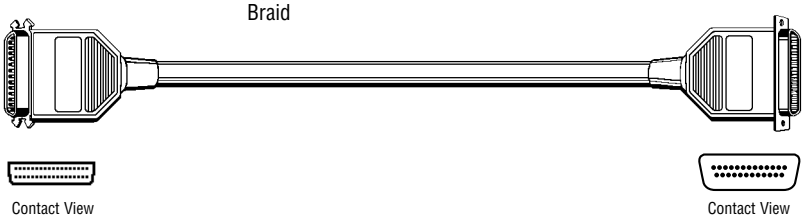
*In shielded versions, the drain wire is always the highest numbered position in the connector.

Parallel Interface and Coax Cable Assembly

Part No.	No. of Cond.	Standard Lengths		Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m				Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm
Parallel Interface Assemblies • Centronics/D-Sub Connectors • For computer-printer parallel interface														
Shielded • Foil plus Braid Shield (Super Shield) **• Semi-rigid PVC Insulation • Chrome PVC Jacket**														
49502A new	25	10	3.0	Male/Male	NEC: CM	24 (7x32) Tinned Copper [.61]	Overall Foil + 65% Tinned Copper Braid	None	.010	.25	.040	1.02	.370	9.40

Universal 36-position ribbon connector (Centronics compatible) on one end and a 25-position D-Subminiature connector (IBM PC and PC-XT compatible) on the other. Molded handles are 100% shielded to guard against EMI/RFI and assist in FCC compliance.

300V 80°C, UL AWM Style 2464



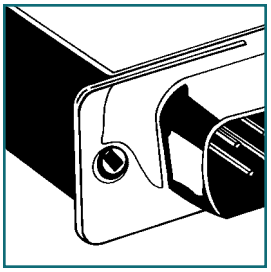
Part No.	Gender	Standard Lengths		Nom. Core OD		Nominal OD		AWG (stranding) [Dia. in In.] Nom. DCR	Shield Nom. DCR	Nom. Imped. (ohms)	Nom. Veloc. of Prop.	Nominal Capacitance		Nominal Attenuation		
		Ft.	m	Inch	mm	Inch	mm					pF/ft	pF/m	MHz	dB/ 100 Ft.	dB/ 100 m
Coax Cable Assemblies • BNC Connectors • For video display instrumentation, testing and control applications																
Shielded • Braid Shield (General Purpose) **• Shielded RG-58C/U Coax • Polyethylene Insulation • Black PVC Jacket**																
49200	Male/Male	1	.31	.116	2.95	.195	4.95	20 (19x.007) [.89] Tinned Copper 10.8Ω/M′ 35.4Ω/km	95% Tinned Copper Braid 4.1Ω/M′ 13.4Ω/km	50	66%	30.8	101.0	50	3.3	10.8
49202	Male/Male	3	.91	.116	2.95	.195	4.95							100	4.9	16.1
49203	Male/Male	4	1.20	.116	2.95	.195	4.95							200	7.3	23.9
														400	11.5	37.7
														700	17.0	55.8
														900	20.0	65.6
														1000	21.5	70.5

Terminations reinforced with molded PVC for strain and flex relief.

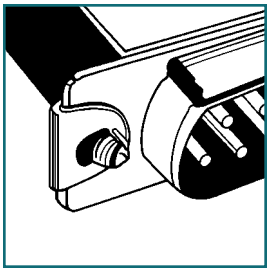
85°C. Packaged: S-25

Technical Information

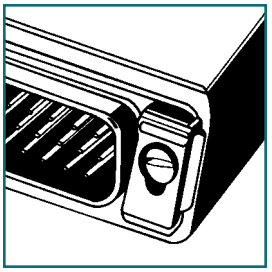
D-Subminiature Retention Systems



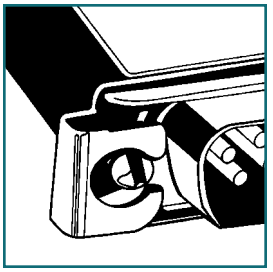
Friction



Screw

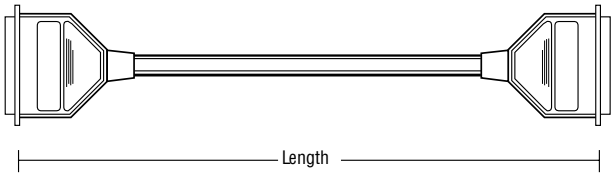


Vertical Slide Lock

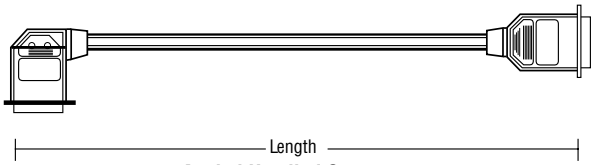


Horizontal Slide Lock

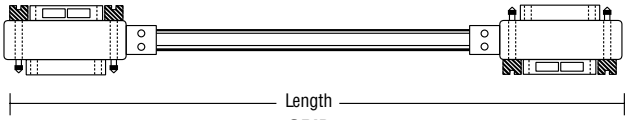
How to Measure a Molded Cable Assembly



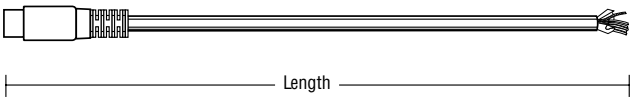
Straight Handled Connector



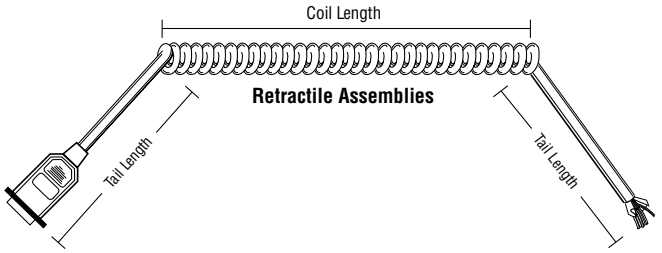
Angled Handled Connector



GPIB



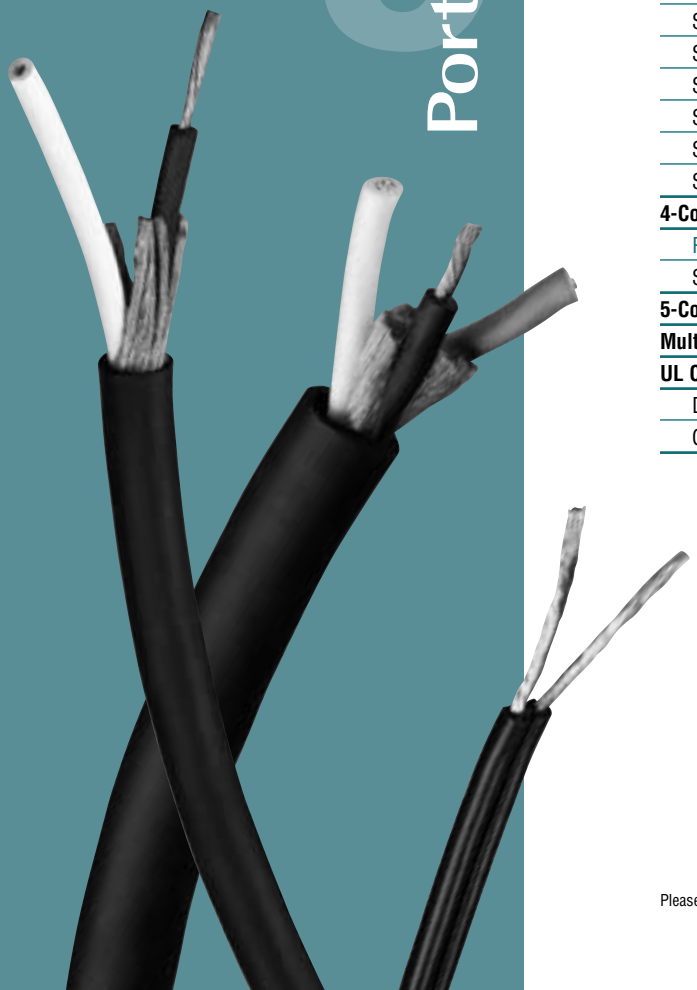
DIN



Retractile Assemblies

Belden

9 Portable Cordage



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Please refer to "Terms of Use of Master Catalog" on page 16.30.

Introduction

Belden® portable cordage products are available in a wide assortment of styles, lengths, and thicknesses. Products offered include 2-, 3-, 4- and 5-conductor as well as multi-conductor constructions. Jacket options include PVC, Rubber, Oil-Resistant Rubber and Belflex®. Belflex is a premium PVC jacket compound (Class 43) that is superior to standard PVC for flexibility and durability.

Belden portable cordage is listed by Underwriters Laboratories Inc. (UL). This approval signifies that Underwriters Laboratories Inc. has approved all elements of the cordage as meeting their applicable construction and performance standards. Where indicated, "Certified to CSA Standards" means that Belden portable cordage has been certified by CSA as meeting their Label Service or Re-examination Service requirements. Certification under the applicable CSA Standards has been made mandatory by most provincial or municipal authorities in Canada.

Most of our portable cordage constructions are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find portable cordage in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Color Code Comparison by Function

Color Coding		Function
International	North American Standards	
Light Blue	White	N-Neutral
Brown	Black	L-Live
Green/Yellow	Green or Green/Yellow	E-Earth or Ground

Manufacturer's Identification

Identification of the flexible cord is provided by our UL and CSA file numbers or printed name on the cord jacket.

UL/CSA File Numbers

UL: E-3462

CSA: LL-7874

Portable Cordage Packaging

Belden's unique UnReel® cable dispenser is available for many of the portable cordage products listed in this section. The letter "U" before the specified put-up length denotes UnReel packaging.

2-Conductor

UL/CSA Types: SPT-1, SPT-2, SP-1 and HPN

Description	Part No.	Standard Lengths		Standard Unit Weight		Jacket Color	AWG (stranding)	Nom. Insulation Thickness		Nom. Jacket Thickness		Nominal OD	
		Ft.	m	Lbs.	kg			Inch	mm	Inch	mm	Inch	mm
SPT-1 PVC Parallel Lamp Cord • UL/CSA Listed													
300V, 60°C • One conductor polarity ribbed													
	19122	250	76.2	6.3	2.8	Brown, White, Black, Silver-Gray	18 (42x34) bare	.032	.81	—	—	.110 x .207	2.79 x 5.26
		1000	304.8	21.0	9.5								
	8888*	250	76.2	6.3	2.8	Brown, Ivory	18 (42x34) bare	.032	.81	—	—	.110 x .207	2.79 x 5.26
		U-1000	U-304.8	21.0	9.5	Brown, Gray							
SPT-2 PVC Parallel Lamp Cord • UL/CSA Listed													
300V, 60°C • One conductor polarity ribbed													
	19123	250	76.2	7.8	3.5	Brown, White, Black	18 (42x34) bare	.049	1.24	—	—	.144 x .277	3.66 x 7.04
	19126	250	76.2	9.8	4.4	Brown, Black	16 (65x34) bare	.048	1.22	—	—	.155 x .299	3.94 x 7.59
SP-1 Rubber Parallel Lamp Cord • UL Listed													
300V, 60°C • One conductor polarity ribbed													
	19115*	250	76.2	7.5	3.4	Brown, Black	18 (41x34) bare	.035	.89	—	—	.123 x .227	3.12 x 5.77
HPN CPE Heater Cord • UL/CSA Listed													
300V, 90°C													
	19405	250	76.2	7.8	3.5	Black	18 (41x34) bare	.047	1.18	—	—	.140 x .276	3.56 x 7.01
		1000	304.8	30.0	13.6								
	19404	250	76.2	9.5	4.3	Black	16 (105x36) bare	.047	1.18	—	—	.152 x .300	3.86 x 7.62
		1000	304.8	38.0	17.3								

*Not CSA recognized.

2-Conductor

UL/CSA Types: SJ, SJO, SJTOW, SO

Description	Part No.	Standard Lengths		Standard Unit Weight		Jacket Color	AWG (stranding)	Nom. Insulation Thickness		Nom. Jacket Thickness		Nominal OD	
		Ft.	m	Lbs.	kg			Inch	mm	Inch	mm	Inch	mm
SJ Rubber Jacket • Smooth Jacket • UL/CSA Listed													
300V, 60°C • Paper Tape Separator • Color Code: Black, White													
	8478	250	76.2	14.3	6.5	Black	18 (42x34) bare	.032	.81	.035	.89	.290	7.37
		1000	304.8	48.0	21.8								
	8472	250	76.2	16.8	7.6	Black	16 (65x34) bare	.033	.84	.035	.89	.315	8.00
SJO Oil-Resistant Rubber Jacket • Smooth Jacket • UL/CSA Listed													
300V, 90°C • Paper Tape Separator • Color Code: Black, White													
	19227	250	76.2	14.8	6.7	Black	18 (16x30) bare	.031	.79	.035	.89	.290	7.37
	19228	250	76.2	17.3	7.8	Black	16 (26x30) bare	.031	.79	.035	.89	.315	8.00
SJTOW Belflex® Matte Black Premium PVC • Smooth Jacket • UL/CSA Listed													
300V, 105°C • Paper Tape Separator • International Color Code: Light Blue, Brown													
VW-1	**19506***	250	76.2	11.0	5.0	Black	18 (42x34) bare	.032	.81	.035	.89	.290	7.34
	19507*	250	76.2	13.8	6.3	Black	16 (65x34) bare	.033	.84	.037	.94	.319	8.10
	19508*	250	76.2	17.3	7.8	Black	14 (41x30) bare	.033	.84	.032	.81	.340	8.64
SO Oil-Resistant Rubber Jacket • Smooth Jacket • UL/CSA Listed													
600V, 90°C • Cotton Serve Separator • Color Code: Black, White													
	19204	250	76.2	18.5	8.4	Black	18 (42x34) bare	.032	.81	.065	1.65	.360	9.14
	19203	250	76.2	21.0	9.5	Black	16 (65x34) bare	.033	.84	.065	1.65	.385	9.78
	19202	250	76.2	39.5	18.0	Black	14 (41x30) bare	.048	1.22	.085	2.16	.523	13.28
600V, 90°C • Paper Tape Separator • Color Code: Black, White													
	19201	250	76.2	52.8	24.0	Black	12 (65x30) bare	.051	1.30	.100	2.54	.610	15.49

*These constructions are approved as water-resistant, oil-resistant and for outdoor use.

2-Conductor

UL/CSA Types: STOW, SV, SVT

Description	Part No.	Standard Lengths		Standard Unit Weight		Jacket Color	AWG (stranding)	Nom. Insulation Thickness		Nom. Jacket Thickness		Nominal OD	
		Ft.	m	Lbs.	kg			Inch	mm	Inch	mm	Inch	mm
STOW Belflex® Matte Black Premium PVC • Smooth Jacket • UL/CSA Listed													
600V, 105°C • Paper Tape Separator • International Color Code: Light Blue, Brown													
VW-1	**19500***	250	76.2	16.0	7.3	Black	18 (42x34) bare	.032	.81	.070	1.78	.360	9.14
	19501*	250	76.2	21.8	9.9	Black	16 (65x34) bare	.033	.84	.070	1.78	.386	9.80
	19502*	250	76.2	34.0	15.5	Black	14 (41x30) bare	.049	1.24	.089	2.26	.524	13.31
SV Rubber Jacket • Serrated Jacket • UL/CSA Listed													
300V, 60°C • Cotton Serve Separator • Color Code: Black, White													
	8452	250	76.2	9.5	4.3	Black	18 (42x34) bare	.017	.43	.037	.94	.245	6.22
		U-500	U-152.4	18.5	8.4								
		500	152.4	19.0	8.6								
		U-1000	U-304.8	37.0	16.8								
		1000	304.8	38.0	17.3								
SV Rubber Jacket • Smooth Jacket • UL/CSA Listed													
300V, 60°C • Cotton Serve Separator • Color Code: Black, White													
	19120	250	76.2	9.5	4.3	Black	18 (42x34) bare	.017	.43	.037	.94	.245	6.22
SVT PVC Jacket • Serrated Jacket • UL/CSA Listed													
300V, 60°C • Paper Tape Separator • Color Code: Black, White													
	19140	250	76.2	8.8	4.0	Black, Gray	18 (42x34) bare	.018	.46	.036	.91	.243	6.17

*These constructions are approved as water-resistant, oil-resistant and for outdoor use.

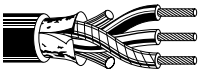
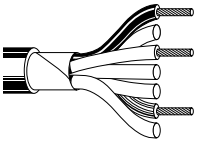
3-Conductor

UL/CSA Types: S, SO, SJ

Description	Part No.	Standard Lengths		Standard Unit Weight		Jacket Color	AWG (stranding)	Nom. Insulation Thickness		Nom. Jacket Thickness		Nominal OD	
		Ft.	m	Lbs.	kg			Inch	mm	Inch	mm	Inch	mm
S Rubber Jacket • Smooth Jacket • UL/CSA Listed													
600V, 60°C • Cotton Serve Separator • Color Code: Black, White, Green													
	19109	250	76.2	20.8	9.4	Black	18 (42x34) bare	.032	.81	.065	1.65	.380	9.65
	19108	250	76.2	27.5	12.5	Black	16 (65x34) bare	.033	.84	.065	1.65	.405	10.29
600V, 60°C • Paper Tape Separator • Color Code: Black, White, Green													
	19107	250	76.2	44.0	20.0	Black	14 (41x30) bare	.048	1.22	.085	2.16	.535	13.59
	19106	250	76.2	61.8	28.1	Black	12 (65x30) bare	.051	1.30	.099	2.51	.640	16.26
	19105	250	76.2	78.0	35.5	Black	10 (105x30) bare	.050	1.27	.099	2.51	.681	17.30
SO Oil-Resistant Rubber Jacket • Smooth Jacket • UL/CSA Listed													
600V, 90°C • Cotton Serve Separator • Color Code: Black, White, Green													
	19209	250	76.2	21.3	9.7	Black	18 (42x34) bare	.032	.81	.065	1.65	.380	9.65
	19208	250	76.2	26.5	12.0	Black	16 (65x34) bare	.033	.84	.063	1.60	.400	10.16
600V, 90°C • Paper Tape Separator • Color Code: Black, White, Green													
	19207	250	76.2	45.3	20.6	Black	14 (41x30) bare	.048	1.22	.086	2.18	.538	13.67
	19206	250	76.2	62.8	28.5	Black	12 (65x30) bare	.051	1.30	.100	2.54	.632	16.05
	19205	250	76.2	79.3	36.0	Black	10 (105x30) bare	.050	1.27	.099	2.51	.681	17.30
SJ Rubber Jacket • Smooth Jacket • UL/CSA Listed													
300V, 60°C • Paper Tape Separator • Color Code: Black, White, Green													
	19129	250	76.2	17.8	8.1	Black	18 (16x30) bare	.031	.79	.039	.99	.315	8.00
	19125	250	76.2	17.3	7.8	Black	18 (42x34) bare	.032	.81	.038	.97	.315	8.00
	19130	250	76.2	19.3	8.8	Black	16 (26x30) bare	.031	.79	.038	.97	.340	8.64
	19124	250	76.2	18.5	8.4	Black	16 (65x34) bare	.033	.84	.038	.97	.340	8.64
	8479	250	76.2	7.8	3.5	Black	14 (41x30) bare	.033	.84	.039	.99	.380	9.65

3-Conductor

UL/CSA Types: SJO, SJT

Description	Part No.	Standard Lengths		Standard Unit Weight		Jacket Color	AWG (stranding)	Nom. Insulation Thickness		Nom. Jacket Thickness		Nominal OD	
		Ft.	m	Lbs.	kg			Inch	mm	Inch	mm	Inch	mm
SJO Oil-Resistant Rubber Jacket • Smooth Jacket • UL/CSA Listed													
300V, 90°C • Paper Tape Separator • Color Code: Black, White, Green													
	19229	250	76.2	18.0	8.2	Black	18 (16x30) bare	.031	.79	.039	.99	.315	8.00
	19230	250	76.2	19.3	8.8	Black	16 (26x30) bare	.031	.79	.038	.97	.340	8.64
SJT PVC Jacket • Serrated Jacket • UL/CSA Listed													
300V, 60°C • Paper Tape Separator • Color Code: Black, White, Green (18 AWG); Black, White, Green/Yellow (16 AWG)													
	19348	250	76.2	17.5	8.0	Gray, Black	18 (42x34) bare	.032	.81	.046	1.17	.328	8.33
	19349	250	76.2	18.5	8.4	Gray, Black	16 (65x34) bare	.033	.83	.038	.97	.340	8.64
SJT PVC Jacket • Smooth Jacket • UL/CSA Listed													
300V, 60°C • Paper Tape Separator • International Color Code: Light Blue, Brown, Green/Yellow													
	**19352**	250	76.2	17.5	8.0	Black	18 (42x34) bare	.032	.81	.046	1.17	.328	8.33
	19353	250	76.2	19.8	9.0	Black	16 (65x34) bare	.033	.84	.036	.91	.353	8.97
	19354	250	76.2	25.0	11.4	Black	14 (41x30) bare	.033	.84	.038	.97	.380	9.65
SJT PVC Jacket • Shielded • Smooth Jacket • 20 AWG Drain Wire (7x28) • UL/CSA Listed													
300V, 60°C Shielded • Beldfoil® 100% Shield Coverage • International Color Code: Light Blue, Brown, Green/Yellow													
	19362	250	76.2	17.5	8.0	Black	18 (42x34) bare	.032	.81	.050	1.27	.340	8.64
		500	152.4	35.0	15.9								
	19363	250	76.2	21.3	9.7	Black	16 (65x34) bare	.033	.84	.047	1.19	.365	9.27
	19364	250	76.2	26.3	11.9	Black	14 (41x30) bare	.033	.84	.042	1.07	.402	10.21
SJT PVC Jacket • Low Leakage Power Cord • Smooth Jacket • UL Listed													
300V, 75°C • Paper Tape Separator • Color Code: Black, White, Green													
	**9998***	500	152.4	53.0	24.1	Gray	16 (65x34) bare	.033	.84	.045	1.14	.475	12.07
		1000	304.8	102.0	46.4	Blue							

*Not CSA recognized.

3-Conductor

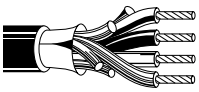
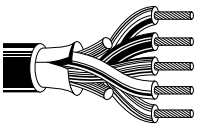
UL/CSA Types: SJTOW, STOW, SV, SVT

Description	Part No.	Standard Lengths		Standard Unit Weight		Jacket Color	AWG (stranding)	Nom. Insulation Thickness		Nom. Jacket Thickness		Nominal OD	
		Ft.	m	Lbs.	kg			Inch	mm	Inch	mm	Inch	mm
SJTOW Belflex® Matte Black Premium PVC • Smooth Jacket • UL/CSA Listed													
300V, 105°C • Paper Tape Separator • International Color Code: Light Blue, Brown, Green/Yellow													
VW-1	**19509***	250	76.2	14.0	6.4	Black	18 (42x34) bare	.032	.81	.038	.97	.315	8.00
	19510*	250	76.2	18.0	8.2	Black	16 (65x34) bare	.033	.84	.038	.97	.340	8.64
	19511*	250	76.2	23.8	10.8	Black	14 (41x30) bare	.032	.81	.040	1.02	.380	9.65
STOW Belflex Matte Black Premium PVC • Smooth Jacket • UL/CSA Listed													
600V, 105°C • Paper Tape Separator • International Color Code: Light Blue, Brown, Green/Yellow													
VW-1	**19503***	250	76.2	19.0	8.6	Black	18 (42x34) bare	.032	.81	.070	1.78	.380	9.65
	19504*	250	76.2	23.0	10.5	Black	16 (65x34) bare	.033	.84	.070	1.78	.405	10.29
	19505*	250	76.2	42.5	19.3	Black	14 (41x30) bare	.049	1.24	.089	2.26	.558	14.17
SV Rubber Jacket • Smooth Jacket • UL/CSA Listed													
300V, 60°C • Cotton Serve Separator • Color Code: Black, White, Green													
	8453	100	30.5	5.6	2.5	Black	18 (41x34) tinned	.018	.46	.036	.91	.256	6.50
		500	152.4	23.0	10.5								
SVT PVC Jacket • Serrated Jacket • UL/CSA Listed													
300V, 60°C • Paper Tape Separator • Color Code: Black, White, Green													
	19350	250	76.2	10.8	4.9	Gray	18 (42x34) bare	.018	.46	.038	.97	.253	6.43
SVT PVC Jacket • Smooth Jacket • UL/CSA Listed													
300V, 60°C • Paper Tape Separator • International Color Code: Light Blue, Brown, Green/Yellow													
	19402	250	76.2	12.3	5.6	Black	18 (42x34) bare	.018	.46	.034	.86	.253	6.43

*These constructions are approved as water-resistant, oil-resistant and for outdoor use.

3-, 4- and 5-Conductor

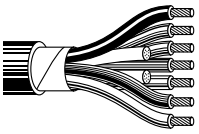
UL/CSA Type: SVT, SO
UL AWM Styles: 4097 and 4256

Description	Part No.	Standard Lengths		Standard Unit Weight		Jacket Color	AWG (stranding)	Nom. Insulation Thickness		Nom. Jacket Thickness		Nominal OD	
		Ft.	m	Lbs.	kg			Inch	mm	Inch	mm	Inch	mm
3-Conductor SVT PVC Jacket • Shielded • Smooth Jacket • 22 AWG Drain Wire (7x30) • UL/CSA Listed													
300V, 60°C Shielded • Beldfoil® 100% Shield Coverage • International Color Code: Light Blue, Brown, Green/Yellow													
	19401	250	76.2	12.3	5.6	Black	18 (42x34) bare	.018	.46	.043	1.09	.270	6.86
		1000	304.8	49.0	22.3								
300V, 60°C Shielded • Duofoil® 100% Shield Coverage • 88% Braid Coverage • International Color Code: Light Blue, Brown, Green/Yellow													
	19403	250	76.2	18.0	8.2	Black	18 (42x34) bare	.018	.46	.038	.97	.307	7.80
4-Conductor Rubber Jacket • Smooth Jacket • Style 4097													
300V, 60°C • Paper Tape Separator • Color Code: Black, White, Brown, Red													
	8454*	100	30.5	6.5	3.0	Black	18 (41x34) tinned	.018	.46	.036	.91	.265	6.73
		U-500	U-152.4	27.0	12.3								
		500	152.4	27.0	12.3								
		U-1000	U-304.8	53.0	24.1								
		1000	304.8	54.0	24.5								
4-Conductor SO Oil-Resistant Rubber Jacket • Smooth Jacket • UL/CSA Listed													
600V, 90°C • Paper Tape Separator • Color Code: Black, White, Green, Red													
	**19217**	50	15.2	13.8	6.3	Black	14 (41x30) bare	.048	1.22	.087	2.21	.603	15.32
		200	60.9	45.2	20.5								
	19216	50	15.2	17.2	7.8	Black	12 (65x30) bare	.051	1.30	.102	2.59	.690	17.53
		200	60.9	61.8	28.1								
5-Conductor Rubber Jacket • Smooth Jacket • Style 4256													
300V, 60°C • Paper Tape Separator • Color Code: Brown, Green, White, Black, Red													
	**8455***	250	76.2	15.8	7.2	Black	3–20 (26x34) tinned	.018	.46	.031	.79	.280	7.11
		U-500	U-152.4	25.0	11.4								
		U-1000	U-304.8	51.0	23.2								
							2–18 (41x34) tinned						

*Not CSA recognized.

Multi-Conductor

Power and Control Cables

Description	Part No.	No. of Cond.	Standard Lengths		Standard Unit Weight		Jacket Color	AWG (stranding)	Nom. Insulation Thickness		Nom. Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg			Inch	mm	Inch	mm	Inch	mm
SO Oil-Resistant Rubber Jacket • Smooth Jacket • UL/CSA Listed														
600V, 60°C • Conductors Cabled with Fillers • Paper Tape Separator • Color Code: See Chart 2 (Tech Info Section)														
	**9420**	5	100	30.5	14.9	6.8	Black	16 (65x34) bare	.033	.84	.084	2.13	.506	12.85
			500	152.4	73.5	33.4								
			1000	304.8	143.0	65.0								
	9422	7	100	30.5	20.3	9.2	Black	16 (65x34) bare	.033	.84	.083	2.11	.581	14.76
			500	152.4	101.0	45.9								
			1000	304.8	201.0	91.4								
	9424	9	100	30.5	28.6	13.0	Black	16 (65x34) bare	.033	.84	.100	2.54	.720	18.29
			500	152.4	150.5	68.4								
			1000	304.8	288.0	130.9								
	9425	12	100	30.5	31.6	14.4	Black	16 (65x34) bare	.033	.84	.100	2.54	.720	18.29
			500	152.4	165.5	75.2								
			1000	304.8	318.0	144.5								
	9427	16	100	30.5	41.2	18.7	Black	16 (65x34) bare	.033	.84	.100	2.54	.787	19.99
			1000	304.8	428.0	194.5								
	9429	20	100	30.5	48.4	22.0	Black	16 (65x34) bare	.033	.84	.100	2.54	.862	21.89
			500	152.4	233.0	105.9								

UL Cordage Type
Designation

UL Cord Type	Description
HPN	Heater Parallel Neoprene
HSJ	Heater Service Junior
HSJO	HSJ with Oil-Resistant Jacket
S	Service
SE	Service Elastomer
SEO	SE with Oil-Resistant Jacket
SEOO	SEO with Oil-Resistant Insulation
SJ	Service Junior
SJE	Service Junior Elastomer
SJEO	SJE with Oil-Resistant Jacket
SJEOO	SJEO with Oil-Resistant Insulation
SJO	SJ with Oil-Resistant Jacket
SJOO	SJO with Oil-Resistant Insulation
SJT	Service Junior Thermoplastic
SJTO	SJT with Oil-Resistant Jacket
SJTOO	SJTO with Oil-Resistant Insulation
SO	Service with Oil-Resistant Jacket
SOO	SO with Oil-Resistant Insulation
SP-1	Service Parallel — 1/32″ Insulation
SP-2	Service Parallel — 3/64″ Insulation
SP-3	Service Parallel — 1/16″ Insulation
SPE-1	Service Parallel Elastomer — 1/32″ Insulation
SPE-2	Service Parallel Elastomer — 3/64″ Insulation
SPE-3	Service Parallel Elastomer — 1/16″ Insulation
SPT-1	Service Parallel Thermoplastic — 1/32″ Insulation
SPT-2	Service Parallel Thermoplastic — 3/64″ Insulation
SPT-3	Service Parallel Thermoplastic — 1/16″ Insulation
ST	Service Thermoplastic
STO	ST with Oil-Resistant Jacket
STOO	STO with Oil-Resistant Insulation
SV	Service Vacuum
SVE	Service Vacuum Elastomer
SVEO	SVE with Oil-Resistant Jacket
SVEOO	SVEO with Oil-Resistant Insulation
SVO	SV with Oil-Resistant Jacket
SVOO	SVO with Oil-Resistant Insulation
SVT	Service Vacuum Thermoplastic
SVTO	SVT with Oil-Resistant Jacket
SVTOO	SVTO with Oil-Resistant Insulation
TPT	Tinsel Parallel Thermoplastic
TST	Tinsel Service Thermoplastic
XT	Christmas Tree Thermoplastic

NOTE: Service parallel types—wall thickness for integral construction.

Elastomer is a thermoplastic material with elastomeric properties similar to rubber.

UL Cordage Type

Construction and Rating

Cord Type*	AWG Size Range	No. of Cond.	Conductor Insulation Material and Min. Average Thickness (inches)	Jacket Material and Min. Average Thickness** (inches)	Temperature Rating (°C)†		Voltage Rating
					Standard	Other	
HPN	18 – 12	2 or 3††	.045 Rubber		90	105	300
HSJ	18 – 12	2, 3, 4	.030 Rubber††	.030 Rubber	90		300
HSJO	18 – 12	2, 3, 4	.030 Rubber▲	.030 Oil-Resistant Rubber	90		300
S	18 – 2	2 or more	.030 Rubber▲	.060 Rubber▲	60	75, 90	600
SE	18 – 2	2 or more	.030 Elastomer	.060 Elastomer	105		600
SEO	18 – 2	2 or more	.030 Elastomer	.060 Elastomer	105		600
SJ	18 – 10	2, 3, 4	.030 Rubber◆	.030 Rubber	60	75, 90	300
SJE	18 – 10	2, 3, 4, 5	.030 Elastomer††	.030 Elastomer	105		300
SJEO	18 – 10	2, 3, 4, 5	.030 Elastomer	.030 Elastomer	105		300
SJO	18 – 10	2, 3, 4	.030 Rubber◆	.030 Oil-Resistant Rubber	60	75, 90, 105	300
SJT	18 – 10	2, 3, 4	.030 Plastic◆	.030 Plastic	60	75, 90, 105	300
SJTO	18 – 10	2, 3, 4	.030 Plastic◆	.030 Plastic	60	75, 90, 105	300
SO	18 – 2	2 or more	.030 Rubber▲	.060 Oil-Resistant Rubber▲	60	75, 90	600
SP-1	18	2 or 3††	.030 Rubber		60		300
SP-2	18 – 16	2 or 3††	.045 Rubber		60		300
SP-3	18 – 12	2 or 3††	.060 Rubber▲		60		300
SPT-1	18	2 or 3††	.030 Plastic		60	75, 90, 105	300
SPT-2	18 – 16	2 or 3††	.045 Plastic		60	75, 90, 105	300
SPT-3	18 – 10	2 or 3††	.060 Plastic▲		60	75, 90, 105	300
ST	18 – 2	2 or more	.030 Plastic▲	.060 Plastic▲	60	75, 90, 105	600
STO	18 – 2	2 or more	.030 Plastic▲	.060 Plastic▲	60	75, 90, 105	600
SV	18	2 or 3††	.015 Rubber	.030 Rubber	60	75, 90	300
SVE	18 – 17	2 or 3††	.015 Elastomer	.030 Elastomer	105		300
SVEO	18 – 17	2 or 3††	.015 Elastomer	.030 Elastomer	105		300
SVO	18	2 or 3††	.015 Rubber	.030 Oil-Resistant Rubber	60	75, 90	300
SVT	18 – 17	2 or 3††	.015 Plastic	.030 Plastic	60	75, 90, 105	300
SVTO	18 – 17	2 or 3††	.015 Plastic	.030 Plastic	60	75, 90, 105	300
TPT	27 (Tinsel)	2	.030 Plastic		60		250
TST	27 (Tinsel)	2	.015 Plastic	.030 Rubber	60		125

* Types SVO, SVTO, SJO, SJTO, SO, STO and HSJO have jackets which are also recognized for oil resistance at maximum temperature of 60ºC.
Types SJ, SJO, SJT, SJTO, S, SO, ST and STO may also be made for outdoor use and will be indicated by adding a "W" suffix to the cord type.
Similarly, types SJ, SJTO, SJO, SJT, S, SO, ST and STO may also be made in water-resistant grades with "Water-Resistant" printed on the jacket.
3-wire SJT may be made in special low-leakage constructions for medical equipment cords.

** Where no jacket is shown, the construction is integral or flat style with insulation also serving as jacket.

† For cordage ratings higher than 60ºC, the temperature limit is printed on the outside of the jacket. This does not apply to heater cordage type HPN, rated 90ºC, or 105ºC.

†† Recognized in three conductors when third or center conductor (with Green or Green/Yellow stripe) is used for equipment grounding.

▲ Insulation and jacket thickness depend on cordage size. Thickness as shown are for 18 and 16 AWG.

◆ Insulation and jacket thickness depend on cordage size.
No. 12 AWG requires .030" conductor insulation thickness and .045" jacket thickness.
No. 10 AWG requires .045" conductor insulation thickness and .060" jacket thickness.

The term Elastomer refers to thermoplastic elastomer.

10 Fiber Optic Cables

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Please refer to "Terms of Use of Master Catalog" on page 16.30.

Introduction

The Belden® BelOptix® fiber optic cable line is designed to answer the diverse, and often complex, needs of today's advanced networks. Not only do these cables future-proof your network, they also fully organize your network while protecting it from the environment.

Belden fiber optic cables have become the natural choice for closed circuit television, government network circuitry, factory automation and major commercial networks. In applications such as video conferencing, medical imaging, and CAD/CAM, Belden fiber optics feature unparalleled performance. The cable has become essential for bringing light-speed communication to hospitals, corporate campuses, educational facilities, and more.

Among the many features found in the Belden BelOptix fiber optic cable line are:

- **Ritestrip® II** Ritestrip II 900 micron buffered fiber is designed to consistently and easily strip to 250 microns or down to 125 microns. It expedites preparation for traditional epoxy and crimp-style, direct-connect ST and SC applications. Ritestrip II also improves preparation of mechanical or fusion splicing requirements.
- **LCF™ (Laser Certified Fiber)** The BelOptix line features LCF to handle the new light sources required in short wavelength Gigabit Ethernet systems. The light sources, named VCSEL (Vertical Cavity Surface Emitting Lasers), are designed to operate at the short wavelength of 850nm, the same wavelength as today's LED light sources. Belden's LCF 62.5 and 50 micron multimode fiber ensures compliance with laser technology. The LCF fiber utilizes enhanced bandwidth and tight attenuation limits to meet and exceed the EIA/TIA-TSB72 300 meter backbone length. LCF fiber has been deployed across the entire BelOptix cable series. It is operational with current LED light sources and exceeds FDDI+ performance specifications. LCF is also able to handle low-cost, long wavelength VCSEL light sources.

LCF Lengths for Gigabit Ethernet

Core Size	Wavelengths	SX	LX
62.5	850nm 1300nm	300m N/A	N/A 550m
50.0	850nm 1300nm	600m N/A	N/A 600m

Customer Service

Most of our fiber optic cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a fiber optic cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1 for additional information.

In addition, Belden fiber optic cables are provided in standard put-up lengths. A cutting charge will be assessed per item, per cut.

Matchmaker Warranty®

Belden's Matchmaker® Certified Link Warranty provides the freedom to choose a connectivity solution from any UL verified manufacturer of patch panels, wall plates or connectors — in addition to Belden cable. It is a transferable program that provides complete flexibility for network design and the added reassurance that the industry leader in cable is backing your installation for a lifetime. Matchmaker is a Warranty Certification to industry standards ANSI EIA/TIA-568-A (1995) and EN50173 (1995).

Fiber Optic Cable Packaging

Reel Identification

Belden shipping labels provide in-depth cable information. Footage, diameter, fiber count, lot number and UL information are included. Belden can trace each glass fiber all the way back to the drawing process.

Sample reel label

Test Reports

Test reports accompany every reel shipped.

Packaging Information

All standard reels now have our new easy access reel design. Reels 30 inches and smaller will feature the new double flange reel (A) and the larger reels will have protective channels (B) to speed on-site testing and preconnectorization.

All standard reels are protected with a reinforced composite wrap for safe shipment.

A. New double flange featured on all reels 30″ and smaller.

B. Larger reels feature protective channels.

BitLite® Interconnect Cable

Tight Buffer — Riser- & Plenum-Rated

Product Description

BelOptix® enhanced BitLite interconnect cordage features the Ritestrip® II tight buffer technology for easy cable preparation during termination. Belden's new interconnect cordage has been updated with 62.5 micron LCF™ (Laser Certified Fiber) to handle emerging Gigabit Ethernet light sources and expanded bandwidth requirements as well as conventional LED light sources.

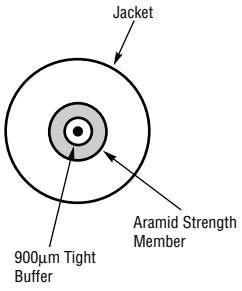
Product Specifications

Fiber Counts	1 and 2
Fiber Size	SM, 50µm, 62.5µm
Buffer Diameter	900µm
Strength Member	Aramid Yarn
Jacket Material	
Riser	PVC
Plenum	Flamarrest®
Flame Test	UL 1666 and NFPA 262
UL Listing NEC/CEC	
Riser	OFNR FT4
Plenum	OFNP FT6
Minimum Bend Radius	
Installation	2″
Long Term	1″
Temperature Range	
Storage	-40 to +75°C
Operating	-20 to +75°C

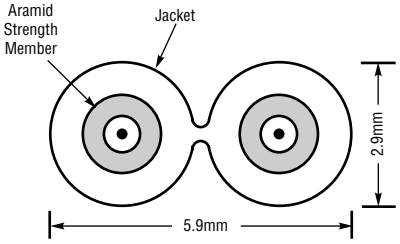
Fiber Specifications

	Multimode	
	50µm	*62.5µm*
Max. Attenuation (dB/km @850/1300nm)	3.5/1.5	3.5/1.0
Min. Bandwidth (MHz-km @850/1300nm)	500/500	220/600
Max. Gigabit Ethernet Distance (m)	600/600	300/550
Numerical Aperture	0.20	0.275
	Single-mode	
Core Diameter	8.3µm	
Mode Field Diameter	9.2µm	
Max. Attenuation (dB/km @1310/1550nm)	0.5/0.5	
Max. Dispersion (Ps/nm-km @1285–1330nm)	3.5	
Max. Dispersion Slope [Ps/(nm²-km)]	0.092	

Simplex



Zip Cord



Part No.	No. of Fibers	Outer Diameter		Weight		Max. Load Installation		Max. Load Long-Term	
		Inch	mm	Lbs./1000′	kg/km	Lbs.	N	Lbs.	N
Riser (NEC/CEC OFNR FT4)									
Single-mode/125/900 Micron (Core/Clad/Coating)									
PTS1001 new	1	.114	2.9	5.6	8.3	106	470	35	156
PTZ1002 new	2	.114 x .23	2.9 x 5.9	9.4	14.0	212	943	70	311
50/125/900 Micron									
PTS5001 new	1	.114	2.9	5.6	8.3	106	470	35	156
PTZ5002 new	2	.114 x .23	2.9 x 5.9	9.4	14.0	212	943	70	311
62.5/125/900 Micron									
PTS6001	1	.114	2.9	5.6	8.3	106	470	35	156
PTZ6002	2	.114 x .23	2.9 x 5.9	9.4	14.0	212	943	70	311
Plenum (NEC/CEC OFNP FT6)									
Single-mode/125/900 Micron (Core/Clad/Coating)									
PTSP101 new	1	.114	2.9	6.3	9.3	106	470	35	156
PTZP102 new	2	.114 x .23	2.9 x 5.9	11.5	17.1	212	943	70	311
50/125/900 Micron									
PTSP501 new	1	.114	2.9	6.3	9.3	106	470	35	156
PTZP502 new	2	.114 x .23	2.9 x 5.9	11.5	17.1	212	943	70	311
62.5/125/900 Micron									
PTSP601	1	.114	2.9	6.3	9.3	106	470	35	156
PTZP602	2	.114 x .23	2.9 x 5.9	11.5	17.1	212	943	70	311

LANLite® Distribution Cable

Tight Buffer — Indoor Riser- & Plenum-Rated, Gigabit Rated

Product Description

BelOptix® LANLite distribution backbone cables offer Ritestrip® II tight buffer technology for easier fiber stripping in cable preparation. The glass fiber performance has been updated to include LCF™ (Laser Certified Fiber) to handle tomorrow's Gigabit Ethernet light sources and expanded bandwidth requirements.

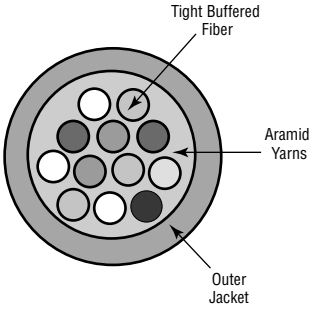
Product Specifications

Fiber Counts	2 through 24
Fiber Size	SM, 50µm, 62.5µm
Buffer Diameter	900µm
Strength Member	Aramid Yarn
Jacket Material	
Riser	PVC
Plenum	Flamarrest®
Flame Test	UL 1666 and NFPA 262
UL Listing NEC/CEC	
Riser	OFNR FT4
Plenum	OFNP FT6
Minimum Bend Radius	
Installation	20 x OD
Long Term	10 x OD
Temperature Range	
Storage	-40 to +70°C
Operating	-20 to +70°C

Fiber Specifications

	Multimode	
	50µm	*62.5µm*
Max. Attenuation (dB/km @850/1300nm)	3.5/1.5	3.5/1.0
Min. Bandwidth (MHz-km @850/1300nm)	500/500	220/600
Max. Gigabit Ethernet Distance (m)	600/600	300/550
Numerical Aperture	0.20	0.275
	Single-mode	
Core Diameter	8.3µm	
Mode Field Diameter	9.2µm	
Max. Attenuation (dB/km @1310/1550nm)	0.5/0.5	
Max. Dispersion (Ps/nm-km @1285–1330nm)	3.5	
Max. Dispersion Slope [Ps/(nm²-km)]	0.092	

LANLite



Part No.	No. of Fibers	Outer Diameter		Weight		Installation Tensile		Long-Term Tensile	
		Inch	mm	Lbs./1000′	kg/km	Lbs.	N	Lbs.	N
Riser (NEC/CEC OFNR FT4)									
Single-mode/125/900 Micron (Core/Clad/Coating)									
PTD1002 new	2	.175	4.4	12	17.6	180	800	45	200
PTD1004	4	.207	5.3	16	23.8	230	1020	69	305
PTD1006	6	.207	5.3	16	23.8	230	1020	69	305
PTD1012	12	.260	6.6	27	40.2	300	1333	100	444
PTD1024	24	.524	13.3	120	179.0	635	2820	225	1000
PTD1036	36	.614	15.6	148	220.0	800	3555	240	1066
50/125/900 Micron									
PTD5002	2	.175	4.4	12	17.6	180	800	45	200
PTD5004	4	.207	5.3	16	23.8	230	1020	69	305
PTD5006 new	6	.207	5.3	16	23.8	230	1020	69	305
PTD5012 new	12	.260	6.6	27	40.2	300	1333	100	444
PTD5024 new	24	.524	13.3	120	179.0	635	2820	225	1000
PTD5036 new	36	.614	15.6	148	220.0	800	3555	240	1066
62.5/125/900 Micron									
PTD6002 new	2	.175	4.4	12	17.6	180	800	45	200
PTD6004	4	.207	5.3	16	23.8	230	1020	69	305
PTD6006	6	.207	5.3	16	23.8	230	1020	69	305
PTD6012	12	.260	6.6	27	40.2	300	1333	100	444
PTD6024	24	.524	13.3	120	179.0	635	2820	225	1000
PTD6036	36	.614	15.6	148	220.0	800	3555	240	1066
Plenum (NEC/CEC OFNP FT6)									
Single-mode/125/900 Micron (Core/Clad/Coating)									
PTDP102	2	.155	3.9	10	15.0	180	800	45	200
PTDP104	4	.190	4.8	32	48.0	230	1020	69	305
PTDP106	6	.190	4.8	32	48.0	230	1020	69	305
PTDP112	12	.250	6.4	38	57.0	300	1333	100	444
PTDP124	24	.508	12.9	104	155.0	635	2820	225	1000
PTDP136 new	36	.606	15.4	171	225.0	800	3555	240	1066
50/125/900 Micron									
PTDP502 new	2	.155	3.9	10	15.0	180	800	45	200
PTDP504	4	.190	4.8	32	48.0	230	1020	69	305
PTDP506 new	6	.190	4.8	32	48.0	230	1020	69	305
PTDP512 new	12	.250	6.4	38	57.0	300	1333	100	444
PTDP524 new	24	.508	12.9	134	200.0	635	2820	225	1000
PTDP536 new	36	.606	15.4	171	225.0	800	3555	240	1066
62.5/125/900 Micron									
PTDP602	2	.155	3.9	10	15.0	180	800	45	200
PTDP604	4	.190	4.8	16	23.8	230	1020	69	305
PTDP606	6	.190	4.8	16	23.8	230	1020	69	305
PTDP612	12	.250	6.4	26	38.7	300	1333	100	444
PTDP624	24	.508	12.9	134	200.0	635	2820	225	1000
PTDP636	36	.606	15.4	171	225.0	800	3555	240	1066

Breakout Style Cable

Tight Buffer — Indoor/Outdoor Riser- & Plenum-Rated

Product Description

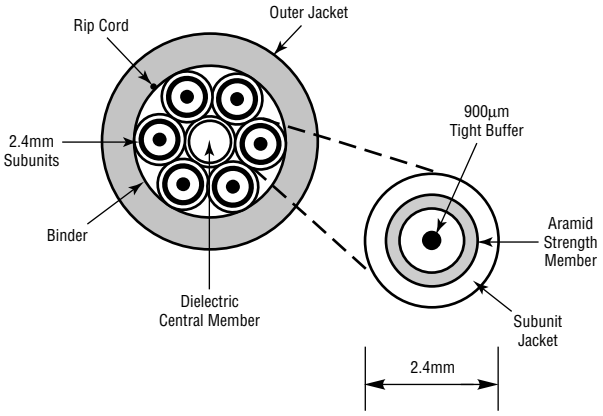
BelOptix® reinforced breakout cables are the preferred selection for direct termination methods. Each EIA colored fiber subunit is protected by a layer of aramid yarn and encased in a PVC jacket. These individual subunits are cabled and then jacketed with a flame resistant PVC compound. Each fiber in the subunit uses the Ritestrip® II tight buffer technology for easier fiber stripping in cable preparation. These cables have been updated to include the LCF™ (Laser Certified Fiber) to handle tomorrow's Gigabit Ethernet light sources and expanded bandwidth requirements.

Product Specifications

Fiber Counts	2 through 12
Fiber Size	50µm, 62.5µm
Buffer Diameter	900µm
Strength Member	Aramid Yarn
Jacket Material	
Riser	PVC
Plenum	Flamarrest®
Flame Test	UL 1666 and NFPA 262
UL Listing NEC/CEC	
Riser	OFNR FT4
Plenum	OFNP FT6
Temperature Range	
Storage	-40 to +70°C
Operating	-20 to +70°C

Fiber Specifications

	Multimode	
	50µm	*62.5µm*
Max. Attenuation (dB/km @850/1300nm)	3.5/1.5	3.5/1.0
Min. Bandwidth (MHz-km @850/1300nm)	500/500	220/600
Max. Gigabit Ethernet Distance (m)	600/600	300/550
Numerical Aperture	0.20	0.275



Part No.	No. of Fibers	Outer Diameter		Weight		Installation Tensile		Long-Term Tensile	
		Inch	mm	Lbs./1000′	kg/km	Lbs.	N	Lbs.	N
Riser (NEC/CEC OFNR FT4)									
50/125/900 Micron (Core/Clad/Coating)									
MTB5002 new	2	.257	6.5	24	35.7	210	930	65	288
MTB5004 new	4	.299	7.6	34	50.7	215	950	75	333
MTB5006 new	6	.373	9.5	63	93.9	380	1685	145	644
MTB5012 new	12	.476	12.1	76	113.2	640	2840	255	1133
62.5/125/900 Micron									
MTB6002	2	.257	6.5	24	35.7	210	930	65	288
MTB6004	4	.299	7.6	34	50.7	215	950	75	333
MTB6006	6	.373	9.5	63	93.9	380	1685	145	644
MTB6012	12	.476	12.1	76	113.2	640	2840	255	1133
Plenum (NEC/CEC OFNP FT6)									
50/125/900 Micron (Core/Clad/Coating)									
MTBP502 new	2	.250	6.4	24	35.8	210	930	65	288
MTBP504 new	4	.293	7.4	36	53.6	215	950	75	333
MTBP506 new	6	.356	9.0	56	83.4	380	1685	145	644
MTBP512 new	12	.461	11.7	84	125.2	640	2840	256	1133
62.5/125/900 Micron									
MTBP602	2	.250	6.4	24	35.8	210	930	65	288
MTBP604	4	.293	7.4	36	53.6	215	950	75	333
MTBP606	6	.356	9.0	56	83.4	380	1685	145	644
MTBP612	12	.461	11.7	84	125.2	640	2840	256	1133

Single-Jacket, All Dielectric Cable

Product Description

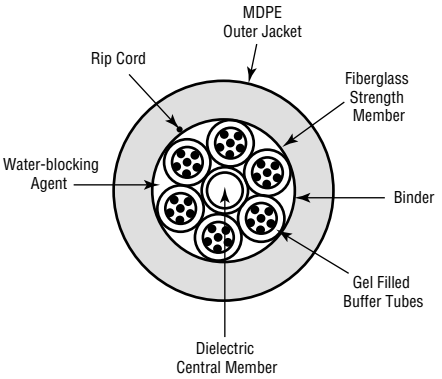
These all-dielectric, loose tube cables are designed for aerial, duct and conduit applications. They feature a durable polyethylene outer jacket. These cables feature Belden's water-blocking agent for a craft-friendly, no mess, hassle-free cable preparation experience. Additionally, these cables utilize LCF™ (Laser Certified Fiber) multimode glass fiber for new expanded bandwidth applications. Higher fiber counts are available. Please contact Belden Technical Support at 1-800-BELDEN-1 for additional information.

Product Specifications

Fiber Counts	2 through 36
Fiber Size	50µm, 62.5µm
Buffer Tube Diameter	2.5mm
Strength Members	Dielectric Central Member/ Fiberglass Yarn
Jacket Material	Medium-density Polyethylene (MDPE)
Temperature Range	
Storage	-40 to +80°C
Operating	-40 to +80°C

Fiber Specifications

	Multimode	
	50µm	*62.5µm*
Max. Attenuation (dB/km @850/1300nm)	3.5/1.0	3.5/1.0
Min. Bandwidth (MHz-km @850/1300nm)	500/500	220/600
Max. Gigabit Ethernet Distance (m)	600/600	300/550
Numerical Aperture	0.20	0.275



Part No.	No. of Fibers	Outer Diameter		Weight		Installation Tensile		Long-Term Tensile	
		Inch	mm	Lbs./ 1000′	kg/ km	Lbs.	N	Lbs.	N
All Dielectric									
50/125/245 Micron (Core/Clad/Coating)									
MLS5002 new	2	.417	10.6	59	88	600	2666	180	800
MLS5004 new	4	.417	10.6	59	88	600	2666	180	800
MLS5006 new	6	.417	10.6	59	88	600	2666	180	800
MLS5008 new	8	.417	10.6	59	88	600	2666	180	800
MLS5012 new	12	.417	10.6	59	88	600	2666	180	800
MLS5018 new	18	.417	10.6	59	88	600	2666	180	800
MLS5024 new	24	.417	10.6	59	88	600	2666	180	800
MLS5036 new	36	.417	10.6	59	88	600	2666	180	800
62.5/125/245 Micron									
MLS6002 new	2	.417	10.6	59	88	600	2666	180	800
MLS6004 new	4	.417	10.6	59	88	600	2666	180	800
MLS6006 new	6	.417	10.6	59	88	600	2666	180	800
MLS6008 new	8	.417	10.6	59	88	600	2666	180	800
MLS6012 new	12	.417	10.6	59	88	600	2666	180	800
MLS6018 new	18	.417	10.6	59	88	600	2666	180	800
MLS6024 new	24	.417	10.6	59	88	600	2666	180	800
MLS6036 new	36	.417	10.6	59	88	600	2666	180	800

Heavy-Duty, Double-Jacket Cable

Loose Tube — Outdoor

Product Description

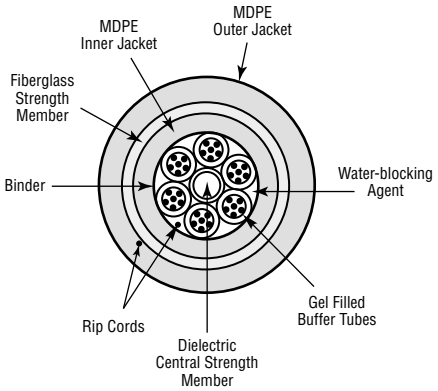
The heavy-duty loose tube cables are designed for direct burial, duct, outside tray and aerial applications. The heavy-duty series utilizes two weather-resistant polyethylene jackets. The extra jacket provides additional crush and impact resistance. These cables have been updated with a water-blocking agent for easier installation and LCF™ (Laser Certified Fiber) multimode glass fiber for new expanded bandwidth applications. Higher fiber counts are available. Please contact Belden Technical Support at 1-800-BELDEN-1 for additional information.

Product Specifications

Fiber Counts	2 through 36
Fiber Size	50µm, 62.5µm
Buffer Tube Diameter	2.5mm
Strength Members	Dielectric Central Member/ Fiberglass Yarn
Jacket Material	Medium-density Polyethylene (MDPE)
Temperature Range	
Storage	-40 to +80°C
Operating	-40 to +80°C

Fiber Specifications

	Multimode	
	50µm	*62.5µm*
Max. Attenuation (dB/km @850/1300nm)	3.5/1.0	3.5/1.0
Min. Bandwidth (MHz-km @850/1300nm)	500/500	220/600
Max. Gigabit Ethernet Distance (m)	600/600	300/550
Numerical Aperture	0.20	0.275



Part No.	No. of Fibers	Outer Diameter		Weight		Installation Tensile		Long-Term Tensile	
		Inch	mm	Lbs./ 1000′	kg/ km	Lbs.	N	Lbs.	N
Outdoor									
50/125/245 Micron (Core/Clad/Coating)									
MLD5002 new	2	.522	13.3	80	119	600	2666	180	800
MLD5004 new	4	.522	13.3	80	119	600	2666	180	800
MLD5006 new	6	.522	13.3	80	119	600	2666	180	800
MLD5008 new	8	.522	13.3	80	119	600	2666	180	800
MLD5012 new	12	.522	13.3	80	119	600	2666	180	800
MLD5018 new	18	.522	13.3	80	119	600	2666	180	800
MLD5024 new	24	.522	13.3	80	119	600	2666	180	800
MLD5036 new	36	.522	13.3	80	119	600	2666	180	800
62.5/125/245 Micron									
MLD6002	2	.522	13.3	80	119	600	2666	180	800
MLD6004	4	.522	13.3	80	119	600	2666	180	800
MLD6006	6	.522	13.3	80	119	600	2666	180	800
MLD6008	8	.522	13.3	80	119	600	2666	180	800
MLD6012	12	.522	13.3	80	119	600	2666	180	800
MLD6018	18	.522	13.3	80	119	600	2666	180	800
MLD6024	24	.522	13.3	80	119	600	2666	180	800
MLD6036	36	.522	13.3	80	119	600	2666	180	800

Corrugated Steel Armor Cable

Loose Tube — Outdoor

Product Description

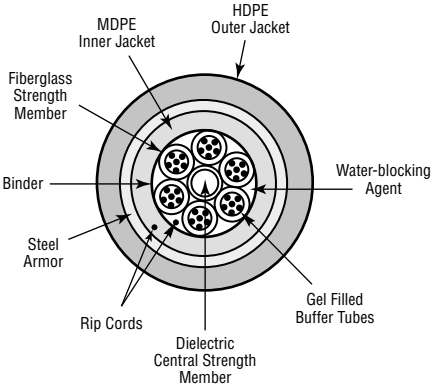
The heavy-duty armored loose tube cables are designed for direct burial, duct and outside tray applications. The heavy-duty series utilizes a corrugated steel tape armor barrier combined with two weather-resistant polyethylene jackets to give the maximum protection of your optical fiber cable. These cables have been updated with a water-blocking agent for easier installation and LCF™ (Laser Certified Fiber) multimode glass fiber for new expanded bandwidth applications. Higher fiber counts are available. Please contact Belden Technical Support at 1-800-BELDEN-1 for additional information.

Product Specifications

Fiber Counts	2 through 36
Fiber Size	50µm, 62.5µm
Buffer Tube Diameter	2.5mm
Strength Members	Dielectric Central Member/ Fiberglass Yarn
Armor Material	Corrugated Steel
Jacket Material	Medium-density Polyethylene (MDPE)/ High-density Polyethylene (HDPE)
Temperature Range	
Storage	-40 to +80°C
Operating	-40 to +80°C

Fiber Specifications

	Multimode	
	50µm	*62.5µm*
Max. Attenuation (dB/km @850/1300nm)	3.5/1.0	3.5/1.0
Min. Bandwidth (MHz-km @850/1300nm)	500/500	220/600
Max. Gigabit Ethernet Distance (m)	600/600	300/550
Numerical Aperture	0.20	0.275



Part No.	No. of Fibers	Outer Diameter		Weight		Installation Tensile		Long-Term Tensile	
		Inch	mm	Lbs./ 1000′	kg/ km	Lbs.	N	Lbs.	N
Outdoor									
50/125/245 Micron (Core/Clad/Coating)									
MLC5002 new	2	.571	14.5	125	186	600	2666	180	800
MLC5004 new	4	.571	14.5	125	186	600	2666	180	800
MLC5006 new	6	.571	14.5	125	186	600	2666	180	800
MLC5008 new	8	.571	14.5	125	186	600	2666	180	800
MLC5012 new	12	.571	14.5	125	186	600	2666	180	800
MLC5018 new	18	.571	14.5	125	186	600	2666	180	800
MLC5024 new	24	.571	14.5	125	186	600	2666	180	800
MLC5036 new	36	.571	14.5	125	186	600	2666	180	800
62.5/125/245 Micron									
MLC6002	2	.571	14.5	125	186	600	2666	180	800
MLC6004	4	.571	14.5	125	186	600	2666	180	800
MLC6006	6	.571	14.5	125	186	600	2666	180	800
MLC6008	8	.571	14.5	125	186	600	2666	180	800
MLC6012	12	.571	14.5	125	186	600	2666	180	800
MLC6018	18	.571	14.5	125	186	600	2666	180	800
MLC6024	24	.571	14.5	125	186	600	2666	180	800
MLC6036	36	.571	14.5	125	186	600	2666	180	800

Steel Messengered Cable

Loose Tube — Aerial

Product Description

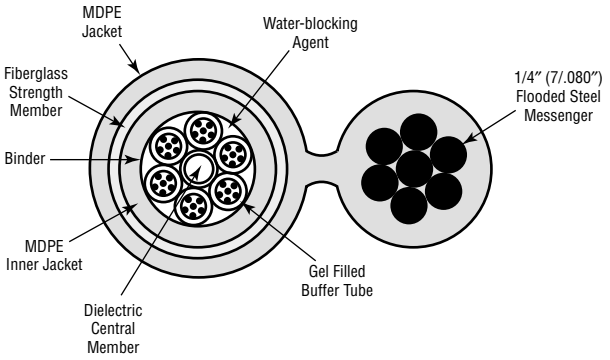
The messengered style outdoor loose tube cables are designed for aerial application between poles, buildings or other structures. The cable is constructed in a figure 8 profile with a 1/4″ EHS galvanized steel support wire and covered with a weather-resistant polyethylene jacket overall. These cables have been updated with a water-blocking agent for easier installation and LCF™ (Laser Certified Fiber) multimode glass fiber for new expanded bandwidth applications. Higher fiber counts and 50 micron constructions are available. Please contact Belden Technical Support at 1-800-BELDEN-1 for additional information.

Product Specifications

Fiber Counts	2 through 36
Fiber Size	62.5µm
Buffer Tube Diameter	2.5mm
Messenger	1/4″ EHS Steel
Strength Members	Dielectric Central Member/ Fiberglass Yarn
Jacket Material	Medium-density Polyethylene (MDPE)
Temperature Range	
Storage	-40 to +80°C
Operating	-40 to +80°C

Fiber Specifications

	62.5µm
Max. Attenuation (dB/km @850/1300nm)	3.5/1.0
Min. Bandwidth (MHz-km @850/1300nm)	220/600
Max. Gigabit Ethernet Distance (m)	300/550
Numerical Aperture	.275



Part No.	No. of Fibers	Outer Diameter		Weight		Max. Messenger Load	
		Minor Inch	Major Inch	Lbs./ 1000′	kg/ km	Lbs.	N
Aerial							
62.5/125/245 Micron (Core/Clad/Coating)							
MLM6004	4	.530	1.00	246	366	3990	17,750
MLM6006	6	.530	1.00	246	366	3990	17,750
MLM6008	8	.530	1.00	246	366	3990	17,750
MLM6012	12	.530	1.00	246	366	3990	17,750
MLM6018	18	.530	1.00	246	366	3990	17,750
MLM6024	24	.530	1.00	246	366	3990	17,750
MLM6036	36	.530	1.00	246	366	3990	17,750

TrayOptic® Heavy-Duty, All Dielectric Cable

Loose Tube — Indoor/Outdoor Riser & Tray

Product Description

The TrayOptic series cables are designed for indoor/outdoor industrial applications. All TrayOptic cables have been upgraded with a water-blocking agent. The TrayOptic series carry the IEEE 383 flame approval. All TrayOptic series products utilize the LCF™ (Laser Certified Fiber) to handle tomorrow's Gigabit Ethernet light sources and expanded bandwidth requirements. TrayOptic cables are also available with 50 micron or single-mode fiber upon request.

Product Specifications

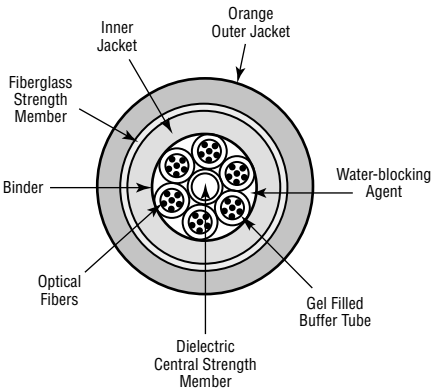
Fiber Counts*	2 through 24
Fiber Size	62.5µm
Buffer Sizes	
≤ 6 Fibers	2.0mm
> 6 Fibers	2.5mm
Jacket Materials	PVC or CPE
Flame Test	Passes IEEE 383 and UL 1581 Vertical Tray Flame Tests
UL Listing NEC/CEC	
2 to 12 Fibers	OFNR FT4
18 to 24 Fibers	OFN FT1
Strength Members	Dielectric Central Member/ Fiberglass Yarn
Temperature Range	-40 to +75°C
Crush Resistance	
2 to 6 Fibers	750 lbs./in. min.
8 to 24 Fibers	500 lbs./in. min.
Impact Resistance	3.3 ft.-lbs./25 impacts min.
Flexing	25 cycles, 12 lbs., 20 x OD radius min.
Twist/Bend	25 cycles, 12 lbs., 20 x OD radius min.
Minimum Bend Radius	
Installation	20 x OD
Long Term	10 x OD
Maximum Recommended Load (Lbs.)	
Installation	600
Long Term	180

*1- through 6-fiber cables are single fiber per tube.

Fiber Specifications

	62.5µm
Max. Attenuation (dB/km @850/1300nm)	3.5/1.0
Min. Bandwidth (MHz-km @850/1300nm)	220/600
Numerical Aperture	0.275

Part No.	Jacket Material	No. of Fibers	Outer Diameter		Weight	
			Inch	mm	Lbs./1000′	kg/km
Riser (NEC/CEC OFNR FT4)						
62.5/125/245 Micron (Core/Clad/Coating)						
I100255	PVC	2	.469	11.91	93	138
I100266	CPE	2	.469	11.91	89	132
I100455	PVC	4	.469	11.91	91	135
I100466	CPE	4	.469	11.91	80	119
I100655	PVC	6	.469	11.91	89	120
I100666	CPE	6	.469	11.91	85	126
I400855	PVC	8	.572	14.53	140	190
I400866	CPE	8	.572	14.53	132	196
I601055 new	PVC	10	.572	14.53	135	183
I601255	PVC	12	.572	14.53	135	183
I601266	CPE	12	.572	14.53	139	207
Tray (NEC/CEC OFN FT1)						
62.5/125/245 Micron (Core/Clad/Coating)						
I601855	PVC	18	.572	14.53	133	180
I601866	CPE	18	.572	14.53	136	202
I602455	PVC	24	.572	14.53	133	180
I602466	CPE	24	.572	14.53	137	204



Public Network Fiber Optic Cable

Loose Tube — Single Mode, Dual Window Fiber
Armored, Double Jacket

Product Description

The BelOptix® Public Network Fiber Series addresses the converging technologies of CATV, Broadband and Telephony providing cable solutions for longhaul, local exchange and MAN/WAN applications.

The BelOptix Public Network Fiber Cables come in a variety of configurations all meeting RUS/PE-90 performance standards.

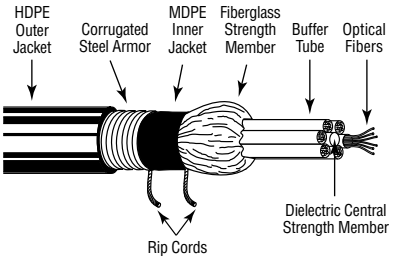
Product Specifications

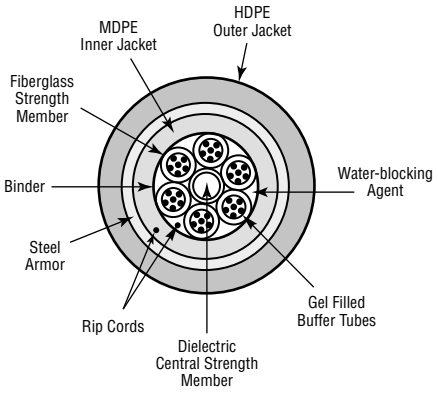
Fiber Counts	6 through 144
Fiber Size	Single-mode
Cladding Diameter	125 ±1µm
Coating Diameter	245 ±10µm, dual layer
Fiber Coating	UV Acrylate
Jacket Materials	Medium-density Polyethylene (MDPE)/ High-density Polyethylene (HDPE)
Strength Member	Fiberglass and Central FGE Rod
Operating Temperature Range	-40 to +75°C
Maximum Recommended Load	
Installation	600 lbs. (2700 N)
Long Term	135 lbs. (600 N)

Fiber Specifications

Mode Field Diameter (@1310nm)	9.2 ± 0.4µm
Mode Field Diameter (@1550nm)	10.5 ± 1.0µm
Cable Cut-off Wavelength	< 1260nm
Zero Dispersion Wavelength	1300–1322nm
Max. Dispersion Slope [Ps/(nm²-km)]	0.092
Max. Dispersion (Ps/nm-km @1285–1330)	< 3.5
Polarization Mode Dispersion (Ps/√km @1310nm)	< 0.5
Effective Refractive Index (@1310nm)	1.466
Effective Refractive Index (@1550nm)	1.467
Core Diameter	8.3µm
Core/Cladding Concentricity Error	< 0.8µm
Cladding Non-circularity	< 1.0µm
Proof Test	100 kpsi
Strip Force (Newtons)	1.3 < F < 8.9
Max. Attenuation (dB/km @1310/1550nm)	.35/.25
Minimum Bend Radius	
Installation	20 x dia.
Long Term	10 x dia.

Part No.	Jacket Material	No. of Fibers	Outer Diameter		Nominal Cable Weight	
			Inch	mm	Lbs./1000′	kg/km
Armored — Double Jacket (RUS/PE-90 Listed)						
Single-mode/125/245 Micron (Core/Clad/Coating)						
A6006FM new	HDPE/MDPE	6	.571	14.5	125	186
A6012FM new	HDPE/MDPE	12	.571	14.5	125	186
A6024FM new	HDPE/MDPE	24	.571	14.5	125	186
A6036FM new	HDPE/MDPE	36	.571	14.5	125	186
AT048FM new	HDPE/MDPE	48	.581	14.8	136	202
AT060FM new	HDPE/MDPE	60	.581	14.8	136	202
AT072FM new	HDPE/MDPE	72	.640	16.3	156	232
AT096FM new	HDPE/MDPE	96	.713	18.1	180	268
AT120FM new	HDPE/MDPE	120	.785	19.9	214	318
AT144FM new	HDPE/MDPE	144	.855	21.7	242	360





Public Network Fiber Optic Cable

Loose Tube — Single Mode, Dual Window Fiber
All Dielectric

Product Description

The BelOptix® Public Network Fiber Series addresses the converging technologies of CATV, Broadband and Telephony providing cable solutions for longhaul, local exchange and MAN/WAN applications.

The BelOptix Public Network Fiber Cables come in a variety of configurations all meeting RUS/PE-90 performance standards.

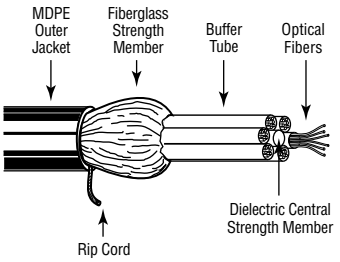
Product Specifications

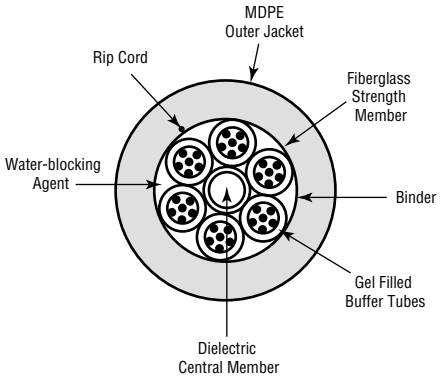
Fiber Counts	6 through 144
Fiber Size	Single-mode
Cladding Diameter	125 ±1µm
Coating Diameter	245 ±10µm, dual layer
Fiber Coating	UV Acrylate
Jacket Materials	Medium-density Polyethylene (MDPE)
Strength Member	Fiberglass and Central FGE Rod
Operating Temperature Range	-40 to +75°C
Maximum Recommended Load	
Installation	600 lbs. (2700 N)
Long Term	135 lbs. (600 N)

Fiber Specifications

Mode Field Diameter (@1310nm)	9.2 ± 0.4µm
Mode Field Diameter (@1550nm)	10.5 ± 1.0µm
Cable Cut-off Wavelength	< 1260nm
Zero Dispersion Wavelength	1300–1322nm
Max. Dispersion Slope [Ps/(nm²-km)]	0.092
Max. Dispersion (Ps/nm-km@1285–1330)	< 3.5
Polarization Mode Dispersion (Ps/√km @1310nm)	< 0.5
Effective Refractive Index (@1310nm)	1.470
Effective Refractive Index (@1550nm)	1.470
Core Diameter	8.3µm
Core/Cladding Concentricity Error	< 0.8µm
Cladding Non-circularity	< 1.0µm
Proof Test	100 kpsi
Strip Force (Newtons)	1.3 < F < 8.9
Max. Attenuation (dB/km @1310/1550nm)	.35/.25
Minimum Bend Radius	
Installation	20 x dia.
Long Term	10 x dia.

Part No.	Jacket Material	No. of Fibers	Outer Diameter		Nominal Cable Weight	
			Inch	mm	Lbs./1000′	kg/km
All Dielectric						
Single-mode/125/245 Micron (Core/Clad/Coating)						
D6006FM new	MDPE	6	.417	10.6	59	88
D6012FM new	MDPE	12	.417	10.6	59	88
D6024FM new	MDPE	24	.417	10.6	59	88
D6036FM new	MDPE	36	.417	10.6	59	88
DT048FM new	MDPE	48	.461	11.7	62	92
DT060FM new	MDPE	60	.461	11.7	62	92
DT072FM new	MDPE	72	.496	12.6	77	114
DT096FM new	MDPE	96	.573	14.6	102	152
DT120FM new	MDPE	120	.647	16.4	119	177
DT144FM new	MDPE	144	.735	18.7	166	247





Public Network Fiber Optic Cable

Loose Tube — Single Mode, Dual Window Fiber
Light Armored

Product Description

The BelOptix® Public Network Fiber Series addresses the converging technologies of CATV, Broadband and Telephony providing cable solutions for longhaul, local exchange and MAN/WAN applications.

The BelOptix Public Network Fiber Cables come in a variety of configurations all meeting RUS/PE-90 performance standards.

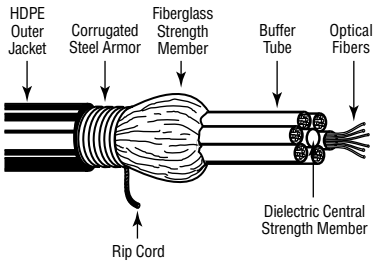
Product Specifications

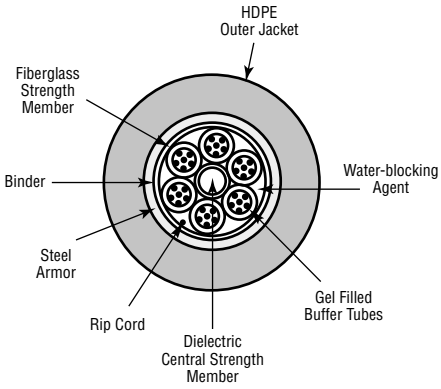
Fiber Counts	6 through 144
Fiber Size	Single-mode
Cladding Diameter	125 ±1µm
Coating Diameter	245 ±10µm, dual layer
Fiber Coating	UV Acrylate
Jacket Materials	High-density Polyethylene (HDPE)
Strength Member	Fiberglass and Central FGE Rod
Operating Temperature Range	-40 to +75°C
Maximum Recommended Load	
Installation	600 lbs. (2700 N)
Long Term	135 lbs. (600 N)

Fiber Specifications

Mode Field Diameter (@1310nm)	9.2 ± 0.4µm
Mode Field Diameter (@1550nm)	10.5 ± 1.0µm
Cable Cut-off Wavelength	< 1260nm
Zero Dispersion Wavelength	1300–1322nm
Max. Dispersion Slope [Ps/(nm²-km)]	0.092
Max. Dispersion (Ps/nm-km@1285–1330)	< 3.5
Polarization Mode Dispersion (Ps/√km @1310nm)	< 0.5
Effective Refractive Index (@1310nm)	1.466
Effective Refractive Index (@1550nm)	1.467
Core Diameter	8.3µm
Core/Cladding Concentricity Error	< 0.8µm
Cladding Non-circularity	< 1.0µm
Proof Test	100 kpsi
Strip Force (Newtons)	1.3 < F < 8.9
Max. Attenuation (dB/km @1310/1550nm)	.35/.25
Minimum Bend Radius	
Installation	20 x dia.
Long Term	10 x dia.

Part No.	Jacket Material	No. of Fibers	Outer Diameter		Nominal Cable Weight	
			Inch	mm	Lbs./1000′	kg/km
Light Armored (RUS/PE-90 Listed)						
Single-mode/125/245 Micron (Core/Clad/Coating)						
L6006FM new	HDPE	6	.487	12.4	93	138
L6012FM new	HDPE	12	.487	12.4	93	138
L6024FM new	HDPE	24	.487	12.4	93	138
L6036FM new	HDPE	36	.487	12.4	93	138
LT048FM new	HDPE	48	.496	12.6	105	156
LT060FM new	HDPE	60	.496	12.6	105	156
LT072FM new	HDPE	72	.531	13.5	123	183
LT096FM new	HDPE	96	.623	15.8	148	220
LT120FM new	HDPE	120	.715	18.2	176	262
LT144FM new	HDPE	144	.785	19.9	204	308





Technical Information

Color Code Charts and Index of Refraction for OTDR

Color Code Chart: Fiber Optic Cables Outside Jackets

Cable Family	Jacket Material	Jacket Color	Mode
BitLite®	PVC	Yellow Orange Orange	Single-mode 50µ Multimode 62.5µ Multimode
	FA	Yellow Orange Orange	Single-mode 50µ Multimode 62.5µ Multimode
LANLite®	PVC	Yellow Orange Orange	Single-mode 50µ Multimode 62.5µ Multimode
	FA	Yellow Orange Orange	Single-mode 50µ Multimode 62.5µ Multimode
Breakout	PVC	Light Blue	Multimode
	FA	Light Blue	Multimode
Single Jacket, All Dielectric	MDPE	Black	Multimode
Heavy-Duty, Double-Jacket	MDPE	Black	Multimode
Corrugated Steel Armor	MDPE/HDPE	Black	Multimode
Steel Messengered	MDPE	Black	62.5µ Multimode
TrayOptic®	PVC	Orange	62.5µ Multimode
	CPE	Orange	62.5µ Multimode
Public Network	MDPE/ HDPE	Black	Single-mode

CPE = Chlorinated Polyethylene
FA = Flamarrest®
MDPE = Medium-density Polyethylene
HDPE = High-density Polyethylene
PVC = Polyvinylchloride

Color Code Chart: Fiber Optic Cables*

Fiber/ Tube No.	Color
1	Blue
2	Orange
3	Green
4	Brown
5	Slate
6	White
7	Red
8	Black
9	Yellow
10	Violet
11	Rose
12	Aqua

*Per TIA/EIA-598-A

Index of Refraction for OTDR Settings

Fiber Type (Core/Clad)	850nm	1300nm 1310nm	1550nm
Single-mode	—	1.466	1.467
Multimode (50µ/125µ)	1.483	1.479	—
Multimode (62.5µ/125µ)	1.496	1.491	—

Belden

DATATWIST®

11 Networking Cables

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Please refer to "Terms of Use of Master Catalog" on page 16.30.

Introduction

DATATWIST®

Structured cabling is the lifeline of a communications system and a key determinant of network performance.

To help achieve optimum network performance, Belden has built reliability into each cable it produces. The result is a comprehensive, unfailing line of cables that fulfill the requirements of your specific application and/or the applicable TIA/EIA Category requirement.

A strict adherence to quality manufacturing processes and a dedication to innovative, performance-enhancing design have enabled Belden to stay at the forefront of this fast paced industry. No one makes a better performing or more reliable networking cable than Belden.

Breakthrough Bonded-Pair Design

Belden's breakthrough Bonded-Pair cables are the result of a patented design that bonds the individual insulated conductors together along their longitudinal axes. This unique physical characteristic results in uniform conductor-to-conductor spacing — a key aspect in consistent electrical performance. Even when a Bonded-Pair cable is subjected to everyday installation stresses such as bending, coiling and pulling, its conductor-to-conductor spacing remains stable.

Installable Performance™

A Category 5e cable that yields 5e performance on the reel but provides only Category 5 performance after installation is of little value.

Since Belden® Bonded-Pair cables are more resistant to the adverse effects of the installation/termination process, they are able to achieve Installable Performance — or achieving the same high level of performance *after* installation. (For more detailed information, please refer to Belden Technical Bulletin TB-66 *The Impact of Typical Installation Stresses on Cable Performance.)*

This superior quality/reliability attribute also offers installer-related dividends as Belden Bonded-Pair cable installations typically require less troubleshooting.

In fact, a recent contractor survey found that Belden Bonded-Pair cables offer significant time/cost savings when the complete installation is taken into consideration. This includes all installation, troubleshooting and correction procedures. (For more detailed information, please refer to Belden Technical Bulletin TB-67, *Contractor Field-Testing Survey Reveals Performance-Related Cost Savings Using Bonded-Pair Cables.)*

More Bonded-Pair Benefits

Signal Integrity

Bonded-Pair cables are designed to maintain signal integrity. Ideally, the centricity, or center-to-center distance, of the copper within the two conductors of the pair should remain fixed and stable along the length of the pair. This centricity varies widely in most unbonded twisted pair cables due to the tendency of gaps to form between the two conductors of a pair.

Fewer Reflected Signal Problems

When a gap forms between the two conductors of a pair, it creates an impedance mismatch. When the transmitted signal encounters this mismatch, portions of the signal are reflected back toward the receiver. This occurrence defines the cable's return loss (RL) characteristics. Belden Bonded-Pair design mitigates the incidence of impedance mismatch/RL since no gaps are formed between the two insulated conductors.

Immunity to Noise

Twisted pairs are designed to cancel out electrical noise from the environment such as EMI/RFI or crosstalk from other pairs. When twisted pairs separate they can act as an antenna, picking up noise from outside sources. Because gaps do not form between the conductors, Bonded-Pair cables are a poor antenna; they are far less likely to receive outside noise.

Belden Bonded-Pair cables exceed the full range of performance criteria, both electrical and physical, and they set a whole new precedent for cabling with confidence. An ever-increasing number of applications requiring optimum performance at high frequencies can now be cabled with the assurance that the users' needs can be accommodated easily, economically — and with the future in mind.

Available Literature

For more information, visit www.belden.com or call Belden for your copy of any available literature.

Brochures

Belden Quality

Bonded-Pair Cables

White Papers

Design for Manufacturability

Sigma

Ensuring Quality

Technical Bulletins

TB-66: *The Impact of Typical Installation Stresses on Cable Performance*

TB-67: *Contractor Field-Testing Survey Reveals Performance-Related Cost Savings Using Bonded-Pair Cables*

Product Bulletins

NP 156: *New DataTwist® 6 UTP Cable from Belden Supports Category 6 Standards*

NP 171: *New DataTwist 600e: Guaranteed Performance to 600 MHz*

NP 175: *New DataTwist 5e+: Enhanced 5e Performance Guaranteed to 350 MHz*

NP 177: *Cable Preparation Tool Speeds Installation of Bonded-Pair Cables*

NP 178: *Belden MediaTwist® Category 6 Bonded-Pair Networking Cables*

NP 179: *Belden DataTwist 350 Bonded-Pair Networking Cables*

NP 180: *Belden DataTwist 5e Twisted Pair Networking Cables*

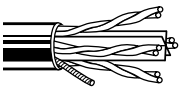
NP 189: *Belden DataTwist 5e Shielded Networking Cables*

DataTwist® 600e UTP Cable

TIA/EIA-568-B.2-1, Category 6
Enhanced Category 6 Bonded-Pair Cables

DATATWIST®

23 AWG Bonded-Pairs Solid Bare Copper • Patented E-Spline Center Member • Rip Cord • See Color Code Chart (below)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Black, White or Dark Gray)																					
	7851A new	NEC: CMR CEC: CMR FT4	4	1000 A-1000	304.8 A-304.8	40.0 42.0	18.2 19.1	.009	.23	.225 x .310	5.72 x 7.87	8.2	3.0	65.6	1	1.9	80.3	78.5	70.8	100±12	20.0
															10	5.7	65.3	59.6	50.8	100±12	25.0
															31.25	10.2	57.9	47.7	40.9	100±15	25.0
															62.5	14.7	53.4	38.7	34.9	100±15	25.0
															100	18.9	50.3	31.4	30.8	100±15	25.0
															155	23.9	47.5	23.5	27.0	100±15	22.8
															200	27.5	45.8	18.3	24.8	100±15	21.7
															250	31.2	44.3	13.2	22.8	100±20	20.5
															350	37.7	40.2	4.5	19.9	100±22	19.8
															400	40.6	39.3	0.6	18.8	100±22	19.5
															500	46.2	37.8	>0*	16.8	100±22	18.4
															550	48.8	37.2	—	16.0	100±22	18.0
															600	51.4	36.6	—	15.2	100±22	17.6
Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Blue, Black, White or Gray)																					
	7852A new	NEC: CMP CEC: CMP FT6	4	1000 A-1000	304.8 A-304.8	37.0 39.0	16.8 17.7	.008	.20	.215 x .290	5.46 x 7.37	8.2	3.0	65.6	1	1.9	80.3	78.5	70.8	100±12	20.0
															10	5.7	65.3	59.6	50.8	100±12	25.0
															31.25	10.2	57.9	47.7	40.9	100±15	25.0
															62.5	14.7	53.4	38.7	34.9	100±15	25.0
															100	18.9	50.3	31.4	30.8	100±15	25.0
															155	23.9	47.5	23.5	27.0	100±15	22.8
															200	27.5	45.8	18.3	24.8	100±15	21.7
															250	31.2	44.3	13.2	22.8	100±20	20.5
															350	37.7	40.2	4.5	19.9	100±22	19.8
															400	40.6	39.3	0.6	18.8	100±22	19.5
															500	46.2	37.8	>0*	16.8	100±22	18.4
															550	48.8	37.2	—	16.0	100±22	18.0
															600	51.4	36.6	—	15.2	100±22	17.6

Jacket sequentially marked at 2 ft. intervals.
U.S. Patents 5,606,151; 5,734,126; 5,789,711 and 6,297,454-B1
Third party verified to TIA/EIA-568-B.2-1, Category 6

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

*PSUM ACR >0 is guaranteed to 460 MHz

DataTwist 600e: Beyond Category 6

Belden® DataTwist 600e data cable is a revolutionary UTP cable engineered specifically to perform well beyond Category 6 standards. While Category 6 cable is specified only to 250 MHz, DataTwist 600e is the only UTP cable in the industry fully characterized with guaranteed performance to 600 MHz. So users have far more headroom to compensate for unforeseen factors that can inhibit the performance of a cabling system today…and protection of their technology investment for the future.

Handy Cable Preparation Tool Speeds Installation of Bonded-Pair Cables new

You know the high performance benefits of using data cables featuring Belden's unique Bonded-Pair technology. The Belden Cable Preparation Tool (1797B) now makes it faster and easier than ever to prepare cables for connector termination providing special features that help separate twisted pairs. The Cable Preparation Tool is packed with every spool of DataTwist 600e. See page 11.24 for more information.

Color Codes: DataTwist 600e

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Teflon is a DuPont trademark.

MediaTwist® UTP Cable

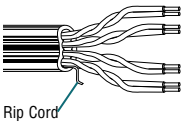
TIA/EIA-568-B.2-1, Category 6
Enhanced Category 6 Bonded-Pair Cables

DATATWIST®

23 AWG Bonded-Pairs Solid Bare Copper • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Blue, Red, Yellow, Orange, Green, Gold, Violet, White, Black or Dark Gray)

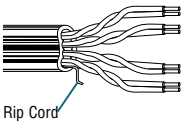
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
	1872A	NEC:	4	1000	304.8	37.0	16.8	.009	.23	.365	9.27	9.0	3.0	49.2	1	1.9	72.3	70	64.8	100±12	20.0
		CMR		A-1000*	A-304.8	38.0	17.3			x	x				4	3.7	63.3	59	52.7	100±12	23.0
		CEC:								.165	4.19				8	5.3	58.8	53	46.7	100±12	24.5
		CMR FT4													10	5.9	57.3	51	44.8	100±12	25.0
															16	7.5	54.3	46	40.7	100±12	25.0
															25	9.5	51.4	42	36.8	100±15	24.3
															31.25	10.6	49.9	39	34.9	100±15	23.6
															62.5	15.4	45.4	30	28.8	100±15	21.5
															100	19.8	42.3	25	24.8	100±15	21.0
															155	25.1	39.5	14	20.9	100±15	21.0
															200	29.0	37.8	10	18.7	100±15	21.0
															250	32.8	36.3	3	16.8	100±20	18.0
															300	35.2	35.2	>0	15.2	100±20	18.0
															350	39.8	34.2	—	13.9	100±22	17.0
															400▸	43.0	—	—	—	100±32	14.0
															500▸	49.0	—	—	—	100±32	14.0



*A-1000 ft. put-up not available in Black.
Jacket sequentially marked at 2 ft. intervals.
U.S. Patents 5,606,151; 5,734,126; 5,821,467
Third party verified to TIA/EIA-568-B.2-1, Category 6

Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Blue, Natural, Dark Gray, Red, Yellow, Orange, Green, Gold, Violet, White or Black)

	1874A	NEC:	4	1000	304.8	40.0	18.2	.009	.23	.365	9.27	9.0	3.0	49.2	1	1.9	72.3	70	64.8	100±12	20.0
		CMP		A-1000**	A-304.8	41.0	18.6			x	x				4	3.7	63.3	59	52.7	100±12	23.0
		CEC:								.165	4.19				8	5.3	58.8	53	46.7	100±12	24.5
		CMP FT6													10	5.9	57.3	51	44.8	100±12	25.0
															16	7.5	54.3	46	40.7	100±12	25.0
															25	9.5	51.4	42	36.8	100±15	24.3
															31.25	10.6	49.9	39	34.9	100±15	23.6
															62.5	15.4	45.4	30	28.8	100±15	21.5
															100	19.8	42.3	25	24.8	100±15	21.0
															155	25.1	39.5	14	20.9	100±15	21.0
															200	29.0	37.8	10	18.7	100±15	21.0
															250	32.8	36.3	3	16.8	100±20	18.0
															300	35.2	35.2	>0	15.2	100±20	18.0
															350	39.8	34.2	—	13.9	100±22	17.0
															400▸	43.0	—	—	—	100±32	14.0
															500▸	49.0	—	—	—	100±32	14.0

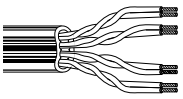


**A-1000 ft. put-up not available in Black.
Jacket sequentially marked at 2 ft. intervals.
U.S. Patents 5,606,151; 5,734,126; 5,821,467
Third party verified to TIA/EIA-568-B.2-1, Category 6

Patch Cables • 24 AWG Bonded-Pairs Stranded (7x32) Tinned Copper • RJ-45 Compatible • See Color Code Chart (below)▲

Non-Plenum • Polyolefin Insulation • PVC Jacket (Red, Orange, Yellow, Green, Blue, Violet, Light Gray, Dark Gray, White or Black)

	1875GA	NEC:	4	1000	304.8	31.0	14.1	.009	.23	.365	9.27	9.0	3.0	49.2	1	2.0	72.3	70	64.8	100±12	20.0
		CMR		A-1000†	A-304.8	32.0	14.5			x	x				4	4.1	63.3	59	52.7	100±12	23.0
		CEC:								.165	4.19				8	5.8	58.8	53	46.7	100±12	24.5
		CMR FT4													10	6.5	57.3	51	44.8	100±12	25.0
															16	8.2	54.3	46	40.7	100±12	25.0
															20	9.3	52.8	44	38.7	100±12	25.0
															25	10.4	51.4	41	36.8	100±15	24.3
															31.25	11.7	49.9	38	34.9	100±15	23.6
	1875GB	NEC:	4	1000††	304.8	31.0	14.1								62.5	17.0	45.4	28	28.8	100±15	21.5
		CMR		A-1000††	A-304.8	32.0	14.5								100	22.0	42.3	20	24.8	100±15	21.0
		CEC:													155	30.2	39.5	9	20.9	100±15	21.0
		CMR FT4													200	34.8	37.8	3	18.7	100±15	21.0
															250	39.4	36.3	—	16.8	100±20	18.0
															310	47.6	34.9	—	14.9	100±20	18.0
															350	51.1	34.2	—	13.9	100±22	17.0



†A-1000 ft. put-up not available in Red, Orange, Blue or Black.
††A-1000 ft. put-up not available in Red, Orange, Dark Gray or Black. 1000 ft. put-up not available in Red, Orange or Dark Gray.
U.S. Patents 5,606,151; 5,734,126; 5,763,823 and 5,821,467

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)
▸Values provided for information only.

Color Codes: MediaTwist

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Color Codes: MediaTwist Patch

Pair No.	1875GA Color Combination	1875GB Color Combination
1	White/Brown Stripe & Brown	White/Brown Stripe & Brown
2	White/Blue Stripe & Blue	White/Blue Stripe & Blue
3	White/Orange Stripe & Orange	White/Green Stripe & Green
4	White/Green Stripe & Green	White/Orange Stripe & Orange

▲Color rotation available for T568-A or T568-B wiring schemes.

Handy Cable Preparation Tool for Bonded-Pairs

See page 11.24 for details.

new

(Part No. 1797B)

Teflon is a DuPont trademark.

DataTwist® 6 UTP Cable

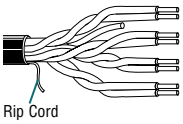
TIA/EIA-568-B.2-1, Category 6 Unbonded-Pair Cables

DATATWIST®

23 AWG Solid Bare Copper • Twisted Pairs • Central Rod Filler • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Gray, White or Black)

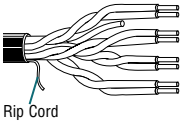
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
	7881A new	NEC: CMR CEC: CMR FT4	4	1000 A-1000	304.8 A-304.8	32.0 34.0	14.5 15.4	.009	.23	.235	5.97	9.38	5.0	330	1	2.0	72.3	70.3	64.8	100±15	20.0
															10	6.0	57.3	51.3	44.8	100±15	25.0
															20	8.5	52.8	44.3	38.7	100±15	25.0
															31.25	10.7	49.9	39.2	34.9	100±15	23.6
															62.5	15.4	45.4	30.0	28.8	100±15	21.5
															100	19.8	42.3	22.5	24.8	100±15	20.1
															200	29.0	37.8	8.8	18.7	100±22	18.0
															250	32.8	36.3	3.5	16.8	100±32	17.3



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2-1, Category 6

Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Blue, Gray, Natural or Black)

	7882A new	NEC: CMP CEC: CMP FT6	4	1000 A-1000	304.8 A-304.8	33.0 35.0	15.0 15.9	.008	.20	.224	5.69	9.38	5.0	330	1	2.0	72.3	70.3	64.8	100±15	20.0
															10	6.0	57.3	51.3	44.8	100±15	25.0
															20	8.5	52.8	44.3	38.7	100±15	25.0
															31.25	10.7	49.9	39.2	34.9	100±15	23.6
															62.5	15.4	45.4	30.0	28.8	100±15	21.5
															100	19.8	42.3	22.5	24.8	100±15	20.1
															200	29.0	37.8	8.8	18.7	100±22	18.0
															250	32.8	36.3	3.5	16.8	100±32	17.3

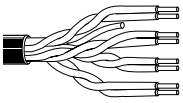


Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2-1, Category 6

Patch Cables • 24 AWG Solid Bare Copper • Twisted Pairs • Central Slit-Film Filler • RJ-45 Compatible* • See Color Code Chart (below)▲

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Violet, Light Gray, White or Black)

	7883A new	NEC: CM CEC: CM FT1	4	1000	304.8	24.0	10.9	.008	.20	.205	5.21	9.38	5.0	330	1	2.4	72.3	69.9	64.8	100±15	20.0
															10	7.1	57.3	50.2	44.8	100±15	25.0
															20	10.2	52.8	42.6	38.7	100±15	25.0
															31.25	12.9	49.9	37.0	34.9	100±15	23.6
															62.5	18.5	45.4	26.9	28.8	100±15	21.5
															100	23.8	42.3	18.5	24.8	100±15	20.1
															200	34.8	37.8	3.0	18.7	100±22	18.0
															250	39.4	36.3	—	16.8	100±32	17.3



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2-1, Category 6

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

*For either T568-A or T568-B configurations.

Color Codes: DataTwist 6

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Color Codes: DataTwist 6 Patch

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

▲Color rotation available for T568-A or T568-B wiring schemes.

Teflon is a DuPont trademark.

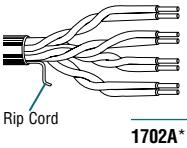
DataTwist® 350 UTP Cable

TIA/EIA-568-B.2, Category 5e
Enhanced Category 5e Bonded-Pair Cables

DATATWIST®

24 AWG Bonded-Pairs Solid Bare Copper • Rip Cord • See Color Code Chart (below)

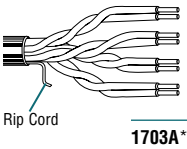
Non-Plenum • Polyolefin Insulation • PVC Jacket (Red, Orange, White, Black, Yellow, Green, Blue, Purple, Light Gray or Gray)



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
	1700A	NEC:	4	U-1000	U-304.8	22.0	10.0	.009	.23	.200	5.08	9.0	3.0	66.0	1	2.0	65.3	63.3	60.8	100±12	20.0
		CM		1000†	304.8	22.0	10.0								4	4.0	56.3	52.3	48.7	100±12	23.0
		CEC:		1640†	500.0	36.1	16.4								8	5.7	51.8	46.1	42.7	100±12	24.5
		CM		3000†	914.4	63.0	28.6								10	6.4	50.3	43.9	40.8	100±12	25.0
				3280†	1000.0	72.2	32.8								16	8.1	47.3	39.1	36.7	100±12	25.0
															25	10.3	44.3	34.1	32.8	100±15	24.3
															31.25	11.6	42.9	31.3	30.9	100±15	23.6
															62.5	16.8	38.4	21.6	24.8	100±15	21.5
															100	21.7	35.3	17.1	20.8	100±15	20.1
	1702A*	NEC:	2x4	1000††	304.8	45.0	20.4	.009	.23	.200	5.08				155	27.7	32.5	4.7	16.9	100±18	19.0
		CM		1640††	500.0	73.8	33.5			x	x				200	32.0	30.8	3.0	14.7	100±20	19.0
		CEC:								.415	10.54				250	36.4	29.3	—	12.8	100±20	18.0
		CM													350	44.3	27.2	—	9.9	100±22	17.0
	1700R new	NEC:	4	U-1000†††	U-304.8	22.0	10.0	.009	.23	.204	5.18										
		CMR		1000†††	304.8	22.0	10.0														
		CEC:		3000†††	914.4	63.0	28.6														
		CMR FT4																			

*1702A is Simiese version of 1700A.
†1000 ft. put-up not available in Gray. 3000 ft. put-up available in Red, Blue, Purple, White or Light Gray only. 1640 ft. and 3280 ft. put-ups available in Light Gray or Blue only.
††1000 ft. and 1640 ft. put-ups available in Light Gray only.
†††U-1000 ft. and 1000 ft. put-ups not available in Black or Gray. 3000 ft. put-up available in Red, Blue, Purple, White or Light Gray only.
Third party verified to TIA/EIA-568-B.2, Category 5e
Jacket sequentially marked at 2 ft. intervals. • U.S. Patents 5,606,151 and 5,734,126

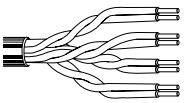
Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Gray, Yellow, Green, Blue, Purple, Natural or Black)



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
	1701A	NEC:	4	U-1000	U-304.8	23.0	10.5	.008	.20	.200	5.08	9.0	3.0	66.0	1	2.0	65.3	63.3	60.8	100±12	20.0
		CMP		1000	304.8	23.0	10.5								4	4.0	56.3	52.3	48.7	100±12	23.0
		CEC:		3000†	914.4	66.0	30.0								8	5.7	51.8	46.1	42.7	100±12	24.5
		CMP FT6													10	6.4	50.3	43.9	40.8	100±12	25.0
															16	8.1	47.3	39.1	36.7	100±12	25.0
															25	10.3	44.3	34.1	32.8	100±15	24.3
															31.25	11.6	42.9	31.3	30.9	100±15	23.6
															62.5	16.8	38.4	21.6	24.8	100±15	21.5
	1703A**	NEC:	2x4	1000††	304.8	48.0	21.8	.008	.20	.195	4.95				100	21.7	35.3	17.1	20.8	100±15	20.1
		CMP								x	x				155	27.7	32.5	4.7	16.9	100±18	19.0
		CEC:								.405	10.29				200	32.0	30.8	3.0	14.7	100±20	19.0
		CMP FT6													250	36.4	29.3	—	12.8	100±20	18.0
															350	44.3	27.2	—	9.9	100±22	17.0

**1703A is Simiese version of 1701A.
†3000 ft. put-up available in Red, Blue, Green, Yellow or Natural only.
††1000 ft. put-up available in Blue or Natural only.
Third party verified to TIA/EIA-568-B.2, Category 5e
Jacket sequentially marked at 2 ft. intervals. • U.S. Patents 5,606,151 and 5,734,126

Plenum • FEP Teflon Insulation • FEP Jacket (Available in Blue or White)



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
	1701LC new	NEC:	4	U-1000	U-304.8	24.0	10.9	.008	.20	.187	4.75	9.0	3.0	66.0	1	2.0	65.3	63.3	60.8	100±12	20.0
		Limited Combustible FHC 25/50		1000	304.8	24.0	10.9								4	4.0	56.3	52.3	48.7	100±12	23.0
		CMP													8	5.7	51.8	46.1	42.7	100±12	24.5
		CEC:													10	6.4	50.3	43.9	40.8	100±12	25.0
		CMP FT6													16	8.1	47.3	39.1	36.7	100±12	25.0
															25	10.3	44.3	34.1	32.8	100±15	24.3
															31.25	11.6	42.9	31.3	30.9	100±15	23.6
															62.5	16.8	38.4	21.6	24.8	100±15	21.5
															100	21.7	35.3	17.1	20.8	100±15	20.1
															155	27.7	32.5	4.7	16.9	100±18	19.0
															200	32.0	30.8	3.0	14.7	100±20	19.0
															250	36.4	29.3	—	12.8	100±20	18.0
															350	44.3	27.2	—	9.9	100±22	17.0

1701LC does not have a rip cord.
Third party verified to TIA/EIA-568-B.2, Category 5e
Jacket sequentially marked at 2 ft. intervals. • U.S. Patents 5,606,151 and 5,734,126

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

Color Codes: DataTwist 350

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Get the Bonded-Pairs Cable Preparation Tool
See page 11.24 for details.
(Part No. 1797B)

Teflon is a DuPont trademark.

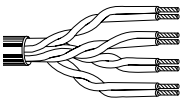
DataTwist® 350 UTP Patch Cable

TIA/EIA-568-B.2, Category 5e
Enhanced Category 5e Bonded-Pair Cables

DATATWIST®

24 AWG Bonded-Pairs Stranded (7x32) Tinned Copper • RJ-45 Compatible • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Black, Yellow, Green, Orange, Blue, Violet or Light Gray)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
	**1752A**	NEC:	4	U-1000	U-304.8	23.0	10.5	.008	.20	.220	5.59	9.0	3.0	66.0	1	2.4	65.3	62.9	60.8	100±12	20.0
		CM		1000	304.8	23.0	10.5								4	4.8	56.3	51.5	48.7	100±12	23.0
		CEC:													8	6.8	51.8	45.0	42.7	100±12	24.5
		CM													10	7.7	50.3	42.6	40.8	100±12	25.0
															16	9.7	47.3	37.5	36.7	100±12	25.0
															25	12.4	44.3	31.9	32.8	100±15	24.3
															31.25	13.9	42.9	29.0	30.9	100±15	23.6
															62.5	20.2	38.4	18.3	24.8	100±15	21.5
															100	26.0	35.3	9.2	20.8	100±15	20.1
															155	33.2	32.5	—	16.9	100±18	19.0
															200	38.4	30.8	—	14.7	100±20	19.0
															250	43.7	29.3	—	12.8	100±20	18.0
															350	53.2	27.2	—	9.9	100±22	17.0

Jacket sequentially marked at 2 ft. intervals.
U.S. Patents 5,606,151; 5,734,126 and 5,763,823
Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

Color Codes: DataTwist 350

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Get the Bonded-Pairs Cable Preparation Tool
See page 11.24 for details.
(Part No. 1797B)

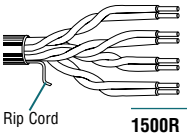
DataTwist® 5e+ UTP Cable

TIA/EIA-568-B.2, Category 5e
Enhanced Category 5e Unbonded-Pair Cables

DATATWIST®

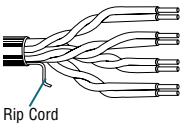
24 AWG Solid Bare Copper • Twisted Pairs • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, White, Blue or Dark Gray)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
 Rip Cord	**1500A** new	NEC: CM CEC: CM FT1	4	1000 A-1000	304.8 A-304.8	24.0 27.0	10.9 12.3	.008	.20	.200	5.08	9.0	3.0	66.0	1	2.0	65.3	63.3	60.8	100±12	20.0
															4	4.0	56.3	52.3	48.7	100±12	23.0
															8	5.7	51.8	46.1	42.7	100±12	24.5
															10	6.4	50.3	43.9	40.8	100±12	25.0
															16	8.1	47.3	39.1	36.7	100±12	25.0
															25	10.3	44.3	34.1	32.8	100±15	24.3
															31.25	11.6	42.9	31.3	30.9	100±15	23.6
															62.5	16.8	38.4	21.6	24.8	100±15	21.5
	1500R new	NEC: CMR CEC: CMR FT4	4	1000 A-1000	304.8 A-304.8	25.0 28.0	11.4 12.7	.008	.20	.204	5.18				100	21.7	35.3	17.1	20.8	100±15	20.1
															155	27.7	32.5	4.7	16.9	100±18	19.0
															200	32.0	30.8	3.0	14.7	100±20	19.0
															250	36.4	29.3	—	12.8	100±20	18.0
															350	44.3	27.2	—	9.9	100±22	17.0

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Gray, Blue or Natural)

 Rip Cord	**1501A** new	NEC: CMP CEC: CMP FT6	4	1000 A-1000	304.8 A-304.8	26.0 27.0	11.8 12.3	.007	.18	.200	5.08	9.0	3.0	66.0	1	2.0	65.3	63.3	60.8	100±12	20.0
															4	4.0	56.3	52.3	48.7	100±12	23.0
															8	5.7	51.8	46.1	42.7	100±12	24.5
															10	6.4	50.3	43.9	40.8	100±12	25.0
															16	8.1	47.3	39.1	36.7	100±12	25.0
															25	10.3	44.3	34.1	32.8	100±15	24.3
															31.25	11.6	42.9	31.3	30.9	100±15	23.6
															62.5	16.8	38.4	21.6	24.8	100±15	21.5
															100	21.7	35.3	17.1	20.8	100±15	20.1
															155	27.7	32.5	4.7	16.9	100±18	19.0
															200	32.0	30.8	3.0	14.7	100±20	19.0
															250	36.4	29.3	—	12.8	100±20	18.0
															350	44.3	27.2	—	9.9	100±22	17.0

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

Color Codes: DataTwist 5e+

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Teflon is a DuPont trademark.

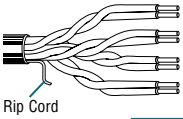
DataTwist® 5e UTP Cable

TIA/EIA-568-B.2, Category 5e Unbonded-Pair Cables

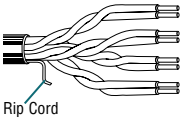
DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
24 AWG Solid Bare Copper • Twisted Pairs • Rip Cord • See Color Code Chart (below)																					
Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Dark Gray or Blue)																					
Rip Cord	**1588A**	NEC:	2	U-1000	U-304.8	14.0	6.4	.008	.20	.183	4.65	9.38	5.0	330	1	2.0	62.3	60	60.8	100±15	20.0
		CM		1000	304.8	15.0	6.8								10	6.5	47.3	41	40.8	100±15	25.0
		CEC:		1640†	500.0	24.6	11.2								16	8.2	44.3	36	36.7	100±15	25.0
		CM													31.25	11.7	39.9	28	30.9	100±15	23.6
															62.5	17.0	35.5	19	24.8	100±15	21.5
															100	22.0	32.3	11	20.8	100±15	20.1
	1588R	NEC:	2	U-1000††	U-304.8	14.0	6.4														
		CMR		1000††	304.8	15.0	6.8														
		CEC:																			
		CMR FT4																			

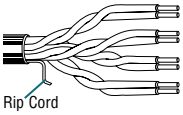
†1640 ft. put-up available in Dark Gray only.
††U-1000 ft. and 1000 ft. put-ups available in Blue only
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in White, Black, Dark Gray, Blue, Red, Orange, Yellow, Green or Pink)																					
 Rip Cord	**1583A**	NEC:	4	U-1000	U-304.8	21.0	9.5	.008	.20	.214	5.44	9.38	5.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0
		CM		1000	304.8	21.0	9.5								4	4.1	53.3	49.0	48.7	100±15	23.0
		CEC:		1640†	500.0	34.4	15.7								10	6.5	47.3	41.0	40.8	100±15	25.0
		CM		3000†	914.4	63.0	28.6								16	8.2	44.3	36.0	36.7	100±15	25.0
															31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5
															100	22.0	32.3	11.0	20.8	100±15	20.1
															200	32.0	27.8	1.0	14.7	100±25	15.0
	1583R	NEC:	4	U-1000††	U-304.8	22.0	10.0														
		CMR		1000††	304.8	22.0	10.0														
		CEC:		3000††	914.4	66.0	30.0														
		CMR FT4																			

†1640 ft. put-up available in Dark Gray or Blue only. 3000 ft. put-up available in Dark Gray, White or Blue only.
††U-1000 ft. and 1000 ft. put-ups not available in Black. 3000 ft. put-ups available in Dark Gray, White or Blue only.
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
Non-Plenum • Polyolefin Insulation • Fluorescent Pink PVC Jacket																					
DataBrite®  Rip Cord	**1583B**	NEC:	4	U-1000	U-304.8	21.0	9.5	.008	.20	.214	5.44	9.38	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0
		CMR		1000	304.8	21.0	9.5								4	4.1	53.3	49.0	48.7	100±15	23.0
		CEC:													10	6.5	47.3	41.0	40.8	100±15	25.0
		CMR FT4													16	8.2	44.3	36.0	36.7	100±15	25.0
															31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5
															100	22.0	32.3	11.0	20.8	100±15	20.1
															200	32.0	27.8	1.0	14.7	100±25	15.0

Third party verified to TIA/EIA-568-B.2, Category 5e

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
Non-Plenum • Polyolefin Insulation • UV Resistant PVC Jacket (Available in Gray, White or Ivory)																					
Indoor/Outdoor  Rip Cord	**1594A** new	NEC:	4	U-1000	U-304.8	23.0	10.5	.008	.20	.215	5.46	9.38	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0
		CMR/CMX													4	4.1	53.3	49.0	48.7	100±15	23.0
		CEC:													10	6.5	47.3	41.0	40.8	100±15	25.0
		CMR/CMX													16	8.2	44.3	36.0	36.7	100±15	25.0
		FT4													31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5
															100	22.0	32.3	11.0	20.8	100±15	20.1
															200	32.0	27.8	1.0	14.7	100±25	15.0

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

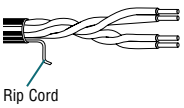
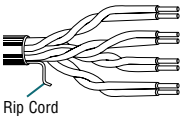
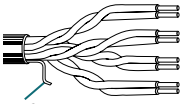
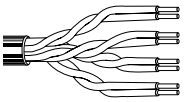
Color Codes: DataTwist 5e

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

DataTwist® 5e UTP Cable

TIA/EIA-568-B.2, Category 5e Unbonded-Pair Cables

DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
24 AWG Solid Bare Copper • Twisted Pairs • Rip Cord • See Color Code Chart (below)																					
Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Natural, Blue, Red, Orange, Yellow, Green, Gray, Black or Pink)																					
 Rip Cord	**1590A**	NEC: CMP CEC: CMP FT6	2	1000* 3000*	304.8 914.6	16.0 45.0	7.3 20.5	.007	.18	.175	4.44	9.38	5.0	330	1	2.0	62.3	60	60.8	100±15	20.0
															10	6.5	47.3	41	40.8	100±15	25.0
															16	8.2	44.3	36	36.7	100±15	25.0
															31.25	11.7	39.9	28	30.9	100±15	23.6
															62.5	17.0	35.5	19	24.8	100±15	21.5
															100	22.0	32.3	11	20.8	100±15	20.1
*1000 ft. put-up available in Natural or Blue only. 3000 ft. put-up available in Natural only.																					
 Rip Cord	**1585A**	NEC: CMP CEC: CMP FT6	4	U-1000 1000 3000†	U-304.8 304.8 914.6	23.0 23.0 69.0	10.5 10.5 31.4	.007	.18	.200	5.08	9.38	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0
															4	4.1	53.3	49.0	48.7	100±15	23.0
															10	6.5	47.3	41.0	40.8	100±15	25.0
															16	8.2	44.3	36.0	36.7	100±15	25.0
															31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5
															100	22.0	32.3	11.0	20.8	100±15	20.1
															200	32.0	27.8	1.0	14.7	100±25	15.0
†3000 ft. put-up available in Natural or Blue only. Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e																					
Plenum • FEP Teflon Insulation • Fluorescent Pink Flamarrest Jacket																					
DataBrite®  Rip Cord	**1585B**	NEC: CMP CEC: CMP FT6	4	1000	304.8	24.0	10.9	.007	.18	.200	5.08	9.38	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0
															4	4.1	53.3	49.0	48.7	100±15	23.0
															10	6.5	47.3	41.0	40.8	100±15	25.0
															16	8.2	44.3	36.0	36.7	100±15	25.0
															31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5
															100	22.0	32.3	11.0	20.8	100±15	20.1
															200	32.0	27.8	1.0	14.7	100±25	15.0
Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e																					
Plenum • FEP Teflon Insulation • FEP Jacket (Available in Blue or White)																					
	**1585LC**** new	NEC: Limited Combustible FHC 25/50 CMP CEC: CMP FT6	4	U-1000 1000	U-304.8 304.8	23.0 23.0	10.5 10.5	.007	.18	.184	4.67	9.38	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0
															4	4.1	53.3	49.0	48.7	100±15	23.0
															10	6.5	47.3	41.0	40.8	100±15	25.0
															16	8.2	44.3	36.0	36.7	100±15	25.0
															31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5
															100	22.0	32.3	11.0	20.8	100±15	20.1
															200	32.0	27.8	1.0	14.7	100±25	15.0
**1585LC does not have a rip cord. Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e																					

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

Color Codes: DataTwist 5e

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

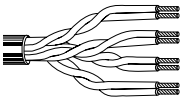
Teflon is a DuPont trademark.

DataTwist® 5e UTP Patch Cable

TIA/EIA-568-B.2, Category 5e Unbonded-Pair Cables

DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω/ 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										
24 AWG Stranded (7x32) Bare Copper • Twisted Pairs • RJ-45 Compatible* • See Color Code Chart (below)																					
Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Violet, Light Gray, White or Black)																					
	1592A new	NEC:	4	U-1000	U-304.8	23.0	10.5	.008	.20	.210	5.33	9.38	3.0	330	1	2.5	62.3	—	60.8	100±15	20.0
		CM		1000	304.8	23.0	10.5								4	4.9	53.3	—	48.7	100±15	23.0
		CEC:													10	7.8	47.3	—	40.8	100±15	25.0
		CM FT1													16	9.9	44.3	—	36.7	100±15	25.0
															31.25	14.1	39.9	—	30.9	100±15	23.6
															62.5	20.4	35.4	—	24.8	100±15	21.5
															100	26.4	32.3	—	20.8	100±15	20.1
															200	38.9	27.8	—	15.0	100±25	15.0



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

*RJ-45 compatible for either T568-A or T568-B configurations.

Color Codes: DataTwist 5e

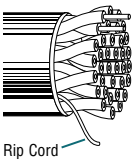
Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

DataTwist® 5 UTP Cable

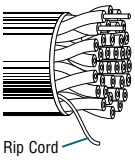
TIA/EIA-568-B.2, Category 5 Unbonded-Pair Cables

DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω/ 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Fitted Input Imped. (Ω)	Min. SRL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm								
24 AWG Solid Bare Copper • Twisted Pairs • Rip Cord • See Color Code Chart (below)																			
Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Light Gray or Blue)																			
	1864A	NEC: CMR CEC: CMR FT4	25	1000	304.8	141.0	64.1	.009	.23	.556	14.12	9.38	5.0	330	1	2.0	62.3	100±15	23.0
															10	6.5	47.3	100±15	23.0
															16	8.2	44.3	100±15	23.0
															31.25	11.7	39.9	100±15	21.1
															62.5	17.0	35.4	100±15	18.0
															100	22.0	32.3	100±15	16.0
Plenum • FEP Teflon® Insulation • FEP Jacket (Available in Blue Tint or White Tint)																			
	1871A new	NEC: CMP	25	1000	304.8	132.0	60.0	.008	.20	.435	11.05	9.38	5.0	330	1	2.0	62.3	100±15	23.0
															10	6.5	47.3	100±15	23.0
															16	8.2	44.3	100±15	23.0
															31.25	11.7	39.9	100±15	21.1
															62.5	17.0	35.4	100±15	18.0
															100	22.0	32.3	100±15	16.0



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5

DCR = DC Resistance • NEXT = Near-end Crosstalk • PSUM = Power Sum • SRL = Structural Return Loss • UTP = Unshielded Twisted Pair(s)

Color Codes: DataTwist 5

Pair No.	Color Combination
1	White & Blue
2	White & Orange
3	White & Green
4	White & Brown
5	White & Gray
6	Red & Blue
7	Red & Orange
8	Red & Green
9	Red & Brown
10	Red & Gray
11	Black & Blue
12	Black & Orange
13	Black & Green

Pair No.	Color Combination
14	Black & Brown
15	Black & Gray
16	Yellow & Blue
17	Yellow & Orange
18	Yellow & Green
19	Yellow & Brown
20	Yellow & Gray
21	Purple & Blue
22	Purple & Orange
23	Purple & Green
24	Purple & Brown
25	Purple & Gray

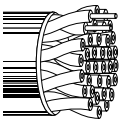
Teflon is a DuPont trademark.

DataTwist® 3 UTP Cable

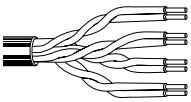
TIA/EIA-568-B.2, Category 3 Unbonded-Pair Cables

DATATWIST®

24 AWG Solid Bare Copper • Twisted Pairs • See Color Code Chart (below)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD		Nominal DCR (Cond.)	Nom. Imped. (Ω)	Nominal Capacitance		Freq. (MHz)	Min. NEXT (dB)	Maximum Attenuation	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm			* pF/Ft.	* pF/m			(dB/ 1000′)	(dB/ 100m)
Non-Plenum • Semi-rigid PVC Insulation • Gray PVC Jacket																			
	**1227A1**	NEC: CMR	2	U-1000	U-304.8	14.0	6.4	.007	.18	.170	4.32	28.0Ω/M′ 91.8Ω/km	100	19.0	62.3	1 4 10 16	41.0 32.0 26.0 23.0	7.8 17.0 30.0 40.0	2.56 5.58 9.71 13.10
	1229A1	NEC: CMR	4	U-1000	U-304.8	22.0	10.0	.006	.15	.200	5.08								
	1232A1	NEC: CMR	25†	1000	304.8	102.0	46.4	.006	.15	.390	9.91								

NEC Article 800
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 3

Plenum • Low-Smoke PVC Insulation • White Low-Smoke PVC Jacket																			
	1243A2	NEC: CMP	2	U-1000	U-304.8	12.0	5.5	.007	.18	.160	4.06	28.0Ω/M′ 91.8Ω/km	100	19.0	62.3	1 4 10 16	41.0 32.0 26.0 23.0	7.8 17.0 30.0 40.0	2.56 5.58 9.71 13.10
	**1245A2**	NEC: CMP	4	U-1000	U-304.8	22.0	10.0	.007	.18	.190	4.83								

NEC Article 800
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 3

DCR = DC Resistance • NEXT = Near-end Crosstalk • UTP = Unshielded Twisted Pair(s)

*Capacitance between conductors
† 25-pair NEXT is Power Sum tested.

Color Codes: DataTwist 3

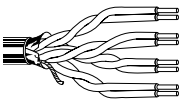
Pair No.	Color Combination
1	White/Blue Stripe & Blue/White Stripe
2	White/Orange Stripe & Orange/White Stripe
3	White/Green Stripe & Green/White Stripe
4	White/Brown Stripe & Brown/White Stripe
5	White/Gray Stripe & Gray/White Stripe
6	Red/Blue Stripe & Blue/Red Stripe
7	Red/Orange Stripe & Orange/Red Stripe
8	Red/Green Stripe & Green/Red Stripe
9	Red/Brown Stripe & Brown/Red Stripe
10	Red/Gray Stripe & Gray/Red Stripe
11	Black/Blue Stripe & Blue/Black Stripe
12	Black/Orange Stripe & Orange/Black Stripe
13	Black/Green Stripe & Green/Black Stripe

Pair No.	Color Combination
14	Black/Brown Stripe & Brown/Black Stripe
15	Black/Gray Stripe & Gray/Black Stripe
16	Yellow/Blue Stripe & Blue/Yellow Stripe
17	Yellow/Orange Stripe & Orange/Yellow Stripe
18	Yellow/Green Stripe & Green/Yellow Stripe
19	Yellow/Brown Stripe & Brown/Yellow Stripe
20	Yellow/Gray Stripe & Gray/Yellow Stripe
21	Purple/Blue Stripe & Blue/Purple Stripe
22	Purple/Orange Stripe & Orange/Purple Stripe
23	Purple/Green Stripe & Green/Purple Stripe
24	Purple/Brown Stripe & Brown/Purple Stripe
25	Purple/Gray Stripe & Gray/Purple Stripe

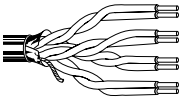
DataTwist® 5e ScTP Cable

TIA/EIA-568-B.2, Category 5e Unbonded-Pair Cables

DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/ 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
24 AWG Solid Bare Copper • Twisted Pairs • Overall Beldfoil® Shield • Drain Wire* • RJ-45 Compatible • See Color Code Chart (below)																					
Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue or Light Gray)																					
	**1533R** new	NEC: CMR CEC: CMR FT4	4	1000 A-1000 1640†	304.8 A-304.8 500.0	34.0 35.0 49.2	15.5 15.9 22.4	.010	.25	.260	6.60	9.38	5.0	330	1	2.0	62.3	60	60.8	100±15	20.0
															4	4.1	53.3	49	48.7	100±15	23.0
															8	5.8	48.8	43	42.7	100±15	24.5
															10	6.5	47.3	41	40.8	100±15	25.0
															16	8.2	44.3	36	36.7	100±15	25.0
															20	9.3	42.8	34	34.7	100±15	25.0
															25	10.4	41.3	31	32.8	100±15	24.3
															31.25	11.7	39.9	28	30.9	100±15	23.6
															65.5	17.0	35.4	19	24.8	100±15	21.5
															100	22.0	32.3	11	20.8	100±15	20.1

†1640 ft. put-up available in Light Gray only.
Shield is bonded to jacket inner wall for electrical stability.
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Blue, Gray or Natural)																					
	**1533P** new	NEC: CMP CEC: CMP FT6	4	1000 A-1000	304.8 A-304.8	34.0 36.0	15.5 16.4	.010	.25	.242	6.15	9.38	5.0	330	1	2.0	62.3	60	60.8	100±15	20.0
															4	4.1	53.3	49	48.7	100±15	23.0
															8	5.8	48.8	43	42.7	100±15	24.5
															10	6.5	47.3	41	40.8	100±15	25.0
															16	8.2	44.3	36	36.7	100±15	25.0
															20	9.3	42.8	34	34.7	100±15	25.0
															25	10.4	41.3	31	32.8	100±15	24.3
															31.25	11.7	39.9	28	30.9	100±15	23.6
															65.5	17.0	35.4	19	24.8	100±15	21.5
															100	22.0	32.3	11	20.8	100±15	20.1

Shield is bonded to jacket inner wall for electrical stability.
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss
ScTP = Screened (Overall Foil) Twisted Pair(s)

*Drain wire is 24 AWG stranded tinned copper.

Color Codes: DataTwist 5e

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Teflon is a DuPont trademark.

DataTwist® 5 ScTP Cable

TIA/EIA-568-B.2, Category 5 Unbonded-Pair Cables

DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω/ 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Input Imped. (Ω)	Min. SRL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm								
24 AWG Solid Bare Copper • Twisted Pairs • Overall Beldfoil® Shield • Drain Wire* • RJ-45 Compatible • See Color Code Chart (below)																			
Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Purple or Light Gray)																			
	1624R	NEC:	4	1000	304.8	34.0	15.5	.011	.27	.250	6.35	9.38	5.0	330	1	2.0	62.0	100±15	23.0
		CMR		A-1000	A-304.8	35.0	15.9								4	4.1	53.0	100±15	23.0
		CEC:		1640†	500.0	54.1	24.7								8	5.8	48.0	100±15	23.0
		CMR FT4													10	6.5	47.0	100±15	23.0
															16	8.2	44.0	100±15	23.0
															20	9.3	42.0	100±15	23.0
															25	10.4	41.0	100±15	22.0
															31.25	11.7	40.0	100±15	21.0
															65.5	17.0	35.0	100±15	18.0
															100	22.0	32.0	100±15	16.0
Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Blue, Violet, Gray or Natural)																			
	1624P	NEC:	4	1000	304.8	34.0	15.5	.011	.27	.235	5.97	9.38	5.0	330	1	2.0	62.0	100±15	23.0
		CMP		A-1000	A-304.8	36.0	16.4								4	4.1	53.0	100±15	23.0
		CEC:													8	5.8	48.0	100±15	23.0
		CMP FT6													10	6.5	47.0	100±15	23.0
															16	8.2	44.0	100±15	23.0
															20	9.3	42.0	100±15	23.0
															25	10.4	41.0	100±15	22.0
															31.25	11.7	40.0	100±15	21.0
															65.5	17.0	35.0	100±15	18.0
															100	22.0	32.0	100±15	16.0

†1640 ft. put-up available in Light Gray only.
Shield is bonded to jacket inner wall for electrical stability.
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5

Shield is bonded to jacket inner wall for electrical stability.
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5

DCR = DC Resistance • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • ScTP = Screened (Overall Foil) Twisted Pair(s)

*Drain wire is 24 AWG stranded tinned copper.

Color Codes: DataTwist 5

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

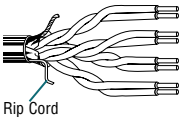
Teflon is a DuPont trademark.

DataTwist® 5 ScTP Cable

TIA/EIA-568-TSB 36, Category 5 Unbonded-Pair Cables

DATATWIST®

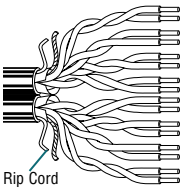
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω/ 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. NEXT (dB)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm								
24 AWG Solid Bare Copper • Twisted Pairs • Overall Beldfoil® Shield • Drain Wire* • Rip Cord • See Color Code Chart (below)																			
Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Light Gray or Blue)																			
	1633A	NEC:	4	U-1000	U-304.8	31.0	14.1	.012	.31	.260	6.60	9.38	5.0	330	4	4.1	53.0	100±15	N/A
		CM		1000	304.8	32.0	14.5								10	6.5	47.0	100±15	N/A
		CEC:		1640	500.0	49.2	22.4								16	8.2	44.0	100±15	N/A
		CM		3280†	1000.0	101.7	46.2								31.25	11.7	40.0	100±15	N/A
															62.5	17.0	35.0	100±15	N/A
															100	22.0	32.0	100±15	N/A



†3280 ft. put-up available in Light Gray only.
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-TSB 36, Category 5

Non-Plenum • Dual • Polyolefin Insulation • Gray PVC Jacket with Polarity Rib

1668A	NEC:	2x4	1000	304.8	70.0	31.8	.012	.31	.518	13.16	9.38	5.0	330	4	4.1	53.0	100±15	N/A
	CM		1640	500.0	109.9	49.9			x	x				10	6.5	47.0	100±15	N/A
	CEC:								.254	6.45				16	8.2	44.0	100±15	N/A
	CM													31.25	11.7	40.0	100±15	N/A
														62.5	17.0	35.0	100±15	N/A
														100	22.0	32.0	100±15	N/A



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-TSB 36, Category 5 (Leg 1 & 2)

DCR = DC Resistance • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • ScTP = Screened (Overall Foil) Twisted Pair(s)

*Drain wire is 24 AWG stranded tinned copper.

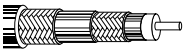
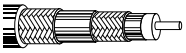
Color Codes: DataTwist 5

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

IEEE 802.3 • ISO/IEC 8802.3 10Base2 and 10Base5

Trunk Cables — Thinnet and Thicknet

DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Thinnet 10Base2 • 20 AWG Stranded (19x32) .037″ Tinned Copper Conductor • Duobond® II + 93% Tinned Copper Braid Shield																			
Non-Plenum • Ethernet • Foam Polyethylene Insulation • Gray PVC Jacket																			
UL AWM	**9907**	NEC:	500	152.4	12.5	5.7	20 AWG	.102	2.59	Duobond II	.185	4.70	50	80%	25.4	83.3	1	.43	1.4
Style 1354		CL2, CM	U-1000	U-304.8	25.0	11.4	(19x32)			+ 93%							10	1.30	4.3
(30V 80°C)		CEC:	1000	304.8	25.0	11.4	.037″			Tinned							50	2.90	9.5
		CM	1640	500.0	39.4	17.9	Tinned			Copper							100	4.20	13.8
			U-2500	U-762.0	60.0	27.3	Copper			Braid		For Plenum versions of 9907, see 89907 or 82907.					200	6.10	20.0
			2500	762.0	62.5	28.4	8.8Ω/M′			5.8Ω/M′							400	8.90	29.2
			3280	1000.0	82.0	37.3	28.9Ω/km			19.0Ω/km							700	12.10	39.7
																	900	13.90	45.6
DEC Part No. 17-01248-00																	1000	14.80	48.6
Plenum Ethernet • Foam FEP Insulation • Natural Flamarrest® Jacket																			
150V 75°C	**82907**	NEC:	500†	152.4	12.5	5.7	20 AWG	.095	2.41	Duobond II	.160	4.06	50	80%	25.4	83.3	1	.43	1.4
		CL2P,	U-1000	U-304.8	23.0	10.5	(19x32)			+ 93%							10	1.30	4.3
		CMP	1000†	304.8	24.0	10.9	.037″			Tinned							50	2.90	9.5
		CEC:	2500†	762.0	57.5	26.1	Tinned			Copper							100	4.20	13.8
		CMP FT6					Copper			Braid							200	6.10	20.0
							8.8Ω/M′			5.8Ω/M′							400	9.20	30.2
							28.9Ω/km′			19.0Ω/km							700	12.90	42.3
																	900	15.00	49.2
																	1000	16.00	52.5
Plenum Ethernet • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
150V 150°C	**89907†**	NEC:	500†	152.4	13.0	5.9	20 AWG	.095	2.41	Duobond II	.160	4.06	50	80%	25.4	83.3	1	.43	1.4
		CL2P,	1000†	304.8	24.0	10.9	(19x32)			+ 93%							10	1.30	4.3
		CMP	2500†	762.0	60.0	27.3	.037″			Tinned							50	2.90	9.5
		CEC:					Tinned			Copper							100	4.20	13.8
		CMP FT6					Copper			Braid							200	6.10	20.0
							8.8Ω/M			5.8Ω/M′							400	9.20	30.2
							28.9Ω/km			19.0Ω/km							700	12.90	42.3
DEC Part No. 17-01246-00																	900	15.00	49.2
Suitable for Outdoor and Direct Burial applications.																	1000	16.00	52.5
Thicknet 10Base5 • 12 AWG Solid .086″ Bare Copper Conductor • Duobond IV* Quad Shield																			
Non-Plenum • Ethernet • Foam Polyethylene Insulation • Yellow PVC Jacket																			
UL AWM	**9880**	NEC:	500	152.4	66.0	30.0	12 AWG	.243	6.17	Duobond IV	.405	10.29	50	78%	26.0	85.0	1	.19	.62
Style 1478		CL2, CM	1000	304.8	131.0	59.5	(solid)			(Duobond II							5	.37	1.21
(30V 60°C)		CEC:	1640	500.0	219.8	99.9	.086″			+ 94%							10	.52	1.71
		CM					Bare Copper			TC Braid							50	1.20	3.94
							1.42Ω/M′			+ Duofoil®		For Plenum version of 9880, see 89880.					100	1.70	5.58
							4.66Ω/km			+ 90%							200	2.55	8.37
										TC Braid)							400	3.90	12.80
										1.52Ω/M′							700	5.50	18.10
DEC Part No. 17-00451-00										5.0Ω/km							900	6.50	21.30
Ring-band stripes marked every 2.5 meters to aid users in tap placement.																	1000	6.90	22.60
Plenum Ethernet • Foam FEP Insulation • Orange Fluorocopolymer Jacket																			
150°C	**89880**	NEC:	500†	152.4	67.0	30.5	12 AWG	.245	6.22	Duobond IV	.375	9.53	50	78%	26.0	85.0	1	.18	.59
		CL2P,	1000†	304.8	134.0	60.9	(solid)			(Duobond II							5	.37	1.21
		CMP	1640†	500.0	224.7	102.1	.086″			+ 90%							10	.52	1.71
		CEC:					Bare Copper			TC Braid							50	1.15	3.77
		CMP FT6					1.42Ω/M′			+ Duofoil							100	1.65	5.41
							4.66Ω/km			+ 90%							200	2.45	8.04
										TC Braid)							400	3.80	12.50
										1.52Ω/M′							700	5.60	18.40
DEC Part No. 17-00324-00										5.0Ω/km							900	6.80	22.30
Suitable for Outdoor and Direct Burial applications.																	1000	7.20	23.60
Ring-band stripes marked every 2.5 meters to aid users in tap placement.																			

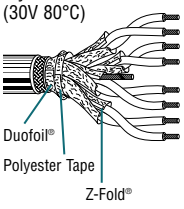
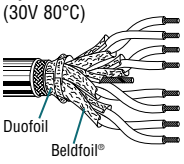
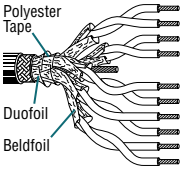
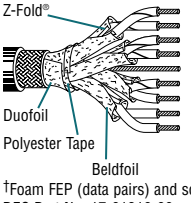
DCR = DC Resistance • TC = Tinned Copper

*Duobond IV = Duobond II + 94% tinned copper braid + Duofoil® + 90% tinned copper braid.
(Plenum version is Duobond II + 90% tinned copper braid + Duofoil + 90% tinned copper braid.)
†Spools are one piece, but length may vary ±10% from length shown.

IEEE 802.3 • ISO/IEC 8802.3 10Base5

Transceiver Cables

DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Conductor (stranding) Nom. DCR	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Drain Wire	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance * pF/Ft.	Nominal Capacitance * pF/m	Nominal Capacitance ** pF/Ft.	Nominal Capacitance ** pF/m
28 and 24 AWG Stranded Tinned Copper • Twisted Pairs • Overall Polyester Isolation Tape + Duofoil® + TC Braid Shield • Drain Wire																			
Non-Plenum • Polypropylene Insulation • Light Gray PVC Jacket																			
UL AWM Style 2919 (30V 80°C) 	**9903**	NEC: CL2, CMG CEC: CMG FT4	4	Gray/White, Yellow/Orange, Green/Blue, Black/Red	500 1000	152.4 304.8	21.5 43.0	9.8 19.5	3 Pair: 28 AWG (7x36) TC 65.0Ω/M′ 213.0Ω/km 1 Pair: 24 AWG (7x32) TC 24.0Ω/M′ 78.7Ω/km Each Pair Individually Beldfoil® Shielded	Polyester Isolation Tape + Duofoil + 92% Tinned Copper Braid 2.9Ω/M′ 9.5Ω/km	.250	6.35	24 AWG Stranded Tinned Copper	78◆	66%	19.7	64.6	34.8	114.2
◆3 Pairs																			
20 AWG Stranded (7x28) Tinned Copper • Twisted Pairs • Overall Polyester Isolation Tape + Duofoil + TC Braid Shield • Drain Wire																			
Non-Plenum • Datalene® Insulation • Light Gray PVC Jacket																			
UL AWM Style 2919 (30V 80°C) 	**9901**	NEC: CL2, CM CEC: CM	4	Gray/White, Yellow/Orange, Blue/Green, Red/Black	500 1000	152.4 304.8	53.5 106.0	24.3 48.2	20 AWG (7x28) Tinned Copper Each Pair Individually Beldfoil Shielded 10.5Ω/M′ 34.4Ω/km	Polyester Isolation Tape + Duofoil + 95% Tinned Copper Braid 2.0Ω/M′ 6.6Ω/km	.415	10.54	22 AWG Stranded Tinned Copper	78	78%	16.7	54.8	29.5	96.8
DEC Part No. 17-01320-00															For Plenum version of 9901, see 89901.				
UL AWM Style 2919 (30V 80°C) 	**9902**	NEC: CL2, CM CEC: CM	5	Gray/White, Yellow/Orange, Blue/Green, Red/Brown, Red/Black	500 1000	152.4 304.8	76.5 145.0	34.8 65.9	20 AWG (7x28) Tinned Copper Each Pair Individually Beldfoil Shielded 10.5Ω/M′ 34.4Ω/km	Polyester Isolation Tape + Duofoil + 95% Tinned Copper Braid 1.65Ω/M′ 5.4Ω/km	.500	12.70	20 AWG Stranded Tinned Copper	78	78%	16.7	54.8	29.5	96.8
Plenum • FEP Teflon® Insulation† • Light Gray Fluorocopolymer (PVDF) Jacket																			
150°C 	**89901**	NEC: CMP CEC: CMP FT6	4	Gray/White, Yellow/Orange, Blue/Green, Red/Black	500† 1000†	152.4 304.8	51.5 104.0	23.4 47.3	20 AWG (7x28) Tinned Copper Each Pair Individually Beldfoil Shielded 10.5Ω/M′ 34.4Ω/km	Polyester Isolation Tape + Duofoil + 95% Tinned Copper Braid 1.5Ω/M′ 4.9Ω/km	.370	9.40	22 AWG Stranded Tinned Copper	78	78%	16.7	54.8	29.5	96.8
†Foam FEP (data pairs) and solid FEP (power pair). DEC Part No. 17-01319-00 Suitable for Outdoor and Direct Burial applications.																			

DCR = DC Resistance • TC = Tinned Copper

* Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary ±10% from length shown.

Teflon is a DuPont trademark.

IEEE 802.4 MAP & Mini-MAP • IEEE 802.7

Broadband Coaxial Cables

DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-6/U Type • 18 AWG Solid Bare Copper-covered Steel • Duobond® IV* Quad Shield																			
Non-Plenum • Foam Polyethylene Insulation • Gray PVC Jacket																			
	3131A	NEC: CL2R, CMR CEC: CMR FT4	1000† 2500	304.8 762.2	41.0 97.5	18.6 44.3	18 AWG (solid) .040″ Bare Copper Covered Steel 28.0Ω/M′ 91.8Ω/km	.180	4.57	Duobond IV Quad Shield 3.6Ω/M′ 11.8Ω/km	.298	7.57	75	82%	16.2	53.1	1 2 5 10 20 50 100 200 300 400	.35 .38 .45 .59 .86 1.37 1.97 2.82 3.48 4.04	1.2 1.3 1.5 1.9 2.8 4.5 6.5 9.3 11.4 13.3
Tap marks every 2.6 meters to aid users in installation.													Sweep tested 5 MHz to 400 MHz. CPE jacket optional.						
Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
150°C	**3132A**	NEC: CMP CEC: CMP FT6	1000†	304.8	36.0	16.4	18 AWG (solid) .040″ Bare Copper Covered Steel 28.0Ω/M′ 91.8Ω/km	.170	4.32	Duobond IV Quad Shield 3.6Ω/M′ 11.8Ω/km	.274	6.96	75	82%	16.3	53.5	1 2 5 10 20 50 100 200 300 400	.36 .38 .50 .65 .95 1.50 2.12 2.99 3.66 4.23	1.2 1.3 1.6 2.1 3.1 4.9 7.0 9.8 12.0 13.9
Tap marks every 2.6 meters to aid users in installation. Suitable for Outdoor and Direct Burial applications.													Sweep tested 5 MHz to 400 MHz.						
RG-11/U Type • 14 AWG Solid Bare Copper-covered Steel • Duobond IV* Quad Shield																			
Non-Plenum • Foam Polyethylene Insulation • Gray PVC Jacket																			
	3094A	NEC: CL2R, CMR CEC: CMR FT4	500† 1000† 2000	152.4 304.8 609.6	31.0 62.0 120.0	14.1 28.2 54.5	14 AWG (solid) .064″ Bare Copper Covered Steel 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond IV Quad Shield 1.8Ω/M′ 5.9Ω/km	.407	10.34	75	82%	16.2	53.1	1 2 5 10 20 50 100 200 300 400	.30 .32 .40 60 .71 .90 1.20 1.70 2.08 2.40	1.0 1.0 1.3 2.0 2.3 3.0 3.9 5.9 6.8 7.9
Tap marks every 2.6 meters to aid users in installation.													Sweep tested 5 MHz to 400 MHz. CPE jacket optional.						
Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
150°C	**3095A**	NEC: CMP, PLTC CEC: CMP FT6	1000†	304.8	76.0	34.5	14 AWG (solid) .064″ Bare Copper Covered Steel 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond IV Quad Shield 1.8Ω/M′ 5.9Ω/km	.387	9.83	75	82%	16.5	54.1	1 2 5 10 20 50 100 200 300 400	.20 .22 .28 .39 .60 1.20 1.70 2.50 3.04 3.50	.7 .7 .9 1.3 2.0 3.9 5.6 8.2 10.0 11.5
Tap marks every 2.6 meters to aid users in installation. Suitable for Outdoor and Direct Burial applications.													Sweep tested 5 MHz to 400 MHz.						

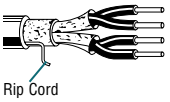
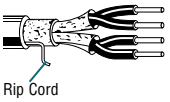
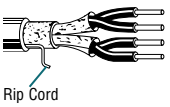
DCR = DC Resistance

*Duobond IV Quad Shield = Duobond + 60% aluminum braid + Duofoil® + 40% aluminum braid.
†Spools are one piece, but length may vary ±10% from length shown.

IEEE 802.5; ISO/IEC 8802.5

IBM Cabling System
Types 1A and 1

DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Nominal OD Inch	Nominal OD mm	AWG (stranding) Diameter Nom. DCR	Shielding	Nom. Imped. (Ω)	Nominal Capacitance * pF/Ft.	Nominal Capacitance * pF/m	Freq. (MHz)	Maximum Attenuation (dB/ 1000′)	Maximum Attenuation (dB/ 100m)	Min. NEXT (dB/ 1000′)	Min. NEXT (dB/ 100m)
IBM Type 1A • 22 AWG Solid Bare Copper • Each Pair Individually Beldfoil® Shielded + Overall 65% TC Braid Shield • Rip Cord																			
Non-Plenum • Flame-retardant Foam Polyethylene Insulation • Black PVC Jacket																			
IBM Part No.	**9688**	NEC:	2	500	152.4	26.5	12.0	.296	7.52	22	100%	150	8.5	27.9	4	6.7	2.2	58.0	58.0
4716748		MPG,		1000	304.8	50.0	22.7	x	x	(solid)	Beldfoil				16	13.4	4.4	50.4	50.4
33G2772		CMG		2000	609.8	102.0	46.3	.431	10.95	BC	Each Pair				100	37.5	12.3	38.5	38.5
		CEC:		3600	1097.6	190.8	86.5			.026″	+ 65%				300	65.2	21.4	31.3	31.3
		MPG,								16.7Ω/M′	TC Braid				100††	40.8	13.4	—	—
		CMG FT4								54.7Ω/km	Overall				300††	71.0	23.3	—	—
															600††	100.3	32.9	—	—
Rip Cord																			
Plenum • Foam FEP Teflon® Insulation • Black Flamarrest® Jacket																			
IBM Part No.	**82688**	NEC:	2	500†	152.4	25.0	11.4	.248	6.30	22	100%	150	8.5	27.9	4	6.7	2.2	58.0	58.0
4716749		MPP,		1000†	304.8	47.0	21.4	x	x	(solid)	Beldfoil				16	13.4	4.4	50.4	50.4
33G8220		CMP						.348	8.84	BC	Each Pair				100	37.5	12.3	38.5	38.5
		CEC:								.026″	+ 65%				300	65.2	21.4	31.3	31.3
		MPP,								16.7Ω/M′	TC Braid				100††	40.8	13.4	—	—
		CMP FT6								54.7Ω/km	Overall				300††	71.0	23.3	—	—
															600††	100.3	32.9	—	—
Rip Cord																			
IBM Type 1 • 22 AWG Solid Bare Copper • Each Pair Individually Beldfoil Shielded + Overall 65% TC Braid Shield • Rip Cord																			
Non-Plenum • Flame-retardant Foam Polyethylene Insulation • Black PVC Jacket																			
IBM Part No.	**1634A**	NEC:	2	1000	304.8	50.0	22.7	.296	7.52	22	100%	150	8.5	27.9	4	6.7	2.2	58.0	58.0
4716748		MPG,		2000	609.8	102.0	46.4	x	x	(solid)	Beldfoil				16	13.4	4.4	40.0	40.0
		CMG		3600	1097.6	190.8	86.7	.431	10.95	BC	Each Pair								
		CEC:								.026″	+ 65%								
		MPG,								16.7Ω/M′	TC Braid								
		CMG FT4								54.7Ω/km	Overall								
Rip Cord																			

Meets IEEE 802.5 and TIA/EIA-568-A specifications, ETL verified. For Token Ring (4/16 Mbps), FDDI over copper, and video applications.
IBM qualified Type 1A Media cable for use in IBM Cabling Systems. For Non-suffix "A" Type IBM Product, **see 1634A** below.

Meets IEEE 802.5 and TIA/EIA-568-A specifications, ETL verified.
IBM qualified Type 1A Media cable for use in IBM Cabling Systems. For Token Ring (4/16 Mbps), FDDI over copper, and video applications.

Meets IEEE 802.5 and TIA/EIA-568-A specifications, ETL verified. For Token Ring (4/16 Mbps), FDDI over copper, and video applications.
IBM qualified Type 1 Media cable for use in IBM Cabling Systems. For Suffix A counterpart see 9688 above.

DCR = DC Resistance • BC = Bare Copper • NEXT = Near-end Crosstalk • TC = Tinned Copper

* Capacitance between conductors
† Spools are one piece, but length may vary ±10% from length shown.
†† Common mode

Teflon is a DuPont trademark.

IEEE 802.5; ISO/IEC 8802.5

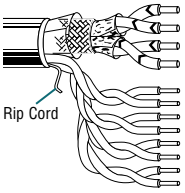
IBM Cabling System
Types 2A and 6A

DATATWIST®

IBM Type 2A • 22 AWG Solid Bare Copper • (2) Data Pairs Individually Beldfoil® Shielded + Overall 65% TC Braid + Mylar® Shield • Rip Cord

Non-Plenum • Flame-retardant Foam Polyethylene Insulation • Black PVC Jacket

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Nominal OD Inch	Nominal OD mm	AWG (stranding) Diameter Nom. DCR	Shielding	Nom. Imped. (Ω)	Nominal Capacitance * pF/Ft.	Nominal Capacitance * pF/m	Freq. (MHz)	Maximum Attenuation (dB/ 1000′)	Maximum Attenuation (dB/ 100m)	Min. NEXT (dB/ 1000′)	Min. NEXT (dB/ 305m)
IBM Part No. 4716739 33G2773	9689	NEC: MPG, CMG CEC: MPG, CMG FT4	6▲	500	152.4	43.0	19.5	.324	8.26	22 (solid) BC .026″ 16.7Ω/M′ 54.7Ω/km	100% Beldfoil Each Pair + 65% TC Braid Overall (data only)	150 @ 1MHz (data) 600 @ 1kHz (voice)	8.5 (data)	27.9 (data)	1k**	.390	.128	—	—
				1000	304.8	80.0	36.4	x	x						4	6.7	2.2	58.0	58.0
				3600	1097.6	298.8	135.8	.466	11.84						16	13.4	4.4	50.4	50.4
															100	37.5	12.3	38.5	38.5
															300	65.2	21.4	31.3	31.3
															100††	40.8	13.4	—	—
															300††	71.0	23.3	—	—
															600††	100.3	32.9	—	—

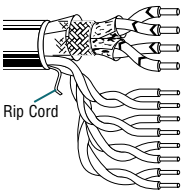


For Plenum version of 9689, see 82689.

IBM qualified Type 2A Media cable for use in IBM Cabling Systems.

Plenum • Foam FEP Teflon® Insulation • Black Flamarrest® Jacket

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Nominal OD Inch	Nominal OD mm	AWG (stranding) Diameter Nom. DCR	Shielding	Nom. Imped. (Ω)	Nominal Capacitance * pF/Ft.	Nominal Capacitance * pF/m	Freq. (MHz)	Maximum Attenuation (dB/ 1000′)	Maximum Attenuation (dB/ 100m)	Min. NEXT (dB/ 1000′)	Min. NEXT (dB/ 305m)
IBM Part No. 4716738 33G8221	82689	NEC: MPP, CMP CEC: MPP, CMP FT6	6▲	1000†	304.8	79.0	35.9	.324	8.26	22 (solid) BC .026″ 16.7Ω/M′ 54.7Ω/km	100% Beldfoil Each Pair + 65% TC Braid Overall (data only)	150 @ 1MHz (data) 600 @ 1kHz (voice)	8.5 (data)	27.9 (data)	1k**	.390	.128	—	—
								x	x						4	6.7	2.2	58.0	58.0
								.466	11.84						16	13.4	4.4	50.4	50.4
															100	37.5	12.3	38.5	38.5
															300	65.2	21.4	31.3	31.3
															100††	40.8	13.4	—	—
															300††	71.0	23.3	—	—
															600††	100.3	32.9	—	—



IBM qualified Type 2A Media cable for use in IBM Cabling Systems.

IBM Type 6A • 26 AWG Stranded (7x34) Bare Copper Twisted Pairs • Beldfoil Shielded Pairs + Overall 65% Tinned Copper Braid Shield

Non-Plenum • Datalene® Insulation • Striated Black PVC Jacket

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Nominal OD Inch	Nominal OD mm	AWG (stranding) Diameter Nom. DCR	Shielding	Nom. Imped. (Ω)	Nominal Capacitance * pF/Ft.	Nominal Capacitance * pF/m	Freq. (MHz)	Maximum Attenuation (dB/ 1000′)	Maximum Attenuation (dB/ 100m)	Min. NEXT (dB/ 1000′)	Min. NEXT (dB/ 305m)
IBM Part No. 4716743 33G2775	1215A	NEC: CL2, CM CEC: CM	2	1000†	304.8	46.0	20.9	.325	8.26	26 (7x34) BC .019″ 38.7Ω/M′ 127.0Ω/km	100% Beldfoil Each Pair + 65% TC Braid Overall	150	8.5	27.9	4	10	3.3	52.0	52.0
															16	20	6.6	44.0	44.0
															100	57	18.7	33.0	33.0
															300	100	32.8	25.0	25.0

IBM qualified Type 6A Office cable for use in IBM Cabling Systems.

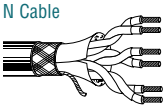
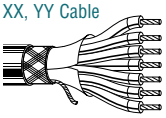
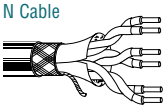
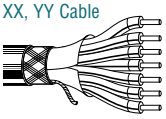
BC = Bare Copper • DCR = DC Resistance • NEXT = Near-end Crosstalk • TC = Tinned Copper

* Capacitance between conductors
**Voice pairs (1 kHz); Data pairs (4–600 MHz)
† Spools are one piece, but length may vary ±10% from length shown.
†† Common mode
▲ (2) shielded Data-grade pairs; (4) unshielded Voice-grade media pairs

Mylar and Teflon are DuPont trademarks.

IBM RISC System/6000

DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs/ Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Nominal OD Inch	Nominal OD mm	AWG (stranding) Material Nom. DCR	Shielding Material Nom. DCR	Nom. Imped. (Ω)	Nominal Capacitance * pF/Ft.	Nominal Capacitance * pF/m	Nominal Capacitance ** pF/Ft.	Nominal Capacitance ** pF/m
28 AWG Stranded (7x36) Bare Copper Twisted Pairs • Overall Beldfoil® Shielded + 65% Tinned Copper Braid • Tinned Copper Drain Wire																
Non-Plenum • Patented Step Polyolefin Insulation • Gray PVC Jacket (See RISC Color Code Chart below)																
IBM Part No. N Cable  RJ-45 compatible	**1538A**	NEC: CL2	3	U-1000 1000	U-304.8 304.8	24.0 25.0	10.9 11.4	.225	5.72	28 (7x36) Bare Copper 63.0Ω/M′ 207.0Ω/km	Overall Beldfoil + 65% TC Braid 5.5Ω/M′ 18.0Ω/km	120	12.0	39.4	21.5	70.5
IBM Part No. XX, YY Cable  RJ-45 compatible	**1540A**	NEC: CL2	7/c	U-1000 1000	U-304.8 304.8	21.0 21.0	9.5 9.5	.190	4.83	28 (7x36) Bare Copper 63.0Ω/M′ 207.0Ω/km	Overall Beldfoil + 65% TC Braid 7.2Ω/M′ 23.6Ω/km	—	12.5	41.0	23.0	75.5
24 AWG Solid Bare Copper Twisted Pairs • Overall Beldfoil Shielded + 65% Tinned Copper Braid • Tinned Copper Drain Wire																
Non-Plenum • Patented Step Polyolefin Insulation • Gray PVC Jacket (See RISC Color Code Chart below)																
IBM Part No. N Cable  RJ-45 compatible	**1534A**	NEC: CMG CEC: CMG FT4	3	1000	304.8	29.0	13.2	.249	6.32	24 (solid) Bare Copper 25.0Ω/M′ 82.0Ω/km	Overall Beldfoil + 65% TC Braid 4.5Ω/M′ 14.8Ω/km	100	15.0	49.2	26.0	85.3
IBM Part No. XX, YY Cable  RJ-45 compatible	**1536A**	NEC: CMG CEC: CMG FT4	7/c	1000	304.8	35.0	15.9	.244	6.20	24 (solid) Bare Copper 25.0Ω/M′ 82.0Ω/km	Overall Beldfoil + 65% TC Braid 5.3Ω/M′ 17.4Ω/km	—	12.5	41.0	23.0	75.5

DC = DC Resistance • TC = Tinned Copper

* Capacitance between conductors
**Capacitance between one conductor and other conductors connected to shield

Color Codes: IBM RISC System/6000

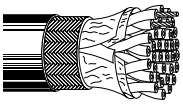
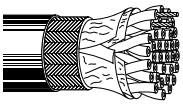
Cond.	Color
1st	White over Blue
2nd	White over Orange
3rd	White over Green
4th	White over Brown
5th	White over Gray
6th	White over Red
7th	White over Yellow

Pair No.	Color Combination
1	White over Blue & Blue over White
2	White over Orange & Orange over White
3	White over Green & Green over White

SCSI 2 Paired Cable

(Small Computer System Interface)

DATATWIST®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD		AWG (stranding) Material Nom. DCR	Shielding Material Nom. DCR	Nom. Imped. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance			
				Ft.	m	Lbs.	kg	Inch	mm					* pF/Ft.	* pF/m	** pF/Ft.	** pF/m
SCSI • 28 AWG Stranded (7x36) TC Twisted Pairs • Overall Beldfoil® Shield + 85% TC Braid Shield • Color Code: Mod. Western Electric Standard																	
Non-Plenum • Flame-retardant Polyolefin Insulation • Polypropylene Buffer Layer • Light Gray PVC Jacket																	
		NEC: CL2, CMG CEC: CMG FT4	25	500 1000	152.4 304.8	51.5 101.0	23.4 45.9	.420	10.7	28 (7x36) TC 64.9Ω/M′ 212.9Ω/km	Overall Beldfoil + 85% TC Braid 2.0Ω/M′ 6.6Ω/km	120† 80††	66%	12.7	45.9	30.0	98.4
		NEC: CL2, CM CEC: CM	34	500 1000	152.4 304.8	71.5 139.0	32.5 63.2	.480	12.2	28 (7x36) TC 64.9/M′ 212.2Ω/km	Overall Beldfoil + 85% TC Braid 1.5Ω/M′ 4.9Ω/km	120† 80††	66%	12.7	45.9	30.0	98.4

DCR = DC Resistance • TC = Tinned Copper

* Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Differential mode impedance.
†† Single end mode termination impedance.

Color Codes: Modified Western Electric Standard

Pair No.	Color Combination
1	White/Blue Stripe & Blue/White Stripe
2	White/Orange Stripe & Orange/White Stripe
3	White/Green Stripe & Green/White Stripe
4	White/Brown Stripe & Brown/White Stripe
5	White/Gray Stripe & Gray/White Stripe
6	Red/Blue Stripe & Blue/Red Stripe
7	Red/Orange Stripe & Orange/Red Stripe
8	Red/Green Stripe & Green/Red Stripe

Pair No.	Color Combination
9	Red/Brown Stripe & Brown/Red Stripe
10	Red/Gray Stripe & Gray/Red Stripe
11	Black/Blue Stripe & Blue/Black Stripe
12	Black/Orange Stripe & Orange/Black Stripe
13	Black/Green Stripe & Green/Black Stripe
14	Black/Brown Stripe & Brown/Black Stripe
15	Black/Gray Stripe & Gray/Black Stripe
16	Yellow/Blue Stripe & Blue/Yellow Stripe

Pair No.	Color Combination
17	Yellow/Orange Stripe & Orange/Yellow Stripe
18	Yellow/Green Stripe & Green/Yellow Stripe
19	Yellow/Brown Stripe & Brown/Yellow Stripe
20	Yellow/Gray Stripe & Gray/Yellow Stripe
21	Purple/Blue Stripe & Blue/Purple Stripe
22	Purple/Orange Stripe & Orange/Purple Stripe
23	Purple/Green Stripe & Green/Purple Stripe
24	Purple/Brown Stripe & Brown/Purple Stripe

Pair No.	Color Combination
25	Purple/Gray Stripe & Gray/Purple Stripe
26	White & Blue
27	White & Orange
28	White & Green
29	White & Brown
30	White & Gray
31	Red & Blue
32	Red & Orange
33	Red & Green
34	Red & Brown

Technical Information

Cable Preparation Tool

DATATWIST®

Cable Preparation Tool Speeds Installation of Bonded-Pair Cables

You know the high performance benefits of using data cables featuring Belden's unique Bonded-Pair technology. The Belden® Cable Preparation Tool (1797B) now makes it faster and easier than ever to prepare cables for connector termination. This tool is ideal for use with Belden's DataTwist® 350, MediaTwist,® and DataTwist 600e Bonded-Pair cables, providing special features that help separate twisted pairs. It can also be used to prepare any unbonded-pair cable for installation.

Instructions

The Belden Cable Preparation Tool now makes it faster and easier than ever to strip the outer jacket from cables without damaging the inner conductors and insulation.

Jacket Removal

DataTwist: Insert cable into the cutting area and rotate tool at least one complete turn. Remove the jacket end.

MediaTwist: Score the printed top and both sides of the cable with scissors or the Cable Preparation Tool. Then snap the cable from side to side to complete jacket separation.

Pair Separation Techniques

Belden's Cable Preparation Tool allows you to choose from either the new "Pick" technique or the traditional "Blade Slot" technique to better facilitate pair untwisting. The Pick technique utilizes a steel awl that is incorporated into the tip of the tool that is surrounded on both sides with guards to assist in pair alignment during the pair separation step. The Pick technique allows for a simple "pick-n-pull" motion to easily separate the conductors of a twisted pair cable. The Blade Slot technique provides the technician an alternate method for separating the conductors quickly and easily. See instructions below for either technique.

Choose Either the Pick Method or Blade Slot Method

Pick Method of Pair Preparation:

Lay each twisted pair into the tool channel with the pair ends facing toward the pick. Place your thumb on the thumb notch to stabilize and secure the pair. The tip of the pick should rest in the webbing between the two conductors. While holding the pair in place with your thumb, puncture the pair webbing with the pick.

Hold the cable in one hand and with the hand holding the tool, pull the tool away from you, allowing the pick to separate the conductors of the pair.

Blade Slot Method of Pair Preparation:

Refer to the Blade Slot Selection Table to determine which blade slot to use to separate the pairs.

Insert each twisted pair into the appropriate slot. Rotate the tool and/or the pair in the direction opposite of the twist to prevent stripping the conductor insulation. Continue insertion to match the desired length of untwisted section.

Blade Slot Selection Table

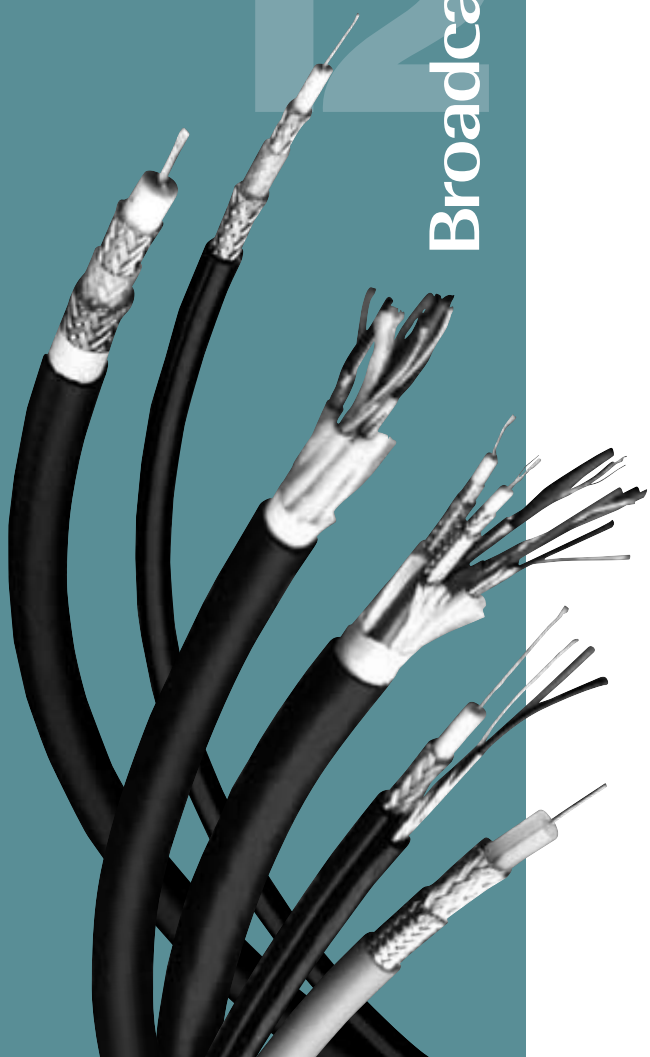
Part No.	Slot A	Slot B	Slot C
1700A	All pairs		
1700R	All pairs		
1701A		All pairs	
1872A	All pairs		
1874A	All pairs		
7851A			All pairs
7852A			All pairs

NOTE: TIA/EIA-568-B allows a maximum of 0.5 inch of untwisted section after termination.

Belden

BRILLIANCE®

12 Broadcast Cables



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Please refer to "Terms of Use of Master Catalog" on page 16.30.

Introduction

Broadcast — there is perhaps no other industry which values performance so highly, for the lack of broadcast performance has immediate, far-reaching, and embarrassing results.

That's why the broadcast industry prefers Belden® cable. From major network events such as the Olympics, space launches, and presidential news conferences to everyday audio and video applications, Belden is the local, regional, and national choice. The overwhelming reason? Performance.

In broadcast, cable performance means ensured product quality, absolute signal integrity, and no system downtime. Belden products provide performance for both critical field applications (where cable is dragged, crunched, trod, and tread upon) and permanent studio installations (where the long run is all important). Belden products are an important link in network and cable broadcasts (NBC Nightly News, Lifetime Cable Network, CNN News, and CNN Headline News), film studios (Lucasfilm) and corporate broadcasting (USA Today, Merrill Lynch).

Watch television last night or listen to the radio this morning? Chances are the link was made with Belden cable. And with dedication to development and innovation, the chance the link will be Belden increases.

Committed to Product Innovation and Technical Excellence

Belden's commitment to product innovation and technical excellence in the broadcast industry has resulted in a line of dependable audio and video cabling products called Brilliance®. Named for the sound and picture brilliance obtainable through new product innovations and improved signal integrity, Brilliance encompasses all Belden Audio/Video products. The line includes:

- High-Conductivity Microphone Cables
- Analog/Digital Audio Cables
- Speaker Cables
- Precision Analog/Digital Video Cables
- Triaxial Cables
- Audio/Video Composite Cables
- RGB & SVHS Cables
- Multimedia Cables
- Fiber Optic Cable (See Fiber Optic Section)

Most of our Brilliance cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find Brilliance cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Performance Features

Innovative Shielding

Belden shielded cable ensures signal integrity and provides confidence in audio and video transmissions, preventing down-time and maintaining sound and picture clarity. Among the shield types available are: braid shields, foil shields, combination shields and Belden's patented "French Braid" shield.

"French Braid" Shields

Belden's patented "French Braid" shield is a double spiral (double serve bare copper shield) with the two spirals tied together by one weave. This construction provides improved flex life over standard spiral shields, improved flexibility over conventional braid shields, and lower levels of microphonic or triboelectric noise than either spiral or conventional braid shields. The "French Braid" is easier to terminate than a standard braid since it is not fully woven. It also provides for a lower DC loop resistance than a single spiral braid for improved performance.

Special Noise/Interference Problems in Broadcasting

Triboelectric noise is generated by mechanical motion of a cable, causing movement in the cable's shield. Belden detects and measures triboelectric noise through the use of Low Noise Test equipment. Belden developed the test procedure and the equipment based on a combination of three low noise standards: NBS, ISA-S, and MIL-C-17.

Mechanically induced noise is a critical and frequent concern in the use of guitar cords and microphone cables. Belden rigorously employs the properties of special conductive tapes and insulations to prevent these noise problems.

Insulations

Belden formulates its own insulations to provide superior performance under a variety of broadcast environment conditions while meeting the electrical requirements of specific applications. Belden cables are available in a number of UL Listed and CSA Approved insulation compounds. Insulation materials include polyethylene, polypropylene, PVC, fluorinated ethylene-propylene (FEP) and Belden's Datalene® — a crush-resistant, lightweight insulation that provides a low dielectric constant and dissipation factor that's well suited to high-speed, low-distortion data handling.

Jackets

Belden broadcast cables are manufactured in a wide selection of standard jacketing materials. Special compounds and variations of standard compounds are used to meet critical broadcast application requirements and unusual environmental conditions. Proper matching of cable jackets to their working environment can prevent deterioration due to intense heat and cold, sunlight, mechanical abuse, impact and crowd or vehicle traffic. Jacket materials offered include PVC (in standard and matte finishes), polyethylene, FEP, Neoprene, Hypalon®, silicone rubber and natural rubber.

For more detailed information and assistance in selecting the correct cable component features for your needs, please refer to the Technical Information section of this catalog.

Hypalon is a DuPont trademark.

Microphone and Musical Instrument Cable

Overview

Flexible Microphone Cables

Belden® microphone cable is used for connecting low level microphones or musical instruments. Key properties of microphone (MIC) cable are ruggedness, flexibility, flex life and interference immunity.

MIC cable constructions utilize either 1-, 2-, 3- or 4-conductor configurations. Cable selection depends on whether the MIC or instrument is of a high- or low-impedance design. High-impedance MICs require unbalanced single conductor (coaxial) cables while low-impedance MICs utilize balanced 2-, 3-, or 4-conductor (quad) designs. Quad MIC cables are connected by attaching the two white conductors to one pin and two blue conductors to the other pin in a balanced-line XLR type connector. Besides the common-mode rejection of a standard balanced line, this gives common-mode rejection at each pin, greatly reducing noise and interference.

High-conductivity Copper

All Belden microphone cables with bare copper conductors utilize only high-conductivity copper produced by a process called Electrolytic Tough Pitch (ETP). This refining process produces a copper conductor that is 99.95% pure copper resulting in high-conductivity per ASTM B115. The high purity obtained from ETP copper results in microphone cable performance that is comparable to that of oxygen-free copper cables.

- **Plastic cables recommended for:**
  Lower capacitance, lower loss, greater ozone and oil resistance, lighter weight, smaller diameter.
- **Rubber cables recommended for:**
  Greater abrasion and impact resistance and extra limpness so the cable will lie flat on stage or on studio floors.

Four-Conductor Star Quad Low-Impedance Cables

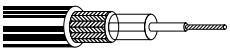
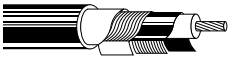
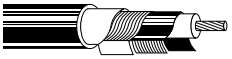
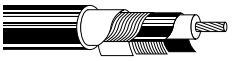
Quad connection scheme: The two blue wires (or wires directly opposite one another) are connected together to form one conductor, and similarly the two white wires (or remaining wires) are connected together to form the second conductor.

Conductors joined in this manner lower the possibility of induced noise.

Microphone and Musical Instrument Cable

Single-Conductor, High-Impedance Cables
High-Conductivity Copper

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
25 AWG Stranded (7x33) High-conductivity Copper • (3) Strands TC, (4) Strands TCCS • Tinned Copper Braid Shield (72% Coverage)																		
Braided Textile Polyethylene Insulation • Chrome PVC Jacket																		
5000 VDC, 80°C	**8401**		1	N/A	1000	304.8	22.0	10.0	.043	1.09	.025	.64	.199	5.05	—	—	28	92
																		
Nom impedance: 57 ohms.																		
25 AWG Stranded (7x33) High-conductivity Copper • (3) Strands TC, (4) Strands TCCS • Tinned Copper Spiral Shield (90% Coverage)																		
PVC Insulation • Matte Gray PVC Jacket																		
1000 VDC, 60°C	**9396**		1	N/A	250	76.2	2.8	1.3	.018	.46	.017	.43	.100	2.54	—	—	75	246
25 AWG Stranded (7x33) High-conductivity Copper • (3) Strands TC, (4) Strands TCCS • Rayon Braid + TC Braid Shield (80% Coverage)																		
Rayon Braid, Rubber Insulation • Black EPDM Rubber Jacket																		
3000 VDC, 60°C	**8410**		1	N/A	500	152.4	20.5	9.3	.058	1.47	.024	.61	.245	6.22	—	—	33	108
20 AWG Stranded (27x34) High-conductivity TC • Conductive Textile Shield (100% Coverage) • TC Spiral Shield (95%) • Paper Tape																		
Rubber Insulation • Black Neoprene Jacket																		
60°C	**9394**		1	N/A	1000	304.8	28.0	12.7	.030	.76	.033	.84	.190	4.83	—	—	55	180
																		
20 AWG Stranded (27x34) High-conductivity TC • Conductive Textile Shield (100% Coverage) • TC Spiral Shield (75%) • Paper Tape																		
Rubber Insulation • Black Neoprene Jacket																		
60°C	**9778**		1	N/A	1000	304.8	38.0	17.3	.040	1.02	.050	1.27	.235	5.97	—	—	45	148
																		
18 AWG Stranded (41x34) High-conductivity TC • Conductive Textile Shield (100% Coverage) • TC Spiral Shield (68%) • Paper Tape																		
Rubber Insulation • Black Neoprene Jacket																		
600V RMS, 60°C	**9395**		1	N/A	1000	304.8	37.0	16.8	.045	1.14	.034	.86	.235	5.97	—	—	55	180
																		

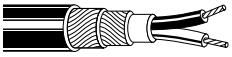
EPDM = Ethylene-propylene-diene Monomer Rubber • TC = Tinned Copper • TCCS = Tinned Copper-covered Steel

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Microphone and Musical Instrument Cable

Two-Conductor, Low-Impedance Cables
High-Conductivity Copper

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (105x44) High-conductivity Bare Copper • Conductors Cabled with Fillers • Bare Copper Double Spiral Shield																		
PVC Insulation • Matte Black PVC Jacket																		
300V RMS 80°C	**9397**		2	White, Green	500 1000	152.4 304.8	12.0 24.0	5.5 10.9	.012	.30	.031	.79	.176	4.47	40	131	110	361
24 AWG Stranded (45x40) HC TCB • Cotton Serve • Cabled with Fillers • Conductive Textile Wrap (100%) • 56% TC Braid Shield • Cotton Spiral																		
Rubber Insulation • Black EPDM Jacket																		
300V 90°C	**8413**		2	White, Black	100 U-500 500	30.5 U-152.4 152.4	3.1 12.0 12.0	1.4 5.5 5.5	.016	.41	.017	.43	.199	5.05	30	98	55	180
24 AWG Stranded (45x40) HC BCC • Cotton Serve • Cabled with Fillers • Conductive Textile Wrap (100%) • 65% TC Braid Shield • Cotton Spiral																		
Rubber Insulation • Brown EPDM Jacket																		
300V 90°C	**9399**		2	Blue, Red	500	152.4	13.5	6.1	.016	.41	.020	.51	.200	5.08	30	98	55	180
24 AWG Stranded (42x40) High-conductivity BC • Conductors Cabled with Fillers • TC "French Braid" Shield (95% Coverage) • BC Drain Wire																		
Datalene® Insulation • Matte PVC Jacket (Available in Red, Yellow, Green, Blue or Black)																		
Digital MIC Cable High-Flex 60°C French Braid	**1800F**	NEC: CL2R 110 Ohm AES/EBU	2	Black, Red	500 ▲ U-1000 1000 ▲	152.4 U-304.8 304.8	13.5 26.0 26.0	6.1 11.8 11.8	.017	.43	.037	.94	.211	5.36	13	43	26	85
▲500 ft. and 1000 ft. put-ups available in Black only.																		
24 AWG Stranded (42x40) High-conductivity Bare Copper • Conductors Cabled • Bare Copper Double Spiral Shield																		
PVC Insulation • Matte PVC Jacket (Available in Red, Yellow, Green, Blue or Black)																		
60°C 	**1812A**		2	Brown, White	328 1000	100.0 304.8	9.8 30.0	4.5 13.6	.012	.30	.037	.94	.213	5.41	33	108	54	177

BC = Bare Copper • BCC = Bare Cadmium Copper • EPDM = Ethylene-propylene-diene Monomer Rubber • HC = High-Conductivity • TC = Tinned Copper • TCB = Tinned Cadmium Bronze

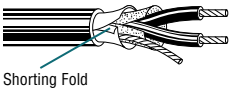
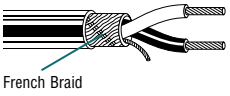
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Datalene insulation features include a low dielectric constant and a low dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Microphone and Musical Instrument Cable

Two-Conductor, Low-Impedance Cables
High-Conductivity Copper

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
24 AWG Stranded (19x36) HC Tinned Copper • Twisted Pair • 100% Beldfoil® Shield • Noise Reducing Tape • 24 AWG Stranded TC Drain Wire																		
High-density Polyethylene Insulation • Black PVC Jacket																		
200V RMS 75°C  Shorting Fold	**9452**		2	Black, Red	U-500	U-152.4	6.5	3.0	.008	.20	.020	.51	.135	3.43	30	98	58	190
					500	152.4	7.5	3.4										
					U-1000	U-304.8	13.0	5.9										
					1000	304.8	13.0	5.9										
Nominal Impedance: 56 Ohms.																		
24 AWG Stranded (41x40) High-conductivity Bare Copper • "French Braid" Shield (95% Coverage) • 24 AWG Stranded TC Drain Wire																		
Polyolefin Insulation • Matte PVC Jacket (Available in Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White or Black)																		
 French Braid	**1901A** new		2	Black, Red	500 ▲	152.4	8.0	3.6	.008	.20	.023	.58	.138	3.51	26	86	48	156
					U-1000	U-304.8	15.0	6.8										
					1000 ▲	304.8	16.0	7.3										
▲500 ft. and 1000 ft. put-ups available in Black only.																		
24 AWG Stranded (27x38) High-conductivity Bare Copper • Conductors Cabled with Fillers • Bare Copper Spiral Shield (92% Coverage)																		
PVC Insulation • Matte PVC Jacket (Available in Red, Yellow, Green, Blue or Black)																		
60°C	**1813A**		2	Red, Blue	100 ◆	30.5	4.0	1.8	.017	.43	.055	1.40	.236	5.99	33	108	61	200
					328	100.0	10.2	4.6										
					500 ◆◆	152.4	16.0	7.3										
					1000	304.8	31.0	14.1										
◆100 ft. put-up available in Black only. ◆◆500 ft. put-up available in Blue or Black only.																		
22 AWG Stranded (16x34) High-conductivity Tinned Copper • Conductors Cabled • Cotton Braid • Tinned Copper Braid Shield (85% Coverage)																		
Polyethylene Insulation • Chrome PVC Jacket																		
1000V RMS 80°C	**8422**		2	Clear, Black	500	152.4	18.0	8.2	.021	.53	.022	.56	.231	5.87	18	59	32	105
					U-1000	U-304.8	30.0	13.6										
					1000	304.8	31.0	14.1										
20 AWG Stranded (26x34) High-conductivity TC • Cotton Wrap • Conductors Cabled • Rayon Braid • TC Braid Shield (85% Coverage)																		
Rubber Insulation • Cotton Wrap • EPDM Jacket (Available in Black, Red, Yellow or Blue)▼																		
600V RMS 90°C	**8412**		2	White, Black	100	30.5	5.9	2.7	.023	.58	.035	.89	.262	6.65	30	98	55	180
					250	76.2	12.0	5.5										
					U-500	U-152.4	24.0	10.9										
					500	152.4	24.0	10.9										
					U-1000	U-304.8	47.0	21.4										
▼Red, Yellow or Blue available in 1000 ft. put-up only.					1000 ▼	304.8	47.0	21.4										
Rubber Insulation • Cotton Wrap • Brown Hypalon® Jacket																		
600V RMS 60°C VW-1	**8402**		2	White, Black	500	152.4	27.0	12.3	.023	.58	.035	.89	.263	6.68	30	98	55	180
					U-1000	U-304.8	53.0	24.1										

BC = Bare Copper • EPDM = Ethylene-propylene-diene Monomer Rubber • HC = High-conductivity • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Hypalon is a DuPont trademark.

Microphone and Musical Instrument Cable

Two-Conductor, Low-Impedance Cables
High-Conductivity Copper

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
18 AWG Stranded (41x34) High-conductivity TC • Cotton Wrap • Conductors Cabled • Rayon Braid • TC Braid Shield (85% Coverage)																		
Rubber Insulation • Cotton Wrap • Black Neoprene Jacket																		
600V RMS 60°C	**8428**		2	White,	100	30.5	7.0	3.2	.023	.58	.030	.76	.290	7.37	35	115	60	197
				Black	U-500	U-152.4	30.0	13.6										
					500	152.4	30.0	13.6										
					1000	304.8	59.0	26.8										
16 AWG Stranded (65x34) High-conductivity TC • Paper Wrap • Conductors Cabled • Rayon Braid • TC Braid Shield (85% Coverage)																		
Rubber Insulation • Cotton Wrap • Brown Hypalon® Heavy-duty Jacket																		
600V RMS 60°C	**8408**		2	Black,	500	152.4	51.5	23.4	.037	.94	.040	1.02	.380	9.65	30	98	55	180
VW-1				White														

TC = Tinned Copper

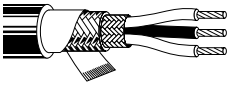
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Hypalon is a DuPont trademark.

Microphone and Musical Instrument Cable

Three-Conductor, Low-Impedance Cables
High-Conductivity Copper

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (105x44) High-conductivity Bare Copper • Conductors Cabled with Fillers • Bare Copper Double Spiral Shield																		
PVC Insulation • Matte Black PVC Jacket																		
300V RMS 80°C	**9398**		3	White, Green, Brown	1000	304.8	25.0	11.4	.012	.30	.030	.76	.185	4.70	40	131	110	361
24 AWG Stranded (45x40) HC TCB • Cotton Serve • Cabled with Fillers • Conductive Textile Wrap (100% Coverage) • 60% TC Braid Shield																		
Rubber Insulation • Cotton Spiral • Black EPDM Rubber Jacket																		
300V 90°C	**8406**		3	Black, Red, White	100 500	30.5 152.4	4.0 17.5	1.8 8.0	.016	.41	.025	.64	.223	5.66	30	98	55	180
20 AWG Stranded (19x32) High-conductivity Tinned Copper • Conductors Cabled • Rayon Braid • TC Braid Shield (89% Coverage)																		
Polyethylene Insulation • Chrome PVC Jacket																		
600V RMS 80°C VW-1	**8403**		3	Clear, Black, Red	500 1000	152.4 304.8	22.5 45.0	10.2 20.5	.016	.41	.033	.84	.244	6.20	25	82	45	148
20 AWG Stranded (26x34) High-conductivity TC • Cotton Wrap • Conductors Cabled • Rayon Braid • TC Braid Shield (85% Coverage)																		
Rubber Insulation • Cotton Wrap • Black EPDM Jacket																		
600V RMS 90°C 	**8423**		3	White, Black, Red	100 500 1000	30.5 152.4 304.8	6.6 28.0 56.0	3.0 12.7 25.5	.023	.58	.040	1.02	.272	6.91	30	98	55	180

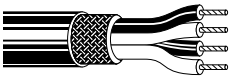
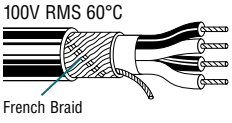
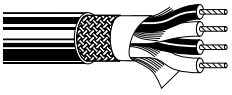
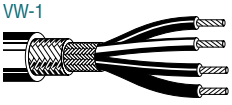
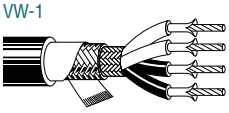
EPDM = Ethylene-propylene-diene Monomer Rubber • HC = High-conductivity • TC = Tinned Copper • TCB = Tinned Cadmium Bronze

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Microphone and Musical Instrument Cable

Four-Conductor Star Quad, Low-Impedance Cables†
High-Conductivity Copper

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
28 AWG Stranded (19x40) High-conductivity Silver Plated Copper Alloy • Tinned Copper Braid Shield (78% Coverage)																		
Polypropylene Insulation • Matte PVC Jacket (Available in Red, Yellow, Blue, Beige or Black)																		
Mini Star Quad 100V RMS 60°C 	**1804A**		4	(2) Blue, (2) White	100▲ 500	30.5 152.4	2.3 5.0	1.0 2.3	.006	.15	.014	.36	.115	2.92	40	131	60	197
2/c 25 AWG equivalent DCR when connected to a 3-pin XLR.																		
▲100 ft. put-up available in Black only. One Blue conductor and one White conductor are striped for use in MIDI and other four conductor applications.																		
26 AWG Stranded (30x40) High-conductivity BC • Conductors Cabled • TC "French Braid" Shield (95% Coverage) • BC Drain Wire																		
Polyethylene Insulation • Matte PVC Jacket (Available in Red, Green, Yellow, Blue, Gray or Black)																		
100V RMS 60°C  French Braid	**1172A**		4	(2) Blue, (2) White	500◆ 1000	152.4 304.8	13.5 27.0	6.1 12.3	.011	.28	.030	.76	.190	4.83	39	128	50	164
2/c 23 AWG equivalent DCR when connected to a 3-pin XLR.																		
◆500 ft. put-up available in Red, Yellow or Black only. One Blue conductor and one White conductor are striped for use in MIDI and other four conductor applications.																		
24 AWG Stranded (42x40) High-conductivity Bare Copper • Conductors Cabled • Tinned Copper Braid Shield (95% Coverage)																		
Polyethylene Insulation • Matte PVC Jacket (Available in Red, Green, Yellow, Blue, Gray or Black)																		
100V RMS 75°C 	**1192A**		4	(2) Blue, (2) White	100▼ 500▼ 1000	30.5 152.4 304.8	4.6 18.5 37.0	2.1 8.4 16.8	.016	.41	.045	1.14	.245	6.22	39	128	57	187
2/c 21 AWG equivalent DCR when connected to a 3-pin XLR.																		
▼100 ft. put-up available in Black only. 500 ft. put-up available in Blue or Black only. One Blue conductor and one White conductor are striped for use in MIDI and other four conductor applications.																		
20 AWG Stranded (19x32) High-conductivity Tinned Copper • Conductors Cabled • Rayon Braid • TC Braid Shield (85% Coverage)																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2094 (300V RMS 60°C) VW-1 	**8404**		4	Clear, Black, Red, Green	100 500 U-1000 1000	30.5 152.4 U-304.8 304.8	5.9 25.0 49.0 49.0	2.7 11.4 22.3 22.3	.016	.41	.032	.81	.252	6.40	40	131	49	161
2/c 17 AWG equivalent DCR when connected to a 3-pin XLR.																		
20 AWG Stranded (26x34) High-conductivity TC • Cotton Wrap • Conductors Cabled • Rayon Braid • TC Braid Shield (85% Coverage)																		
Rubber Insulation • Cotton Wrap • Black EPDM Rubber Jacket																		
600V RMS 90°C	**8424**		4	Black, White, Red, Green	100 250 U-500 500 1000	30.5 76.2 U-152.4 152.4 304.8	7.5 18.8 33.0 32.5 64.0	3.4 8.5 15.0 14.8 29.1	.023	.58	.036	.91	.294	7.47	47	154	59	194
2/c 17 AWG equivalent DCR when connected to a 3-pin XLR.																		
16 AWG Stranded (65x34) High-conductivity TC • Paper Wrap • Conductors Cabled • Rayon Braid • TC Braid Shield (85% Coverage)																		
Rubber Insulation • Cotton Wrap • Black Neoprene Jacket																		
600V RMS 60°C VW-1 	**8407**		4	Black, White, Red, Green	100 250	30.5 76.2	15.0 30.3	6.8 13.8	.031	.79	.043	1.09	.416	10.57	55	180	66	216
2/c 13 AWG equivalent DCR when connected to a 3-pin XLR.																		

BC = Bare Copper • DCR = DC Resistance • EPDM = Ethylene-propylene-diene Monomer Rubber • HC = High-conductivity • TC = Tinned Copper

*Capacitance between conductors. **Capacitance between one conductor and other conductors connected to shield.

† **Quad connection scheme:** The two blue wires (or wires directly opposite one another) are connected together to form one conductor, and similarly the two white wires (or remaining wires) are connected together to form the second conductor.

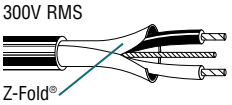
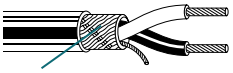
Line Level Analog Audio Cable

Single- and Double-Pair Cables

BRILLIANCE®

Belden analog audio cables are used for connecting line level audio equipment, in either permanent or semi-permanent installations. They consist of one or two individually foil-shielded, twisted pairs. Once installed, they are not intended to be moved while in service. For cables that are in motion during use, refer to the Microphone and Musical Instrument Cable section in this catalog.

Belden's analog audio cable offering consists of a selection of designs to handle a variety of audio applications. Belden part no. 8451 utilizes a paper tape separator to facilitate easy long length jacket stripping. Part no. 9451 comes with a bonded Beldfoil® shield so that the shield and jacket strip simultaneously with automatic stripping equipment. A special matte PVC jacket material is employed on part no. 1508A making it a highly flexible construction. Double pair cables are available in a round construction (part no. 8723) or in a ZIP cord style (part no. 1504A) for easy separation in two-channel stereo and audio hook-ups.

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
24 AWG Stranded (7x32) Tinned Copper Conductors • Twisted Pair • Overall 100% Beldfoil Shield†† • 24 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • Gray PVC Jacket																		
300V RMS  Z-Fold®	**1883A**	NEC: CMR CEC: CMG FT4	1	Black, Red	U-1000 ▲ 1000	U-304.8 304.8	12.0 12.0	5.5 5.5	.008	.20	.020	.51	.123	3.12	31	102	58	190
▲U-1000 ft. put-up also available in Brown, Red, Orange, Yellow, Green, Blue, Violet, White or Black. Jacket and shield are bonded so both can be removed with automatic stripping equipment.																		
Polyolefin Insulation • Black Matte PVC Jacket																		
High-Flex 300V RMS	**1508A**		1	Black, Red	500 1000	152.4 304.8	5.5 12.0	2.5 5.5	.008	.20	.024	.61	.131	3.33	31	102	58	190
Jacket and shield are bonded so both can be removed with automatic stripping equipment.																		
24 AWG Stranded (41x40) HC Bare Copper Conductors • BC "French Braid" Shield (95% Coverage) • 24 AWG Stranded TC Drain Wire																		
Polyolefin Insulation • Matte PVC Jacket (Available in Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White or Black)																		
 French Braid	**1901A** new		1	Black, Red	500 ◆ U-1000 1000 ◆	152.4 U-304.8 304.8	8.0 15.0 16.0	3.6 6.8 7.3	.008	.20	.023	.58	.138	3.51	26	86	48	156
◆500 ft. and 1000 ft. put-ups available in Black only.																		
24 AWG Stranded (7x32) Tinned Copper Conductors • Twisted Pair • Overall 100% Beldfoil Shield†† • 24 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
Low-Capacitance UL AWM Style 2092 (300V 60°C)	**8641**	NEC: CM CEC: CM	1	Black, Clear	100 U-500 500 U-1000 1000 2000	30.5 U-152.4 152.4 U-304.8 304.8 609.6	2.1 7.0 7.0 13.0 14.0 26.0	1.0 3.2 3.2 5.9 6.4 11.8	.016	.41	.025	.64	.168	4.27	22	72	42	138
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit	**88641**	NEC: CMP CEC: CMP FT6	1	Black, Red	100 500 † 1000 †	30.5 152.4 304.8	2.4 6.0 11.0	1.1 2.7 5.0	.006	.15	.014	.36	.106	2.69	31	102	59	194
Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit	**82641**	NEC: CMP CEC: CMP FT6	1	Black, Red	U-1000 † 1000 †	U-304.8 304.8	9.0 10.0	4.1 4.5	.006	.15	.014	.36	.106	2.69	31	102	59	194

For cross-connect use with 1408R (et al.) Snake Cables, see page 12.19.

For cross-connect use with FleXnake® Audio Snake Cables, see page 12.21.

For Plenum versions of 8641, see 88641 or 82641.

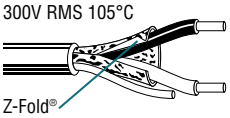
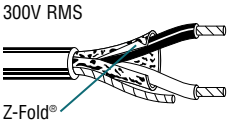
BC = Bare Copper • HC = High-Conductivity • TC = Tinned Copper

*Capacitance between conductors. **Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown. ††Beldfoil provides high reliability with ease of termination.

Line Level Analog Audio Cable

Single- and Double-Pair Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
22 AWG Stranded (7x30) Tinned Copper Conductors • Twisted Pairs • Overall 100% Beldfoil® Shield • 24 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • PVC Jacket (Available in Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White or Black)																		
300V RMS	**1266A**	NEC:	1	Black,	U-1000	U-304.8	15.0	6.8	.010	.25	.020	.51	.145	3.68	30	99	54	177
		CM		Red	1000 ▲	304.8	15.0	6.8										
		CEC:																
		CM																
▲1000 ft. put-up available in Black only. Unique design features lower capacitance and greater flexibility than standard audio pair constructions.																		
PVC Insulation • PVC Jacket (Available in Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White or Black)																		
300V 90°C	**1503A**	NEC:	1	Black,	U-1000	U-304.8	16.0	7.3	.010	.25	.020	.51	.142	3.61	53	174	97	318
		CM		Red														
		CEC:																
		CM																
22 AWG Solid Tinned Copper Conductors • Twisted Pairs • Overall 100% Beldfoil Shield • 22 AWG Solid TC Drain Wire																		
Polypropylene Insulation • Gray or Black PVC Jacket																		
300V RMS 105°C  Z-Fold®	**8450**	NEC:	1	Black,	U-500 ◆	U-152.4	7.0	3.2	.007	.18	.018	.46	.118	3.00	40	131	76	249
		CM		Red	U-1000 ◆	U-304.8	13.0	5.9										
		CEC:			1000	304.8	13.0	5.9										
		CM																
◆U-500 ft. and U-1000 ft. put-ups available in Black only. Belden's Miniature Type Broadcast Audio and Instrumentation Cables occupy 1/2 to 2/3 less space than standard cables.																		
22 AWG Stranded (7x30) Tinned Copper Conductors • Twisted Pair • Overall 100% Beldfoil Shield • 22 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • Paper Wrap • Gray or Black PVC Jacket																		
300V RMS  Z-Fold®	**8451**	NEC:	1	Black,	100 ▼	30.5	2.7	1.2	.008	.20	.020	.51	.138	3.51	34	111	67	220
		CMR		Red	U-500	U-152.4	7.5	3.4										
		CEC:			500	152.4	8.0	3.6										
		CMG FT4			U-1000	U-304.8	14.0	6.4										
					1000	304.8	15.0	6.8										
▼100 ft. put-up available in Black only. Belden's Miniature Type Broadcast Audio and Instrumentation Cables occupy 1/2 to 2/3 less space than standard cables. Unique paper separator facilitates jacket stripping.																		
Polypropylene Insulation • PVC Jacket (Available in Black, Gray, Brown, Red, Orange, Yellow, Green, Blue, Violet or White)																		
300V RMS	**9451**	NEC:	1	Black,	U-500 ✱	U-152.4	8.0	3.6	.008	.20	.020	.51	.135	3.43	34	111	67	220
		CMR		Red	500 ✱	152.4	8.0	3.6										
		CEC:			T-1000 ✱	T-304.8	17.0	7.7										
		CMR FT4			U-1000	U-304.8	15.0	6.8										
					5000	1524.0	74.5	33.9										
✱U-500 ft., 500 ft. and T-1000 ft. put-ups available in Gray only. The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.																		

For cross-connect use with 1814R (et al.) Snake Cables, see page 12.22.

TC = Tinned Copper

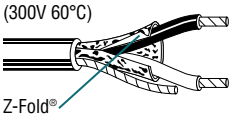
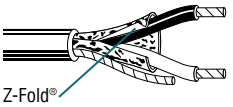
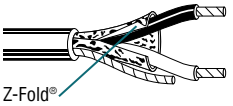
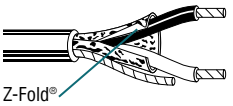
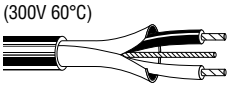
*Capacitance between conductors.

**Capacitance between one conductor and other conductors connected to shield.

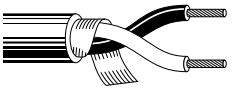
Line Level Analog Audio Cable

Single- and Double-Pair Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Stranded (7x30) Tinned Copper Conductors • Twisted Pair • Overall 100% Beldfoil® Shield • 22 AWG Stranded TC Drain Wire *(cont'd)*																		
Polyethylene Insulation • Chrome PVC Jacket																		
Low-Capacitance	**8761**	NEC:	1	Black,	U-500	U-152.4	9.0	4.1	.016	.41	.025	.64	.175	4.45	24	79	47	154
UL AWM Style 2092		CM		Clear	500	152.4	9.0	4.1										
(300V 60°C)		CEC:			U-1000	U-304.8	17.0	7.7										
		CM			1000	304.8	18.0	8.2			For Plenum versions of 8761, see 88761, 87761 or 82761.							
					2000	609.6	34.0	15.5										
					5000	1524.0	90.0	40.9										
Z-Fold®					10000††	3048.0	170.0	77.3										
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit	**88761**	NEC:	1	Black,	100	30.5	2.7	1.2	.006	.15	.014	.36	.116	2.95	35	115	67	220
		CMP		Red	U-500	U-152.4	7.0	3.2										
		CEC:			500†	152.4	7.5	3.4										
		CMP FT6			U-1000	U-304.8	13.0	5.9										
Z-Fold®					1000†	304.8	14.0	6.4										
Plenum • FEP Insulation • Red Fluorocopolymer Jacket																		
300V RMS, Non-conduit	**87761**	NEC:	1	Black,	500†	152.4	7.0	3.2	.006	.15	.014	.36	.116	2.95	35	115	67	220
		CMP		Red	1000†	304.8	13.0	5.9										
		CEC:																
		CMP FT6																
Z-Fold®																		
Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit	**82761**	NEC:	1	Black,	U-500†	U-152.4	6.5	3.0	.006	.15	.014	.36	.116	2.95	35	115	67	220
		CMP		Red	U-1000†	U-304.8	12.0	5.5										
		CEC:			1000†	304.8	13.0	5.9										
		CMP FT6																
Z-Fold®																		
Polyethylene Insulation • Chrome PVC Jacket																		
Low-Capacitance	**9461**	NEC:	1	Black,	U-500	U-152.4	11.0	5.0	.016	.41	.026	.66	.180	4.57	24	79	47	154
UL AWM Style 2092		CM		Clear	U-1000	U-304.8	21.0	9.6										
(300V 60°C)		CEC:																
		CM																

The jacket and shield are bonded so both can be removed on automatic stripping equipment.

22 AWG Stranded (7x30) Tinned Copper Conductors • Twisted Pair • 85% Tinned Copper Spiral Wrapped Shield																		
PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2095	**8737**	NEC:	1	Black,	U-500	U-152.4	10.5	4.8	.015	.38	.025	.64	.180	4.57	40	131	70	230
(300V 80°C)		CMG		Red	500	152.4	10.0	4.5										
		CEC:			U-1000	U-304.8	20.0	9.1										
		CMG FT4			1000	304.8	20.0	9.1										

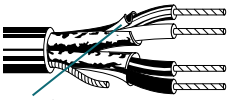
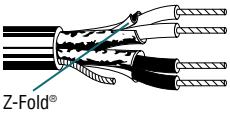
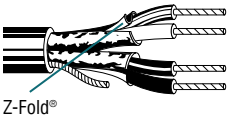
TC = Tinned Copper

* Capacitance between conductors.
** Capacitance between one conductor and other conductors connected to shield.
† Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.
†† Length may vary -10% to +20% and may contain 2 pieces. Minimum length of any piece is 1500 ft.

Line Level Analog Audio Cable

Single- and Double-Pair Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
22 AWG Stranded (7x30) Tinned Copper • Twisted Pairs • Individually Shielded w/ 100% Beldfoil® • 24 AWG Stranded TC Common Drain Wire																		
Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS 60°C  Z-Fold®	**8723**	NEC: CM CEC: CM	2	Red/Black, Green/White	100	30.5	2.3	1.0	15.0Ω/M′	16.6Ω/M′	.168	4.27	45	66%	35	115	62	203
					U-500	U-152.4	10.5	4.8	49.2Ω/km	54.5Ω/km								
					500	152.4	10.0	4.5										
					U-1000	U-304.8	20.0	9.1										
					1000	304.8	20.0	9.1										
					1640	499.9	32.8	14.9					For Plenum versions of 8723, see 88723, 87723 or 82723.					
					U-2000	U-609.6	40.0	18.2										
					2000	609.6	40.0	18.2										
					3280	999.7	65.6	29.8										
					5000	1524.0	95.0	43.2										
					10000	3048.0	200.0	90.9										
Plenum • FEP Insulation • Red FEP Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit Z-Fold®	**88723**	NEC: CMP CEC: CMP FT6	2	Red/Black, Green/White	100	30.5	3.4	1.5	16.0Ω/M′	14.7Ω/M′	.148	3.76	40	69%	35	115	67	220
					500	152.4	11.0	5.0	52.5Ω/km	48.2Ω/km								
					1000	304.8	21.0	9.5										
Plenum • FEP Insulation • Red Fluorocopolymer Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit  Z-Fold®	**87723**	NEC: CMP CEC: CMP FT6	2	Red/Black, Green/White	500†	152.4	11.0	5.0	16.0Ω/M′	14.7Ω/M′	.148	3.76	40	69%	35	115	67	220
					1000†	304.8	20.0	9.1	52.5Ω/km	48.2Ω/km								
Plenum • Halar® Insulation • Natural Flamarrest® Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit  Z-Fold®	**82723**	NEC: CMP CEC: CMP FT6	2	Red/Black, Green/White	U-500†	U-152.4	10.0	4.5	14.7Ω/M′	16.6Ω/M′	.148	3.76	36	62%	43	141	75	246
					U-1000	U-304.8	19.0	8.6	48.2Ω/km	54.5Ω/km								
					1000†	304.8	20.0	9.1										
					U-2000†	U-609.6	38.0	17.3										

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

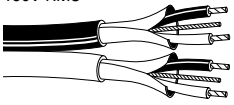
Halar is an Ausimont Corporation trademark.

Line Level Analog Audio Cable

Single- and Double-Pair Cables

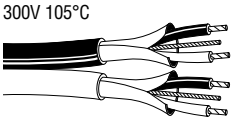
BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Stranded (19x34) Tinned Copper Conductors • Dual Twisted Pairs • Overall 100% Beldfoil® Shield • 24 AWG Stranded TC Drain Wire																		
PVC Insulation • PVC Jacket in Zip-Cord Construction (Red & Green, Red & Black, Red & Purple or Red & Gray)																		
Stereo Audio 150V RMS	**1504A**	NEC: CM CEC: CM	2	Black, Red	U-1000 2000 ▲	U-304.8 609.8	33.0 68.0	15.0 30.9	.010	.25	.020	.51	.143 x .286	3.63 x 7.26	57	187	100	328



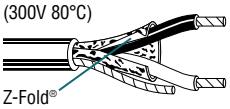
▲2000 ft. put-up available in Red & Gray or Red & Green only.
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.

22 AWG Stranded (7x30) Tinned Copper Conductors • Twisted Pair • Overall 100% Beldfoil Shield • 22 AWG Stranded TC Drain Wire																		
Polyolefin Insulation • PVC Jacket in Zip-Cord Construction (Red & Green, Red & Black, Red & Purple or Red & Gray)																		
300V 105°C	**9451D** new	NEC: CMR CEC: CMG FT4	2	Black, Red	U-1000 2000 ◆	U-304.8 620.8	28.0 60.0	12.7 27.3	.008	.20	.020	.51	.135 x .270	3.43 x 6.86	34	112	67	220



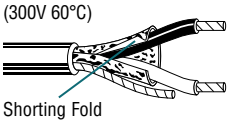
◆2000 ft. put-up available in Red & Green only.
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.

20 AWG Stranded (7x28) Tinned Copper Conductors • Twisted Pair • Overall 100% Beldfoil Shield • 20 AWG Stranded TC Drain Wire																		
PVC Insulation • Beige PVC Jacket																		
UL AWM Style 2464 (300V 80°C)	**9154**	NEC: CMG CEC: CMG FT4	1	Black, Red	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	11.5 12.0 23.0 23.0	5.2 5.5 10.5 10.5	.014	.36	.031	.79	.198	5.03	60	197	100	328



9154 has 22 AWG stranded tinned copper drain wire.

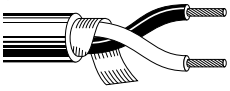
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2092 (300V 60°C)	**8762**	NEC: CM CEC: CM	1	Black, Clear	100 250 U-500 500 U-1000 1000 2000 10000	30.5 76.2 U-152.4 152.4 U-304.8 304.8 609.6 3048.0	3.2 6.3 12.0 12.0 23.0 23.0 46.0 240.0	1.5 2.8 5.5 5.5 10.5 10.5 20.9 109.1	.016	.41	.028	.71	.204	5.18	27	89	49	161



UL AWM Style 2092 (300V 60°C)	**9464**	NEC: CM CEC: CM	1	Black, Clear	U-500 U-1000	U-152.4 U-304.8	16.5 33.0	7.5 15.0	.016	.41	.035	.89	.214	5.44	27	89	49	161

The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is on the inside of foil shield.

20 AWG Stranded (7x28) Tinned Copper Conductors • Twisted Pair • 89% Tinned Copper Spiral Wrapped Shield																		
PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2095 (300V 80°C)	**8759**	NEC: CMG CEC: CMG FT4	1	Black, Red	U-500 U-1000 1000	U-152.4 U-304.8 304.8	13.0 25.0 25.0	5.9 11.4 11.4	.016	.41	.025	.64	.199	5.05	47	154	79	259



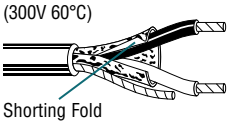
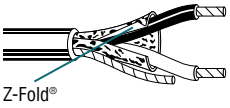
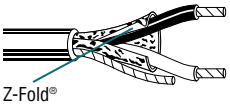
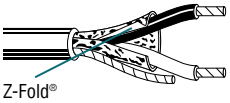
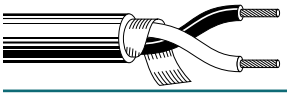
TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Line Level Analog Audio Cable

Single- and Double-Pair Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
18 AWG Stranded (16x30) Tinned Copper Conductors • Twisted Pair • Overall 100% Beldfoil® Shield • 20 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2092 (300V 60°C)	**9460**	NEC: CM CEC: CM	1	Black, Clear	U-500 U-1000	U-152.4 U-304.8	18.5 36.0	8.4 16.4	.019	.48	.030	.76	.230	5.84	24	79	44	144
The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is on the inside of foil shield.																		
Low-Capacitance UL AWM Style 2092 (300V 60°C)  Shorting Fold	**8760**	NEC: CM CEC: CM	1	Black, Clear	250 U-500 500 U-1000 1000 2000 5000 10000	76.2 U-152.4 152.4 U-304.8 304.8 609.6 1524.0 3048.0	6.8 13.0 13.0 26.0 25.0 50.0 135.0 260.0	3.1 5.9 5.9 11.8 11.4 22.7 61.4 118.2	.019	.48	.028	.71	.222	5.64	24	79	44	144
For Plenum versions of 8760, see 88760, 87760 or 82760.																		
18 AWG Stranded (19x30) Tinned Copper Conductors • Twisted Pair • Overall 100% Beldfoil Shield • 20 AWG Stranded TC Drain Wire																		
Plenum • FEP Insulation • Red FEP Jacket																		
300V RMS, Non-conduit  Z-Fold®	**88760**	NEC: CMP CEC: CMP FT6	1	Black, Red	100 U-500 500† U-1000 1000†	30.5 U-152.4 152.4 U-304.8 304.8	3.7 12.5 13.0 24.0 24.0	1.7 5.7 5.9 10.9 10.9	.007	.18	.014	.36	.150	3.81	51	167	97	318
Plenum • FEP Insulation • Red Fluorocopolymer Jacket																		
300V RMS, Non-conduit  Z-Fold®	**87760**	NEC: CMP CEC: CMP FT6	1	Black, Red	U-500 500† 1000†	U-152.4 152.4 304.8	12.0 12.5 23.0	5.5 5.7 10.5	.007	.18	.014	.36	.150	3.81	51	167	97	318
Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS, Non-conduit  Z-Fold®	**82760**	NEC: CMP CEC: CMP FT6	1	Black, Red	U-500† U-1000† 1000†	U-152.4 U-304.8 304.8	11.5 22.0 23.0	5.2 10.0 10.5	.007	.18	.014	.36	.150	3.81	51	167	97	318
18 AWG Stranded (7x26) Tinned Copper Conductors • Twisted Pair • 85% Tinned Copper Spiral Wrapped Shield																		
PVC Insulation • Chrome PVC Jacket																		
300V RMS 60°C 	**8790**	NEC: CMG CEC: CMG FT4	1	Red, White	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	17.0 17.5 34.0 35.0	7.7 8.0 15.5 15.9	.022	.56	.028	.71	.241	6.12	53	174	92	302

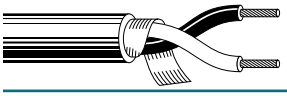
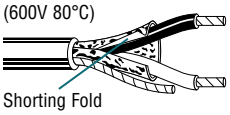
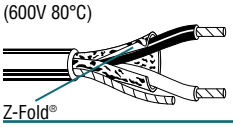
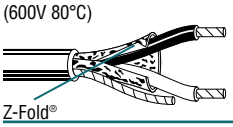
TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Line Level Analog Audio Cable

Single- and Double-Pair Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
16 AWG Stranded (19x29) Tinned Copper Conductors • Twisted Pair • 85% Tinned Copper Spiral Wrapped Shield																		
PVC Insulation • Chrome PVC Jacket																		
300V RMS 60°C 	**8780**	NEC:	1	Black,	500	152.4	23.5	10.7	.023	.58	.030	.76	.280	7.11	57	187	98	322
		CMG		White	U-1000	U-304.8	45.0	20.5										
		CEC:			1000	304.8	46.0	20.9										
		CMG FT4																
16 AWG Stranded (19x29) Tinned Copper Conductors • Twisted Pair • Overall 100% Beldfoil® Shield • 18 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
Low-Capacitance	**8719**	NEC:	1	Black,	U-500	U-152.4	24.5	11.1	.032	.81	.032	.81	.313	7.95	23	75	44	144
UL AWM Style 20253		CM, CL2		Clear	500	152.4	24.5	11.1										
(600V 80°C)		CEC:			U-1000	U-304.8	47.0	21.4										
		CM			1000	304.8	49.0	22.3										
					2000	609.6	100.0	45.5										
					5000	1524.0	245.0	111.4										
Shorting Fold					10000	3048.0	430.0	195.5										
14 AWG Stranded (19x27) Tinned Copper Conductors • Twisted Pair • Overall 100% Beldfoil Shield • 16 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
Low-Capacitance	**8720**	NEC:	1	Black,	U-500	U-152.4	34.5	15.7	.032	.81	.035	.89	.355	9.02	24	79	47	154
UL AWM Style 20253		CM, CL2		Clear	500	152.4	34.0	15.5										
(600V 80°C)		CEC:			1000	304.8	71.0	32.3										
		CM			2000	609.6	138.0	62.7										
Z-Fold®																		
12 AWG Stranded (19x25) Tinned Copper Conductors • Twisted Pair • Overall 100% Beldfoil Shield • 14 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
Low-Capacitance	**8718**	NEC	1	Black,	U-500	U-152.4	48.5	22.0	.037	.94	.040	1.02	.400	10.16	25	82	49	161
UL AWM Style 20253		CM, CL2		Clear	500	152.4	51.0	23.2										
(600V 80°C)		CEC:			1000	304.8	100.0	45.5										
		CM			2000	609.6	198.0	90.0										
Z-Fold®																		

TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Analog Multi-Pair Snake Cable

High-Flex and NEC Rated Cables

BRILLIANCE®

Especially designed for the broadcast industry, Belden's full family of multi-pair audio "Snake" cables feature options and construction for virtually every application.

Applications

Snake cables are used to connect multiple audio channels in low-level (microphone) and high-level (line) componentry such as console board equipment for recording studios, radio television stations, post-production facilities, and sound system installations. With Belden's individually shielded and jacketed snakes, pairs can be split out of the overall jacket for any length and connectorized directly without the need for heat shrink tubing or costly and time-consuming preparation. 22 AWG and 24 AWG sizes are also ideal for punch down connector applications.

Numbered and Color Coded

Jacketed pairs are individually numbered and color coded (following the familiar resistor color code) for easy identification.

Low-Capacitance Design

Belden's 1200 Series Snake Cables feature a low-capacitance design in a flexible, high-performance construction.

New "French Braid" Shield

Belden's patented "French Braid" shield is a double spiral (double serve) bare copper shield with the two spirals tied together by one weave. This improves flex life over standard spiral shields, improves flexibility over conventional braid shields, and lowers microphonic or triboelectric noise.

The "French Braid" is easy to terminate since it is not fully woven. It also provides for lower DC loop resistance than a single spiral braid. The "French Braid" is featured on Belden's FleXnake® Cables (1900 Series) and Quad Snake Cables (7880 Series).

How to Choose a Snake Cable

Permanent Installations

For installed jobs, where you must have an NEC rating, choose your preferred pair-count from within one of the following Belden® snake cable series:

1400R Series Page 12.19
CMR Rated
24 AWG
Individually Shielded and Jacketed Pairs

1500C Series Page 12.20
Flexible, CM Rated
24 AWG
Individually Shielded and Jacketed Pairs

1800R Series Page 12.22
CMR Rated
22 AWG
Individually Shielded and Jacketed Pairs

8770/9760 Series Page 12.24
CM Rated
22 AWG
Individually Shielded Pairs

80000 Series Page 12.25
CMP Rated (Plenum-Rated)
22 AWG
Individually Shielded Pairs

6540PA Series Page 12.26
CMP Rated (Plenum-Rated)
22 AWG
Individually Shielded Pairs

Temporary Installations or Field Use

For non-installed jobs, where cable flexibility is more important than NEC rating, choose your preferred pair-count from these snake cables series:

1500C Series Page 12.20
Flexible, CM Rated
24 AWG
Individually Shielded and Jacketed Pairs

1200B Series Page 12.23
Flexible, Low-Capacitance
22 AWG
Individually Shielded and Jacketed Pairs

1900A Series Page 12.21
Super-Flexible
24 AWG
Individually Shielded and Jacketed Pairs with "French Braid" Shield

7880A Series Page 12.18
Super-Flexible Star Quads
26 AWG
Individually Shielded and Jacketed Quads with "French Braid" Shield

Analog Multi-Quad Snake Cable

Super-Flexible, High-Performance Star Quad Cables
Individually Shielded and Jacketed Quads

BRILLIANCE®

Individually Shielded and Jacketed Quads

Not NEC Rated

Product Description

26 AWG* stranded (30x40) bare copper conductor. Polyethylene insulation. Quads individually shielded with bare copper "French Braid," each quad with 26 AWG tinned copper drain wire. Color-coded PVC inner jackets (see table below) with overall Matte Black PVC jacket and 20 AWG drain wire.

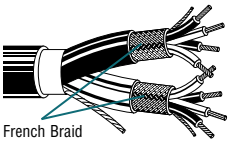
Color Code: Blue, White, Blue w/White stripe, White w/Blue stripe.

Specifications

Nominal OD — Conductor	.020″ (.51mm)
Nominal OD — Insulation	.045″ (1.14mm)
Inner Pair Jacket OD	.157″ (3.99mm)
Nominal DCR	
Conductor	36.0Ω/M′ (11.8Ω/km)
Shield	6.8Ω/M′ (2.23Ω/km)
Nominal Impedance	40Ω
Nominal Velocity of Propagation	66%
Nominal Capacitance	
Between Conductors	39 pF/Ft. (129 pF/m)
Between Conductors in Quad Config.	57 pF/Ft. (188 pF/m)

DCR = DC Resistance

*22 AWG equivalent DCR when connected to a 3-pin XLR



Part No.	No. of Quads	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
Super-Flexible Quads							
26 AWG							
7884A new	2	250	76.2	27.0	12.3	.458	11.63
		500	152.4	54.5	24.8		
		1000	304.8	99.0	45.0		
7885A new	4	250	76.2	35.0	15.9	.498	12.65
		500	152.4	70.5	32.0		
		1000	304.8	131.0	59.5		
7886A new	8	250	76.2	76.0	34.6	.782	19.86
		500	152.4	146.5	66.6		
		1000	304.8	315.0	143.2		
7887A new	12	250	76.2	90.0	41.0	.828	21.03
		500	152.4	178.0	80.9		
		1000	304.8	366.0	166.4		
7888A new	16	250	76.2	115.0	52.3	.938	23.83
		500	152.4	239.5	108.9		
		1000	304.8	470.0	213.6		
7889A new	24	250	76.2	194.0	88.3	1.232	31.29
		500	152.4	396.0	180.0		
		1000	304.8	798.0	362.7		

Length may vary -10% to +0% from length shown.

Inner Jacket Colors:

Quad No.	Jacket Color
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Violet

Quad No.	Jacket Color
8	Gray
9	White
10	Black
11	Beige
12	Pink
13-24	Gray (numbered)

Analog Multi-Pair Snake Cable

CMR Rated Cables
Individually Shielded and Jacketed Twisted Pairs

BRILLIANCE®

Individually Shielded and Jacketed Pairs

NEC: CMR (CEC: CMG FT4)

Product Description

24 AWG stranded (7x32) tinned copper conductor. Polyolefin insulation. Twisted pairs individually shielded with 100% Beldfoil® and have numbered and color-coded PVC jackets (see Chart 7 in Technical Information Section for colors). Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment. Overall Beldfoil shield plus overall Black PVC jacket and nylon rip cord.

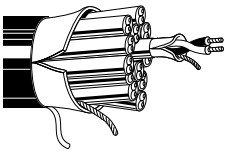
Color Code: Red, Black.

Specifications

Nominal OD — Conductor	.024″ (.61mm)
Nominal OD — Insulation	.040″ (1.02mm)
Inner Pair Jacket OD	.111″ (2.82mm)
Approvals	
NEC	CMR
CEC	CMG FT4
Nominal DCR	
Conductor	23.3Ω/M′ (76.4Ω/km)
Shield	15.9Ω/M′ (62.0Ω/km)
Nominal Impedance	50Ω
Nominal Velocity of Propagation	66%
Nominal Capacitance	
Between Conductors	31 pF/Ft. (102 pF/m)
Between Conductor/Shield*	56 pF/Ft. (184 pF/m)

DCR = DC Resistance

*Capacitance between one conductor and other conductors connected to shield.



Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
CMR Rated Twisted Pairs NEC: CMR (CEC: CMG FT4)							
24 AWG							
1408R	4	500 1000	152.4 304.8	37.5 73.0	15.0 33.2	.346	8.79
1409R	6	500 1000	152.4 304.8	50.0 99.0	22.7 45.0	.412	10.46
1410R	8	500 1000	152.4 304.8	61.0 121.0	27.7 55.0	.446	11.33
1411R	12	500 1000	152.4 304.8	90.0 173.0	40.9 78.6	.555	14.10
1412R	16	500 1000	152.4 304.8	115.0 229.0	52.3 104.1	.622	15.80
1413R	20	500 1000	152.4 304.8	142.5 289.0	64.8 131.4	.704	17.88
1414R	24	500 1000	152.4 304.8	179.5 369.0	81.6 167.7	.801	20.35
1415R	26	500 1000	152.4 304.8	190.5 391.0	86.6 177.7	.816	20.73
1416R	32	500 1000	152.4 304.8	225.0 458.0	102.3 208.2	.890	22.61

Length may vary -10% to +0% from length shown.

Analog Multi-Pair Snake Cable

Flexible, CM Rated Cables
Individually Shielded and Jacketed Twisted Pairs

BRILLIANCE®

Individually Shielded and Jacketed Pairs

NEC: CM (CEC: CM)

Product Description

24 AWG stranded (7x32) tinned copper conductor. Polyolefin insulation. Twisted pairs individually shielded with 100% Beldfoil® and have numbered and color-coded PVC jackets (see Chart 7 in Technical Information Section for colors). Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment. Overall Beldfoil shield plus overall Matte Black PVC jacket and nylon rip cord.

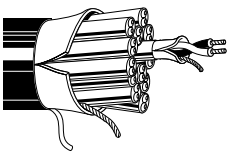
Color Code: Red, Black.

Specifications

Nominal OD — Conductor	.024″ (.61mm)
Nominal OD — Insulation	.040″ (1.02mm)
Inner Pair Jacket OD	.111″ (2.82mm)
Approvals	
NEC	CM
CEC	CM
Nominal DCR	
Conductor	23.3Ω/M′ (76.4Ω/km)
Shield	15.9Ω/M′ (62.0Ω/km)
Nominal Impedance	50Ω
Nominal Velocity of Propagation	66%
Nominal Capacitance	
Between Conductors	31 pF/Ft. (102 pF/m)
Between Conductor/Shield*	56 pF/Ft. (184 pF/m)

DCR = DC Resistance

*Capacitance between one conductor and other conductors connected to shield.



Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
Flexible, CM Rated Twisted Pairs NEC: CM (CEC: CM)							
24 AWG							
1509C	2	500 1000	152.4 304.8	23.5 44.0	10.7 20.0	.301	7.65
1510C	4	500 1000	152.4 304.8	37.0 71.0	16.8 32.3	.352	8.94
1511C	6	500 1000	152.4 304.8	49.0 97.0	22.3 44.1	.418	10.61
1512C (DT-12)	8	500 1000	152.4 304.8	64.0 130.0	29.1 59.1	.452	11.48
1513C	12	500 1000	152.4 304.8	88.0 174.0	40.0	.561	14.25
1514C	16	500 1000	152.4 304.8	116.5 228.0	53.0 103.6	.628	15.95
1515C	20	500 1000	152.4 304.8	139.0 282.0	63.2 128.2	.710	19.56
1516C	24	500 1000	152.4 304.8	174.0 358.0	79.1 162.7	.807	20.50
1517C	26	500 1000	152.4 304.8	183.5 377.0	83.4 171.4	.823	20.90
1518C	32	500 1000	152.4 304.8	220.5 449.0	100.2 204.1	.897	22.78
1519C	52	500 1000	152.4 304.8	359.5 705.0	163.4 320.5	1.117	28.37

Length may vary -10% to +0% from length shown.

Analog Multi-Pair Snake Cable

FleXnake® Super-Flexible, High-Performance Cables
Individually Shielded and Jacketed Twisted Pairs

BRILLIANCE®

Individually Shielded and Jacketed Pairs

Not NEC Rated

Product Description

24 AWG stranded (41x40) bare copper conductor. Polyolefin insulation. Twisted pairs individually shielded with double serve "French Braid" (93% coverage). Pairs have numbered and color-coded PVC jackets (see Chart 7 in Technical Information Section for colors). Overall Black PVC jacket with tinned copper drain wire.

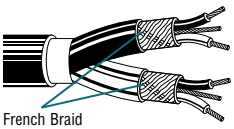
Color Code: Red, Black.

Specifications

Nominal OD — Conductor	.023″ (.58mm)
Nominal OD — Insulation	.040″ (1.02mm)
Inner Pair Jacket OD	.120″ (3.05mm)
Nominal DCR	
Conductor	25.5Ω/M′ (83.7Ω/km)
Shield	7.2Ω/M′ (23.6Ω/km)
Nominal Impedance	60Ω
Nominal Velocity of Propagation	66%
Nominal Capacitance	
Between Conductors	26 pF/Ft. (85 pF/m)
Between Conductor/Shield*	47 pF/Ft. (154 pF/m)

DCR = DC Resistance

*Capacitance between one conductor and other conductors connected to shield.



French Braid

Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
FleXnake Super-Flexible Twisted Pairs							
24 AWG							
1902A	2	250	76.2	14.0	6.4	.330	8.38
		500	152.4	27.0	12.3		
		1000	304.8	53.0	24.1		
1904A	4	250	76.2	23.3	10.6	.372	8.45
		500	152.4	40.5	18.4		
		1000	304.8	78.0	35.5		
1906A	6	250	76.2	28.0	12.7	.449	11.40
		500	152.4	55.5	25.2		
		1000	304.8	111.0	50.5		
1908A	8	250	76.2	34.3	15.6	.482	12.20
		500	152.4	70.0	31.8		
		1000	304.8	136.0	61.8		
1912A	12	250	76.2	52.0	23.6	.602	15.30
		500	152.4	102.5	46.6		
		1000	304.8	203.0	92.3		
1916A	16	250	76.2	71.3	32.4	.683	17.30
		500	152.4	138.0	62.7		
		1000	304.8	280.0	127.3		
1924A	24	250	76.2	108.3	49.2	.825	21.00
		500	152.4	215.0	97.7		
		1000	304.8	438.0	199.1		
1932A	32	250	76.2	135.5	61.6	.968	24.60
		500	152.4	274.5	124.8		
		1000	304.8	540.0	245.5		

Length may vary -10% to +0% from length shown.

Analog Multi-Pair Snake Cable

CMR Rated Cables
Individually Shielded and Jacketed Twisted Pairs

BRILLIANCE®

Individually Shielded and Jacketed Pairs

NEC: CMR (CEC: CMG FT4)

Product Description

22 AWG stranded (7x30) tinned copper conductor. Polyolefin insulation. Twisted pairs individually shielded with bonded Beldfoil® and have numbered and color-coded PVC jackets (see Chart 7 in Technical Information Section for colors). Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment. Overall Beldfoil shield plus overall Black PVC jacket and nylon rip cord.

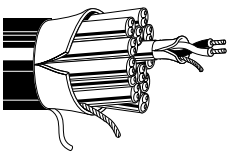
Color Code: Red, Black.

Specifications

Nominal OD — Conductor	.030″ (.76mm)
Nominal OD — Insulation	.050″ (1.27mm)
Inner Pair Jacket OD	.133″ (3.38mm)
Approvals	
NEC	CMR
CEC	CMG FT4
Nominal DCR	
Conductor	16.0Ω/M′ (52.5Ω/km)
Shield	14.0Ω/M′ (45.9Ω/km)
Nominal Impedance	50Ω
Nominal Velocity of Propagation	66%
Nominal Capacitance	
Between Conductors	31 pF/Ft. (102 pF/m)
Between Conductor/Shield*	56 pF/Ft. (184 pF/m)

DCR = DC Resistance

*Capacitance between one conductor and other conductors connected to shield.



Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
CMR Rated Twisted Pairs NEC: CMR (CEC: CMG FT4)							
22 AWG							
1814R	2	500	152.4	29.0	13.2	.330	8.38
		1000	304.8	56.0	25.5		
1815R	4	500	152.4	46.0	20.9	.384	9.74
		1000	304.8	90.0	40.9		
1816R	6	250	76.2	31.8	14.4	.462	11.73
		500	152.4	62.0	28.2		
		1000	304.8	124.0	56.4		
1817R	8	500	152.4	78.5	35.7	.503	12.78
		1000	304.8	150.0	68.2		
1818R	12	500	152.4	117.5	53.4	.638	16.21
		1000	304.8	233.0	105.9		
1819R	16	500	152.4	172.5	78.4	.776	19.71
		1000	304.8	349.0	158.6		
1820R	20	500	152.4	214.5	97.5	.865	21.97
		1000	304.8	439.0	199.5		
1821R	24	500	152.4	261.0	118.6	.969	24.61
		1000	304.8	513.0	233.2		
1822R	26	500	152.4	278.0	126.4	.989	25.12
		1000	304.8	547.0	248.6		
1823R	32	500	152.4	332.0	150.9	1.072	27.23
		1000	304.8	685.0	311.4		

Length may vary -10% to +0% from length shown.

Analog Multi-Pair Snake Cable

Flexible, Low-Capacitance Cables
Individually Shielded and Jacketed Twisted Pairs

BRILLIANCE®

Individually Shielded and Jacketed Pairs

Not NEC Rated

Product Description

22 AWG stranded (7x30) tinned copper conductor. Datalene® insulation. Twisted pairs individually shielded with 100% Beldfoil® and have numbered and color-coded PVC jackets (see Chart 7 in Technical Information Section for colors). Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment. Overall Matte Black PVC jacket and nylon rip cord.

Datalene insulation features include a low dielectric constant and a low dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

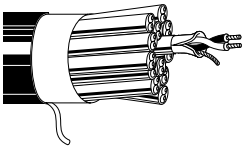
Color Code: Red, Black.

Specifications

Nominal OD — Conductor	.030″ (.76mm)
Nominal OD — Insulation	.060″ (1.52mm)
Inner Pair Jacket OD	.153″ (3.89mm)
Nominal DCR	
Conductor	16.0Ω/M′ (52.5Ω/km)
Shield	10.6Ω/M′ (34.8Ω/km)
Voltage Rating	150V
Temperature Rating	60°C
Nominal Impedance	70Ω
Nominal Velocity of Propagation	78%
Nominal Capacitance	
Between Conductors	19 pF/Ft. (62 pF/m)
Between Conductor/Shield*	35 pF/Ft. (115 pF/m)

DCR = DC Resistance

*Capacitance between one conductor and other conductors connected to shield.



Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
Flexible, Low-Capacitance Twisted Pairs							
22 AWG							
1217B	4	500 1000	152.4 304.8	52.0 104.0	23.6 47.3	.458	11.63
1218B	6	500 1000	152.4 304.8	80.0 153.0	36.4 69.5	.578	14.68
1219B	9	500 1000	152.4 304.8	116.0 235.0	52.7 106.8	.700	17.78
1220B	12	500 1000	152.4 304.8	141.5 287.0	64.3 130.5	.760	19.30
1222B	16	500 1000	152.4 304.8	188.5 385.0	85.7 175.0	.852	21.64
1225B	20	500 1000	152.4 304.8	241.5 474.0	109.8 215.5	.960	24.38
1427B	24	1000	304.8	579.0	263.2	1.088	27.64
1221B	28	500 1000	152.4 304.8	335.5 677.0	152.5 307.7	1.140	28.96
1226B	32	500 1000	152.4 304.8	369.0 744.0	167.7 338.2	1.183	30.05
1428B†	52	1000	304.8	1142.0	519.1	1.496	38.00

Length may vary -10% to +0% from length shown.

†1428B available by special order. Please contact Belden for lead time.

Analog Multi-Pair Snake Cable

CM Rated Cables
Individually Shielded Twisted Pairs

BRILLIANCE®

Individually Shielded and Jacketed Pairs

NEC: CM (CEC: CM)

Product Description

22 AWG stranded (7x30) tinned copper conductor. Polypropylene insulation. Twisted pairs individually shielded with 100% Beldfoil®. Overall Chrome PVC jacket and 22 AWG stranded tinned copper drain wire.

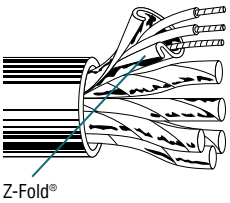
Color Code: See Chart 3 (in Technical Information Section)

Specifications

Nominal OD — Conductor	.030″ (.76mm)
Nominal OD — Insulation	.050″ (1.27mm)
Approvals	
NEC	CM
CEC	CM
UL Ratings	UL AWM Style 2919
Voltage Rating	30V
Temperature Rating	80°C
Nominal DCR	
Conductor	16.0Ω/M′ (52.5Ω/km)
Shield	10.6Ω/M′ (34.8Ω/km)
Nominal Impedance	50Ω
Nominal Velocity of Propagation	66%
Nominal Capacitance	
Between Conductors	30 pF/Ft. (98 pF/m)
Between Conductor/Shield*	55 pF/Ft. (180 pF/m)

DCR = DC Resistance

*Capacitance between one conductor and other conductors connected to shield.



Z-Fold®

Part No.	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nominal OD Inch	Nominal OD mm
CM Rated Twisted Pairs NEC: CM (CEC: CM)							
22 AWG							
8777	3	100	30.5	5.3	2.4	.273	6.93
		250	76.2	11.3	5.1		
		U-500	U-152.4	21.0	9.5		
		500	152.4	21.0	9.5		
		U-1000	U-304.8	41.0	18.6		
		1000	304.8	42.0	19.1		
		1640	499.9	67.2	30.6		
		3280	999.7	137.8	62.6		
		5000	1524.0	210.0	95.5		
		10000	3048.0	450.0	204.5		
For Plenum versions of 8777, see 88777, 87777 or 82777.							
8778	6	100	30.5	8.4	3.8	.362	9.19
		250	76.2	20.8	9.4		
		500	152.4	43.0	19.5		
		1000	304.8	83.0	37.7		
For Plenum versions of 8778, see 88778, 87778 or 82778.							
8774	9	100	30.5	11.6	5.3	.417	10.59
		250	76.2	28.8	13.1		
		500	152.4	58.0	26.4		
		1000	304.8	115.0	52.3		
8775	11	100	30.5	14.1	6.4	.464	11.79
		500	152.4	67.0	30.5		
		1000	304.8	133.0	60.5		
9768	12	100	30.5	14.9	6.8	.464	11.79
		250	76.2	35.5	16.1		
		500	152.4	73.5	33.4		
		1000	304.8	143.0	65.0		
8776	15	100	30.5	19.7	9.0	.548	13.92
		250	76.2	49.5	22.5		
		500	152.4	98.0	44.5		
		1000	304.8	197.0	89.5		
9769	17	100	30.5	22.0	10.0	.577	14.66
		500	152.4	109.0	49.5		
		1000	304.8	215.0	97.7		
8769	19	100	30.5	25.0	11.4	.603	15.32
		500	152.4	123.5	56.1		
		1000	304.8	245.0	111.4		
8773	27	100	30.5	33.8	15.4	.709	18.00
		250†	76.2	85.0	38.6		
		500†	152.4	166.0	75.5		
		1000†	304.8	346.0	157.3		
9767	37	500†	152.4	224.0	101.8	.800	20.32
		1000†	304.8	481.0	218.6		

†Spools are one piece, but length may vary -0 to +20% from length shown.

Analog Multi-Pair Snake Cable

CMP Rated (Plenum) Cables
Individually Shielded Twisted Pairs

BRILLIANCE®

Individually Shielded and Jacketed Pairs

NEC: CMP (CEC: CMP FT6)

Product Description

22 AWG stranded (7x30) tinned copper conductor. FEP insulation (except 82777, 82778 which have Halar® insulation). Twisted pairs individually shielded with 100% Beldfoil®. Overall jacket per table below. 22 AWG stranded tinned copper drain wire.

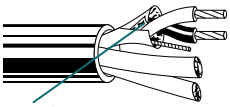
Color Code: See Chart 3 (in Technical Information Section)

Specifications

Nominal OD — Conductor	.030″ (.76mm)
Nominal OD — Insulation	.050″ (1.27mm)
Approvals	
NEC	CMP
CEC	CMP FT6
UL Ratings	Non-conduit
Voltage Rating	300V RMS
Nominal DCR	
Conductor	16.0Ω/M′ (52.5Ω/km)
Shield	11.3Ω/M′ (37.1Ω/km)
Nominal Impedance	
82xxx Series	46Ω
87xxx, 88xxx Series	50Ω
Nominal Velocity of Propagation	
82xxx Series	62%
87xxx, 88xxx Series	69%
Nominal Capacitance (82xxx Series)	
Between Conductors	35 pF/Ft. (115 pF/m)
Between Conductor/Shield*	76 pF/Ft. (249 pF/m)
Nominal Capacitance (87xxx, 88xxx Series)	
Between Conductors	31 pF/Ft. (102 pF/m)
Between Conductor/Shield*	67 pF/Ft. (220 pF/m)

DCR = DC Resistance

*Capacitance between one conductor and other conductors connected to shield.



Z-Fold®

Part No.	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nominal OD Inch	Nominal OD mm
Plenum-Rated Twisted Pairs NEC: CMP (CEC: CMP FT6)							
22 AWG							
88777	3	100	30.5	6.0	2.7	.234	5.94
		500†	152.4	21.0	9.5		
		1000†	304.8	42.0	19.1		
88778	6	100	30.5	8.8	4.0	.309	7.85
		500†	152.4	40.0	18.2		
		1000†	304.8	75.0	34.1		
87777	3	500†	152.4	20.0	9.1	.234	5.94
		1000†	304.8	40.0	18.2		
87778	6	500†	152.4	37.5	17.0	.309	7.85
		1000†	304.8	73.0	33.2		
82777	3	U-500†	U-152.4	19.0	8.6	.234	5.94
		U-1000	U-304.8	38.0	17.3		
		1000†	304.8	39.0	17.7		
82778	6	1000†	304.8	67.0	30.5	.330	8.38

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Halar is an Ausimont Corporation Trademark.

Analog Multi-Pair Snake Cable

CMP Rated (Plenum) Cables
Individually Shielded Twisted Pairs

BRILLIANCE®

Individually Shielded and Jacketed Pairs

NEC: CMP (CEC: CMP FT6)

Product Description

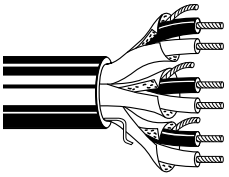
22 AWG stranded (7x30) bare copper conductor. FEP insulation. Twisted pairs individually shielded with 100% Beldfoil® with drain wire. Multiple pairs cable together. Overall Gray fluorocopolymer jacket and rip cord. Sequential footage marking every two feet.

Color Code: See Chart 3 (in Technical Information Section)

Specifications

Nominal OD — Conductor	.029″ (.74mm)
Nominal OD — Insulation	.049″ (1.24mm)
Insulation Thickness	.010″ (.254mm)
Shield	Beldfoil
Outer Jacket Thickness	
2- to 12-pair	.015″ (.38mm)
16-pair (6549PA)	.018″ (.46mm)
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C
Nominal DCR	
Conductor	16.4Ω/M′ (53.8Ω/km)
Shield	15.3Ω/M′ (50.2Ω/km)
Nominal Impedance	50Ω
Nominal Velocity of Propagation	69%
Nominal Capacitance	27.5 pF/Ft. (90.2 pF/m)

DCR = DC Resistance



Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
Plenum-Rated Twisted Pairs NEC: CMP (CEC: CMP FT6)							
22 AWG							
6541PA	2	500 U-1000 1000	152 U-305 305	13.5 26.0 26.0	6.1 11.8 11.8	.214	5.44
6542PA	3	1000	305	36.0	16.4	.228	5.79
6543PA	4	1000	305	46.0	20.9	.252	6.40
6545PA	6	1000	305	62.0	28.2	.300	7.62
6546PA	8	1000	305	82.0	37.3	.328	8.53
6548PA	12	1000	305	121.5	55.2	.404	9.14
6549PA	16	1000	305	161.0	73.2	.459	9.53

AES/EBU Digital Audio Cable

Overview

While digital audio has been around for over 25 years, only recently has there been an effort to standardize specifications. The Audio Engineering Society (U.S.) and the European Broadcast Union have established an international standard, called AES/EBU. The detailed specifications of this standard are:

Sampling Rate: from 32 KHz to 192 KHz
Bandwidth: from 4.096 MHz to 24.5 MHz
Impedance: 110Ω ± 20%

The key difference between twisted pair specifications for digital audio cable and standard analog audio cable is the impedance specification.

AES/EBU, with its broad tolerance, allows cables with impedances from 88 ohms to 132 ohms to be used. Standard analog audio cable impedance is 45 ohms to 70 ohms. This potential amount of mismatch can result in signal reflections and jitter, causing bit errors at the receiver. For this reason Belden recommends 100 to 120 ohm shielded twisted pair cable.

Product Characteristics

Belden's product offering includes 110 ohm cable solutions and an entire line of single and multi-pair snake cable designed specifically for digital audio. These cables utilize Datalene® premium grade high density insulation. This provides exceptional crush resistance as compared to standard foam polyethylenes, making the new cables less susceptible to damage resulting from cable pulling or flexing. The high velocity of propagation further reduces capacitance and signal delay providing error-free transmissions over extended distances.

Belden's "Super Flexible" digital patch cable, part no. 1800F, utilizes Belden's patented "French Braid" shield technology and a special jacket compound formulation to provide the ultimate in flexibility and performance.

Digital Audio Attenuation

Part No.	2 MHz		4 MHz		5 MHz		6 MHz		12 MHz		25 MHz	
	dB/100 Ft.	dB/100m	dB/100 Ft.	dB/100m	dB/100 Ft.	dB/100m	dB/100 Ft.	dB/100m	dB/100 Ft.	dB/100m	dB/100 Ft.	dB/100m
7880A Series	1.67	5.48	2.11	6.92	2.30	7.55	2.46	8.07	3.16	10.37	4.22	13.85
1800F	1.28	4.20	2.17	7.12	2.62	8.60	3.01	9.88	4.72	15.49	7.17	23.52
1803F Series	1.30	4.27	1.56	5.12	1.70	5.58	1.81	5.94	2.28	7.48	3.08	10.10
1696A	.93	3.05	1.15	3.77	1.20	3.94	1.30	4.27	1.60	5.25	1.97	6.46
1855A	.57	1.86	.82	2.70	.92	3.02	1.00	3.29	1.30	4.27	1.80	5.91
1505A	.41	1.35	.58	1.89	.63	2.07	.69	2.25	.90	2.95	1.30	4.27
1505F	.34	1.11	.53	1.74	.60	1.97	.67	2.20	.98	3.22	1.44	4.72
1694A	.16	.52	.48	1.57	.54	1.77	.59	1.93	.80	2.62	1.00	3.28

Values reflect typical results.

Maximum Recommended Transmission Distance at Digital Audio Data Rates

Part No.	2 MHz		4 MHz		5 MHz		6 MHz		12 MHz		25 MHz	
	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m
7880A Series	1198	365	948	289	870	265	813	248	633	193	474	144
1800F	1563	476	922	281	763	233	664	203	424	129	279	85
1803F Series	1538	469	1282	391	1176	359	1105	337	877	267	649	198
1696A	2151	655	1739	530	1667	508	1538	469	1250	381	1015	309
1855A	3521	1073	2427	740	2174	663	1992	607	1538	469	1111	339
1505A	4866	1483	3478	1060	3175	968	2911	887	2222	677	1538	469
1505F	5882	1793	3774	1150	3333	1016	2985	910	2041	622	1389	423
1694A	5882	1793	4184	1275	3704	1129	3407	1039	2500	762	2000	610

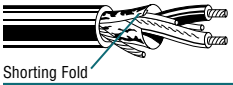
Transmission distance calculations assume minimum allowable output signal amplitude (2V per AES3-1992) and minimum allowable input signal amplitude (2mV per AES3-1992) and a 80% safety factor. Much longer transmission distance is achievable but is contingent upon system component quality.

AES/EBU Digital Audio Cable

Single- and Double-Pair Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
26 AWG Stranded (7x34) .018″ Tinned Copper • Twisted Pair • Beldfoil® Shield • 26 AWG Stranded TC Drain Wire																		
Datalene® Insulation • Chrome or Violet PVC Jacket																		
2-Conductor Digital Video Time Code Cable 80°C	**9180**	NEC: CMR CEC: CMG FT4	1	Black, White	1000	304.8	11.0	5.0	37.3Ω/M′ 122.3Ω/km	23.1Ω/M′ 75.8Ω/km	.144	3.66	110	76%	13	43	26	85
24 AWG Stranded (7x32) Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Drain Wire																		
Datalene Insulation • Slate Gray or Violet PVC Jacket																		
60°C	**1800B**	NEC: CMG CEC: CMG FT4	1	Black, Red	500◆ U-1000 1000 5000◆	152.4 U-304.8 304.8 1524.0	12.0 18.0 18.0 88.8	5.5 8.2 8.2 40.4	23.7Ω/M′ 77.7Ω/km	18.9Ω/M′ 62.0Ω/km	.177	4.57	110	76%	13	43	26	85
24 AWG Stranded (42x40) HC Bare Copper • Conductors Cabled with Fillers • TC "French Braid" Shield (95% Coverage) • BC Drain Wire																		
Datalene Insulation • Matte PVC Jacket (Red, Yellow, Green, Blue, Gray or Black)																		
Digital Mic Cable High-Flex 60°C	**1800F**	NEC: CL2R	1	Black, Red	500▲ U-1000 1000▲	152.4 U-304.8 304.8	13.5 26.0 26.0	6.1 11.8 11.8	23.7Ω/M′ 77.7Ω/km	5.0Ω/M′ 16.4Ω/km	.211	5.36	110	76%	13	43	26	85
24 AWG Stranded (7x32) Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Drain Wire																		
Plenum • Foam FEP Teflon® Insulation • Natural White or Violet Flamarrest® Jacket																		
75°C, Non-conduit	**1801B** new	NEC: CMP CEC: CMP FT6	1	Black, Red	500† U-1000† 1000†	152.4 U-304.8 304.8	9.0 14.0 14.0	4.1 6.4 6.4	23.7Ω/M′ 77.7Ω/km	18.9Ω/M′ 62.0Ω/km	.165	4.19	110	76%	13	43	26	85
24 AWG Stranded (7x32) Tinned Copper • Dual Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Drain Wire																		
Datalene Insulation • Violet PVC Jacket in Zip-Cord Construction																		
60°C	**1802B**	NEC: CMG CEC: CMG FT4	2	Black, Red	500 U-1000 1000	152.4 U-304.8 304.8	18.5 36.0 37.0	8.4 16.4 16.8	23.7Ω/M′ 77.7Ω/km	18.9Ω/M′ 62.0Ω/km	.180 x .360	4.57 x 9.14	110	76%	13	43	26	85
22 AWG Stranded (7x30) Tinned Copper • Twisted Pair with Fillers • Overall 100% Beldfoil Shield + 90% TC Braid Shield • 24 AWG Drain Wire																		
Datalene Insulation • Black High-Flex Matte PVC Jacket																		
High-Flex 60°C	**1696A**		1	Blue, White	250 500 U-1000 1000	76.2 152.4 U-304.8 304.8	8.0 16.0 32.0 32.0	3.6 7.3 14.5 14.5	14.8Ω/M′ 48.5Ω/km	4.6Ω/M′ 15.2Ω/km	.234	5.94	110	76%	13	43	26	85



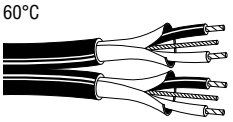
For cross-connect use with 7891A (et al.) Digital Audio Snake Cables, see page 12.29.

◆500 ft. put-up available in Gray only. 5000 ft. put-up available in Violet only.
The jacket and shield are bonded so both can be removed with automatic stripping equipment.

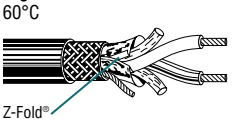
For cross-connect use with 1803F (et al.) Digital Audio Snake Cables, see page 12.29.

For Plenum version of 1800B, see 1801B.

▲500 ft. and 1000 ft. put-ups available in Black only.



The jacket and shield are bonded so both can be removed with automatic stripping equipment.



BC = Bare Copper • DCR = DC Resistance • HC = High-conductivity • TC = Tinned Copper

*Capacitance between conductors. **Capacitance between one conductor and other conductors connected to shield.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Teflon is a DuPont trademark.

AES/EBU Digital Audio Cable

Multi-Pair Snake Cables
Individually Shielded and Jacketed Pairs

BRILLIANCE®

Individually Shielded and Jacketed Pairs

NEC: CMG (CEC: CMG FT4)

Product Description

26 AWG or 24 AWG stranded tinned copper conductor. Datalene® insulation. Pairs individually shielded with bonded Beldfoil® and have numbered and color-coded PVC jackets (see Chart 7 in Technical Information Section for colors). Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment. Overall Beldfoil shield plus overall Purple PVC jacket and nylon rip cord.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

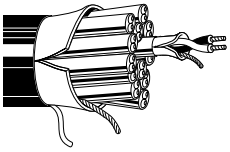
Color Code: Black, Red.

Specifications

Nominal OD — Conductor	
26 AWG	.019″ (.48mm)
24 AWG	.024″ (.60mm)
Nominal OD — Insulation	
26 AWG	.054″ (1.37mm)
24 AWG	.070″ (1.78mm)
Inner Pair Jacket OD	
26 AWG	.136″ (3.45mm)
24 AWG	.167″ (4.24mm)
Approvals*	
NEC	CMG
CEC	CMG FT4
Nominal DCR (26 AWG)	
Conductor	37.3Ω/M′ (122.3Ω/km)
Shield	25.5Ω/M′ (83.6Ω/km)
Nominal DCR (24 AWG)	
Conductor	23.7Ω/M′ (77.7Ω/km)
Shield	18.9Ω/M′ (62.0Ω/km)
Nominal Impedance	110Ω ±10Ω
Nominal Velocity of Propagation	76%
Nominal Capacitance	
Between Conductors	13 pF/Ft. (43 pF/m)
Between Conductor/Shield**	25 pF/Ft. (82 pF/m)

DCR = DC Resistance

*7880A is NEC: CM/CEC: CM rated.
**Capacitance between one conductor and other conductors connected to shield.



Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
Individually Shielded & Jacketed NEC: CMG (CEC: CMG FT4)							
26 AWG (7x34)							
7891A new	2	500	152.4	28.0	12.7	.343	8.71
		1000	304.8	56.0	25.5		
7890A new	4	100	30.5	8.2	3.7	.399	10.13
		250	76.2	18.0	8.2		
		500	152.4	31.0	14.1		
		1000	304.8	61.0	27.7		
7880A† new	8	250	76.2	29.8	13.5	.541	13.74
		500	152.4	57.0	25.9		
		1000	304.8	141.0	64.1		
Fits D-Sub connectors.							
7892A new	12	500	152.4	85.0	38.6	.679	17.25
		1000	304.8	174.0	79.1		
7893A new	16	500	152.4	109.5	49.8	.770	19.56
		1000	304.8	240.0	109.1		
24 AWG (7x32) • **Flexible**							
1803F	4	250	76.2	30.0	13.6	.485	12.32
		500	152.4	57.5	26.1		
		1000	304.8	107.0	48.6		
1805F	8	250	76.2	52.3	23.8	.661	16.79
		500	152.4	103.5	47.0		
		1000	304.8	205.0	93.2		
1806F	12	250	76.2	78.8	35.8	.829	21.06
		500	152.4	156.0	70.9		
		1000	304.8	322.0	146.4		
1850F new	16	250	76.2	99.5	45.2	.944	23.98
		500	152.4	209.5	95.2		
		1000	304.8	410.0	186.4		
1852F new	24	250	76.2	156.0	70.9	1.205	30.61
		500	152.4	322.0	146.4		
		1000	304.8	646.0	293.6		
1854F new	32	250	76.2	224.0	101.8	1.346	34.19
		500	152.4	434.0	197.3		
		1000	304.8	846.0	384.5		

Length may vary -10% to +0% from length shown.
†7880A is designed to fit in 25-pin D-sub connectors used in digital console board equipment.

AES/EBU Digital Audio Cable

Multi-Pair Snake Cables
Individually Shielded Pairs

BRILLIANCE®

Individually Shielded Pairs

NEC: CM (CEC: CM)

Product Description

24 AWG stranded (7x32) tinned copper conductor. Datalene® insulation. Twisted pairs individually shielded with 100% Beldfoil®. Overall Chrome PVC jacket and 24 AWG stranded tinned copper drain wire.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

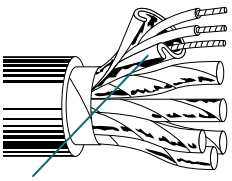
Color Code: See Chart 3 (in Technical Information Section)

Specifications

Nominal OD — Conductor	.024″ (.60mm)
Nominal OD — Insulation	.061″ (1.55mm)
Approvals	
NEC	CM
CEC	CM
UL Ratings	UL AWM Style 2493
Voltage Rating	300V
Temperature Rating	60°C
Nominal DCR	
Conductor	24.0Ω/M′ (78.7Ω/km)
Shield	18.0Ω/M′ (59.1Ω/km)
Nominal Impedance	100Ω
Nominal Velocity of Propagation	76%
Nominal Capacitance	
Between Conductors	12.5 pF/Ft. (41.0 pF/m)
Between Conductor/Shield*	23.2 pF/Ft. (76.1 pF/m)

DCR = DC Resistance

*Capacitance between one conductor and other conductors connected to shield.



Part No.	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nominal OD Inch	Nominal OD mm
Individually Shielded Pairs NEC: CM (CEC: CM)							
24 AWG							
9729	2	100	30.5	4.4	2.0	.317	8.05
		500	152.4	21.0	9.5		
		1000	304.8	39.0	17.7		
		10000	3048.0	400.0	181.8		
For Plenum version of 9729, see 89729 or 82729.							
9730	3	100	30.5	5.1	2.3	.334	8.48
		500	152.4	24.5	11.1		
		1000	304.8	46.0	20.9		
		10000	3048.0	520.0	236.4		
For Plenum version of 9730, see 89730.							
9728	4	100	30.5	6.0	2.7	.363	9.22
		500	152.4	28.5	13.0		
		1000	304.8	55.0	25.0		
For Plenum version of 9728, see 89728.							
9731	6	100	30.5	11.1	5.0	.421	10.69
		500	152.4	42.0	19.1		
		1000	304.8	83.0	37.7		
For Plenum version of 9731, see 89731.							
9732	9	100	30.5	11.9	5.4	.488	12.40
		500	152.4	58.0	26.4		
		1000	304.8	108.0	49.1		
For Plenum version of 9732, see 89732.							
9733	11	500	152.4	75.0	34.1	.575	14.61
9734	12	500	152.4	79.5	36.1	.575	14.61
		1000	304.8	154.0	70.0		
For Plenum version of 9734, see 89734.							
9735	15	500	152.4	95.0	43.2	.639	16.23
		1000	304.8	185.0	84.1		
9736	17	500	152.4	103.5	47.0	.671	17.04
		1000	304.8	210.0	95.5		
9737	19	1000	304.8	231.0	105.0	.671	17.04
9738	27	1000	304.8	334.0	151.8	.797	20.24

AES/EBU Digital Audio Cable

Plenum-Rated, Multi-Pair Snake Cables
Individually Shielded Pairs

BRILLIANCE®

Individually Shielded Pairs

NEC: CMP (CEC: CMP FT6)

Product Description

24 AWG stranded (7x32) tinned copper conductor. Foam FEP insulation. Twisted pairs individually shielded with 100% Beldfoil®. Overall Gray fluorocopolymer jacket (except 82729 which has Natural Flamarrest® jacket). 24 AWG stranded tinned copper drain wire.

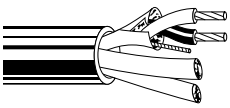
Color Code: See Chart 5 (in Technical Information Section)

Specifications

Nominal OD — Conductor	.024″ (.60mm)
Nominal OD — Insulation	.062″ (1.57mm)
Approvals	
NEC	CMP
CEC	CMP FT6
UL Ratings	Non-conduit
Voltage Rating	300V RMS
Nominal DCR	
Conductor	23.3Ω/M′ (76.4Ω/km)
Shield	14.4Ω/M′ (47.2Ω/km)
Nominal Impedance	100Ω
Nominal Velocity of Propagation	76%
Nominal Capacitance	
Between Conductors	13.5 pF/Ft. (44 pF/m)
Between Conductor/Shield*	22.5 pF/Ft. (73.8 pF/m)

DCR = DC Resistance

*Capacitance between one conductor and other conductors connected to shield.



Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
Plenum Individually Shielded NEC: CMP (CEC: CMP FT6)							
24 AWG							
82729	2	U-1000	U-304.8	27.0	12.3	.255	6.48
		1000	304.8	28.0	12.7		
89729	2	500	152.4	18.5	8.4	.261	6.63
		1000	304.8	31.0	14.1		
89730	3	500	152.4	23.0	10.5	.278	7.06
		1000	304.8	40.0	18.2		
89728	4	500	152.4	26.5	12.0	.307	7.80
		1000	304.8	50.0	22.7		
89705	5	500	152.4	30.5	13.9	.327	8.31
		1000	304.8	62.0	28.2		
89731	6	500	152.4	35.0	15.9	.361	9.17
		1000	304.8	71.0	32.3		
89757	7	500	152.4	39.5	18.0	.361	9.17
		1000	304.8	80.0	36.4		
89732	9	1000	304.8	106.0	48.2	.429	10.90
89734	12	500	152.4	71.0	32.3	.498	12.65
		1000	304.8	140.0	63.6		
89758	18	500	152.4	100.5	45.7	.616	15.65
		1000	304.8	204.0	92.7		

Spools are one piece, but length may vary ±10% from length shown.

Audio Wire and Cable
Overview

BRILLIANCE®

Electrolytic Tough Pitch (ETP) High-conductivity Copper Speaker Cables

Speaker cables are used to connect receivers or power amplifiers to speakers and are also used for the internal wiring of the speakers themselves.

High-conductivity Copper

All Belden® speaker cables utilize only high-conductivity copper produced by a process called Electrolytic Tough Pitch. This refining process produces a conductor that is 99.95% pure copper resulting in high-conductivity per ASTM B115. The high purity obtained from ETP copper results in audio cable performance that is comparable to that of oxygen-free copper cables.

Gage Selection

Because the impedance of the loud-speaker is quite low (typically 3 to 10 ohms) much of the power conducted through the cable is carried in the current domain which is affected by conductor resistance. The resistance of the cable between the speaker and the amplifier turns some of the amplifier's power into heat and does not get to the speaker.

The feedback from the speaker is altered by the cable. This feedback is used by the amplifier to correct the speaker's non-linearity. It is measured as the Damping factor by amplifier designers and is called "Servoing" by the Hi-fi community.

In general, the higher the cable resistance, the lower the power level getting to the speaker, resulting in "sloppier" speaker performance due to damping.

Ultimately, the system designer must decide how to compromise system performance against system cost. In general, one of the least expensive ways to squeeze more and better performance out of the system hardware is to use larger speaker cables and cut your losses where they occur rather than try to "Band-Aid" the system later with equalization or more power.

The Cable Selection Guide can aid in determining the proper gage selection depending on the speaker impedance, acceptable power loss and cable run length.

Cable Selection Guide

AWG	4Ω Speaker			8Ω Speaker			70V Speaker*		
	Power (%) / Loss (dB/Ft.)								
	11% .5	21% 1.0	50% 3.0	11% .5	21% 1.0	50% 3.0	11% .5	21% 1.0	50% 3.0
12	140	305	1150	285	610	2285	6920	14890	56000
14	90	195	740	185	395	1480	4490	9650	36300
16	60	125	470	115	250	935	2840	6100	22950
18	40	90	340	85	190	685	2070	4450	16720
20	25	50	195	50	105	390	1170	2520	9500
22	15	35	135	35	70	275	820	1770	6650
24	10	25	85	20	45	170	520	1120	4210

The number of feet of cable you can run for a given loss and performance budget.

How to Use the Guide

Step One	Select the appropriate speaker impedance column.
Step Two	Select the appropriate power loss column deemed to be acceptable.
Step Three	Select the applicable wire gage size and follow the row over to the columns determined in steps one and two. The number listed is the maximum cable run length.
Example	The maximum run for 12 AWG in a 4 Ohm speaker system with 11% or .5 dB loss is 140 ft.

*70 volt line drive systems, while considered a potential for Hi-fi performance, follow the same cable loss physics as the higher current (lower impedance) system. For the sake of this calculation a 25 watt 70 volts system (196W) was used.

Audio Wire and Cable

Electrolytic Tough Pitch (ETP) High-Conductivity Copper Speaker Cables
Parallel Zip Constructions

BRILLIANCE®

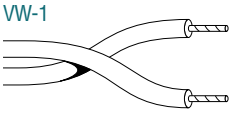
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
24 AWG Stranded (7x32) ETP High-conductivity Copper • Parallel: (1) Tinned, (1) Bare											
PVC Insulation • PVC Jacket (Available in Clear, White, Brown or Chrome)											
300V 60°C (Clear) 300V 75°C (Chrome, Brown, White)	**8782**		2	U-1000 ▲ 1000 ◆	U-304.8 304.8	6.0 7.0	2.7 3.2	.017	.43	.058 x .116	1.47 x 2.95
22 AWG Stranded (7x30) ETP High-conductivity Copper • Parallel: (1) Tinned, (1) Bare											
PVC Insulation • Clear PVC Jacket											
300V 60°C	**9712**		2	1000	304.8	9.0	4.1	.017	.43	.065 x .130	1.65 x 3.30
20 AWG Stranded (7x28) ETP High-conductivity Copper • Parallel: (1) Tinned, (1) Bare											
PVC Insulation • Clear or Chrome PVC Jacket											
300V 60°C VW-1	**8649**		2	1000	304.8	12.0	5.5	.018	.46	.073 x .146	1.85 x 3.71
18 AWG Stranded (16x30) ETP High-conductivity Copper • Parallel: (1) Tinned, (1) Bare											
PVC Insulation • Clear PVC Jacket											
300V 60°C	**9708**		2	100 U-500 500 U-1000 1000	30.4 U-152.4 152.4 U-304.8 304.8	2.8 10.5 10.5 20.0 21.0	1.3 4.8 4.8 9.1 9.5	.032	.81	.110 x .220	2.79 x 5.59
16 AWG Stranded (26x30) ETP High-conductivity Copper • Parallel: (1) Tinned, (1) Bare											
PVC Insulation • Clear PVC Jacket											
300V 60°C	**9716**		2	U-1000 1000	U-304.8 304.8	8.0 7.0	3.6 3.2	.027	.69	.115 x .230	2.92 x 5.84
14 AWG Stranded (19x27) ETP High-conductivity Copper • Parallel: (1) Tinned, (1) Bare											
PVC Insulation • Clear PVC Jacket											
60°C	**9717**		2	U-1000 1000	U-304.8 304.8	43.0 42.0	19.5 19.1	.035	.89	.146 x .292	3.71 x 7.42
12 AWG Stranded (65x30) ETP High-conductivity Copper • Parallel: (1) Tinned, (1) Bare											
PVC Insulation • Clear PVC Jacket											
60°C	**9718**		2	500 1000	152.4 304.8	33.0 66.0	15.0 30.0	.045	1.14	.185 x .370	4.70 x 9.40

▲U-1000 ft. put-up available in Brown or Chrome only.
◆1000 ft. put-up available in White or Clear only.

Audio Wire and Cable

Electrolytic Tough Pitch (ETP) High-Conductivity Copper Speaker Cables
Open Twisted Construction

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
22 AWG Stranded (7x30) ETP High-conductivity Copper • Cabled: (1) Tinned, (1) Bare											
PVC Insulation											
UL Listed. Wires Misc. 90V 90°C VW-1 	**9151**		2	U-1000	U-304.8	7.0	3.2	.012	.30	.108	2.74
18 AWG Stranded (7x26) ETP High-conductivity Tinned Copper • Cabled											
PVC Insulation • (Color Code: Black, White)											
UL AWM Style 1007 (300V 80°C) VW-1	**8460**		2	U-1000 1000	U-304.8 304.8	17.0 18.0	7.7 8.2	.020	.51	.180	4.57
18 AWG Stranded (19x30) ETP High-conductivity Bare Copper • Cabled											
Plenum • Flamarrest® Insulation • (Color Code: Black, White)											
75°C, Non-conduit	**1863A**	NEC: CL2P	2	1000	304.8	19.0	8.6	.022	.56	.178	4.52
16 AWG Stranded (19x29) ETP High-conductivity Tinned Copper • Cabled											
PVC Insulation • (Color Code: Black & White for 8470; Black & Orange for 9497)											
UL AWM Style 1007 (300V 80°C) VW-1	**8470**		2	500 U-1000 1000	152.4 U-304.8 304.8	13.0 25.0 26.0	5.9 11.4 11.8	.023	.58	.210	5.33
	9497		2	1000	304.8	30.0	13.6	.023	.58	.210	5.33
16 AWG Stranded (19x29) ETP High-conductivity Bare Copper • Cabled											
Plenum • Flamarrest Insulation • (Color Code: Black, White)											
75°C, Non-conduit	**1862A**	NEC: CL2P	2	1000	304.8	26.0	11.8	.022	.56	.202	5.13

Audio Wire and Cable

Electrolytic Tough Pitch (ETP) High-Conductivity Copper Speaker Cables
Open Twisted Construction

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
14 AWG Stranded (19x26) ETP High-conductivity Bare Copper • Cabled											
Plenum • Flamarrest® Insulation • PVC Jacket (Color Code: Black, White)											
75°C, Non-conduit	**1861A**	NEC: CL2P	2	1000	304.8	35.0	15.9	.022	.56	.236	5.99
12 AWG Stranded (19x25) ETP High-conductivity Bare Copper • Cabled											
Plenum • Flamarrest Insulation • PVC Jacket (Color Code: Black, White)											
75°C, Non-conduit	**1860A**	NEC: CL2P	2	1000	304.8	58.0	26.4	.022	.56	.270	6.86

Audio Wire and Cable

Electrolytic Tough Pitch (ETP) High-Conductivity Copper Speaker Cables
Twisted Jacketed Construction

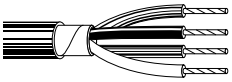
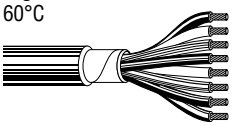
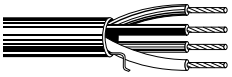
BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
22 AWG Stranded (7x30) Tinned Copper Conductors • Conductors Cabled														
PVC Insulation • Chrome PVC Jacket														
	8442	NEC: CMG CEC: CMG FT4	2	Black, Red	100 U-500 500 U-1000 1000 10000	30.5 U-152.4 152.4 U-304.8 304.8 3048.0	2.2 7.5 7.5 15.0 15.0 150.0	1.0 3.4 3.4 6.8 6.8 68.2	.015	.38	.025	.64	.170	4.32
									For Plenum versions of 8442, see 88442 or 82442.					
20 AWG Stranded (7x28) Tinned Copper Conductors • Twisted Pairs														
PVC Insulation • Chrome PVC Jacket														
300V RMS 	**8205**	NEC: CMG CEC: CMG FT4	2	Black, Red	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	2.5 9.0 9.0 17.0 18.0	1.1 4.1 4.1 7.7 8.2	.013	.33	.025	.64	.180	4.57
18 AWG Stranded (7x26) Tinned Copper Conductors • Twisted Pair														
PVC Insulation • Chrome PVC Jacket														
300V RMS 	**8461**	NEC: CMG CEC: CMG FT4	2	Black, White	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.8 14.0 14.0 28.0 28.0	1.7 6.4 6.4 12.7 12.7	.022	.56	.028	.71	.234	5.94
16 AWG Stranded (19x29) Tinned Copper Conductors • Twisted Pair														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2598 (300V 60°C) 	**8471**	NEC: CMG CEC: CMG FT4	2	Black, White	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	20.0 20.0 39.0 40.0	9.1 9.1 17.7 18.2	.023	.58	.032	.81	.274	6.96
14 AWG Stranded (42x30) Tinned Copper Conductors • Twisted Pair														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2587 (600V 90°C) 	**8473**	NEC: CL3 CEC: FAS 90 FT4	2	Black, White	U-500 500 1000	U-152.4 152.4 304.8	29.5 30.5 58.0	13.4 13.9 26.4	.031	.79	.032	.81	.340	8.64
See NEC Guidelines for applicable CL3 voltage ratings.														
12 AWG Stranded (65x30) Tinned Copper Conductors • Twisted Pair														
PVC Insulation • Chrome PVC Jacket														
UL AWM Style 2587 (600V 90°C) 	**8477**	NEC: CL3R	2	Black, White	U-500 500 1000	U-152.4 152.4 304.8	42.0 42.0 83.0	19.1 19.1 37.7	.032	.81	.035	.89	.386	9.80
See NEC Guidelines for applicable CL3 voltage ratings.														

Audio Wire and Cable

High-Flex Multi-Conductor Cables
Bi-amp and Tri-amp Speaker Connections

BRILLIANCE®

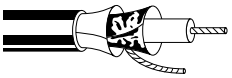
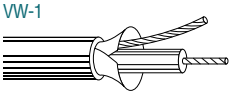
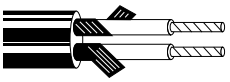
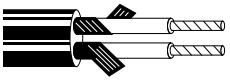
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
14 AWG Stranded (104x34) Bare Copper • Conductors Cabled with Fillers • Paper Wrap														
PVC Insulation • Overall Matte Black PVC Jacket														
High-Flex 60°C  Compatible with Neutrik Speakon® Connectors.	**1810A**		4	Red, Green, White, Black	250 500 1000	76.2 152.4 304.8	28.0 57.0 112.0	12.7 25.9 50.9	.025	.64	.040	1.02	.390	9.91
High-Flex 60°C  Compatible with Neutrik Speakon® Connectors.	**1811A**		8	Brown, Red, Orange, Yellow, Green, White, Blue, Black	1000	304.8	206.0	93.6	.025	.64	.040	1.02	.515	13.08
10 AWG Stranded (65x28) Bare High-conductivity ETP Copper • Rip Cord														
High-grade PVC Insulation • PVC Jacket (Available in Black, Blue, Green, White or Gray)														
High-Flex 75°C  Jacket sequentially marked at 2 ft. intervals.	**5T00UP** new	NEC: CL2 Audio Use Only	2	Black, White	500 1000	152.4 304.8	44.0 87.0	20.0 39.5	.015	.38	.026	.66	.356	9.04
									For Plenum version of 5T00UP, see 6T00UP.					
10 AWG Stranded (65x28) Bare Copper • Cabled • Rip Cord														
Plenum • Flamarrest® Insulation • Natural Flamarrest Jacket														
High-Flex 150V 75°C Jacket sequentially marked at 2 ft. intervals.	**6T00UP**	NEC: CL2P Audio Use Only	2	Black, White	1000	304.8	83.0	37.8	.011	.28	.015	.38	.308	7.82

Neutrik is a Liechtenstein Corporation trademark.

Special Application
Audio, Communication and Instrumentation Cable

Audio Connecting Cables and Dual Channel Audio Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
25 AWG Stranded (7x33) • (3) Tinned Copper, (4) Tinned Copper Covered Steel • Double Beldfoil® Shield • 26 AWG Stranded TC Drain Wire																		
FPE Insulation • Chrome PVC Jacket																		
Miniature 80°C VW-1 	**8417**		1		250	76.2	3.3	1.5	.020	.51	.026	.66	.140	3.56	29	95	—	—
25 AWG Stranded (7x33) • (3) Tinned Copper, (4) Tinned Copper Covered Steel • Tinned Copper Spiral Wrapped Shield (86% Coverage)																		
FPE Insulation • Chrome PVC Jacket																		
Low-Capacitance 80°C	**8421**		1		250	76.2	5.3	2.4	.051	1.30	.023	.58	.180	4.57	16	53	—	—
24 AWG Uni-strand (7x32) • Beldfoil Shield																		
Flame-retardant Polyethylene Insulation • Black PVC Jacket																		
UL AWM Style 1770 (300V 80°C) VW-1  Nominal impedance: 50 ohms. Tear-drop, machine strippable coaxial cable.	**9264**		1		1000	304.8	14.0	6.4	.027	.69	.020	.51	.122 x .146	3.10 x 3.71	34	112	—	—
Dual Channel • 30 AWG Stranded (7x38) Tinned Copper Covered Steel • Individual Tinned Copper Spiral Wrapped Shield (85% Coverage)																		
FPE Insulation • Black PVC Jacket • Polarity Ribbed																		
Low-Capacitance 70°C  Stereo connecting cable	**9454**		2		100	30.5	3.8	1.7	.049	1.24	.020	.51	.160 x .320	4.06 x 8.13	12 each channel	39	—	—
Dual Channel • 25 AWG Stranded (7x33) • (3) TC, (4) TCCS • Individual TC Spiral Wrapped Shield (90% Coverage)																		
Polyethylene Insulation • Gray PVC Jacket • Polarity Rib on Red Conductor																		
80°C  For use with head sets, stereo and language labs.	**8416**		2		250	76.2	5.3	2.4	.018	.46	.020	.51	.106 x .213	2.69 x 5.41	36 each channel	118	—	—

FPE = Foam Polyethylene • TC = Tinned Copper • TCCS = Tinned Copper-covered Steel

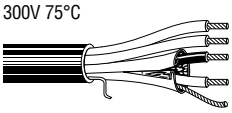
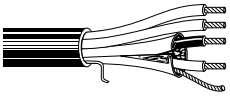
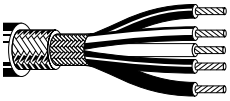
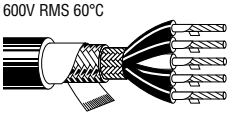
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Halar is a Ausimont Corporation trademark.

Special Application
Audio, Communication and Instrumentation Cable

Multimedia Control Cables and Microphone/Musical Instrument Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Stranded (7x30) TC Twisted Data Pair w/ Beldfoil® Shield, TC Drain Wire • **18 AWG** (16x30) TC Unshielded Power Pair • Rip Cord																		
FPE Insulation (Data) • **F-R PVC Insulation** (Power) • **F-R PVC Jacket** (Available in Black, White or Aqua)																		
300V 75°C  Sequential footing marking every two feet.	**1502R** new	NEC: CMR CEC: CMR FT4	1 STP +2/C	Pair: Blue, White Cond.: Red, Black	1000	304.8	45.0	20.5	Data: .025 Power: .013	.64 .33	.039	.99	.250	6.35	14	46	38	125
22 AWG (7x30) TC Twisted Pair w/ Beldfoil Shield, TC Drain Wire • **18 AWG** (16x30) TC Unshielded • Polypropylene Binder Tape • Rip Cord																		
Plenum • Foam FEP Insulation (Data) • **Flamarrest® Insulation** (Power) • **Flamarrest Jacket** (Natural)																		
300V 75°C 	**1502P** new	NEC: CMP CEC: CMP FT6	1 STP +2/C	Pair: Blue, White Cond.: Red, Black	1000	304.8	40.0	18.2	Data: .025 Power: .011	.64 .28	.015	.381	.205	5.21	14	46	38	125
Mic • 20 AWG Stranded (19x32) High-conductivity Tinned Copper • Conductors Cabled • Rayon Braid • TC Braid Shield (84% Coverage)																		
Polyethylene Insulation • Chrome PVC Jacket																		
Low-Impedance UL AWM Style 2094 (300V 80°C) VW-1 	**8405**		5	Black, Clear, Green, Red, Blue	250 500 1000	46.2 152.4 304.8	18.5 31.5 63.0	8.4 14.3 28.6	.016	.41	.035	.89	.281	7.14	23	76	40	131
Mic • 20 AWG Stranded (26x34) High-conductivity TC • Cotton Wrap • Conductors Cabled • Rayon Braid • 85% TC Braid Shield																		
Rubber Insulation • Black EPDM Rubber Jacket																		
Low-Impedance 600V RMS 60°C 	**8425**		5	Blue, Orange, Black, White, Brown,	100 250	30.5 46.2	7.8 21.3	3.5 9.7	.023	.58	.031	.79	.318	8.08	30	98	55	180
	8426		6	(Same as 8425) + Green	100 250	30.5 46.2	9.0 22.3	4.1 10.1	.023	.58	.037	.94	.342	8.69	30	98	55	180
	8427		7	(Same as 8426) + Red	100 250	30.5 46.2	9.8 24.3	4.5 11.0	.023	.58	.041	1.04	.355	9.02	30	98	55	180
	8418		8	(Same as 8427) + Yellow	100 250	30.5 46.2	11.0 27.0	5.0 12.3	.023	.58	.037	.94	.381	9.68	30	98	55	180

BC = Bare Copper • EPDM = Ethylene-propylene-diene Monomer Rubber • FPE = Foam Polyethylene • F-R = Flame-retardant • STP = Shielded Twisted Pair • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Standard Analog Video Cable

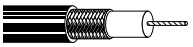
75 Ohm Miniature Coax

BRILLIANCE®

Belden standard video cables are typically used in non-critical video applications such as video equipment rack wiring, closed circuit TV(CCTV), master antenna TV(MATV) and color or monochrome video monitor hook-ups. Applications such as these do not require Precision Video coaxes which have extremely tight electrical tolerances. (See Precision Video cables, pages 12.48 through 12.56.)

Video coax cables have a characteristic impedance of 75 ohms. This value was not chosen arbitrarily. Physics shows that optimum attenuation characteristics occur at 77 ohms. Materials and design lead to the selection of 75 ohms as the optimum compromise for low power applications.

Standard video coaxes are available in both solid and stranded designs. Stranded designs are recommended for flexing applications such as interconnection of CCTV cameras with pan and tilt capabilities, or remote camera hook-ups where the cable is constantly being spooled and despooled from a reel. Belden's Brilliance high-flex part no. 8241F is ideal for these types of applications.

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
30 AWG Stranded (7x38) .012″ Tinned Copper • 89% Tinned Copper Braid Shield																			
Foam HDPE Insulation • Black PVC Jacket																			
UL AWM	**9221**		100	30.5	2.3	1.0	30 AWG	.058	1.47	TC Braid	.097	2.46	75	78%	17.3	56.8	1	.7	2.3
Style 1375			U-500	U-152.4	3.5	1.6	(7x38)			89% Shield							4	1.3	4.3
(30V 60°C)			500	152.4	4.5	2.0	.012″			Coverage							5	1.6	5.2
							TC			11.7Ω/M′							10	2.2	7.2
							100.0Ω/M′			38.4Ω/km							50	5.1	16.7
							328.0Ω/km										100	7.3	23.9
																	200	10.5	34.4
																	400	15.5	50.9
																	1000	26.6	87.3
27 AWG Stranded (7x35) .017″ Bare Copper-covered Steel • 93% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**8218**		U-500	U-152.4	8.0	3.6	27 AWG	.100	2.54	TC Braid	.150	3.81	75	66%	20.5	67.3	1	1.2	3.9
Style 1354			500	152.4	8.0	3.6	(7x35)			93% Shield							10	2.4	7.9
(30V 60°C)			U-1000	U-304.8	16.0	7.3	.017″			Coverage							50	4.2	13.8
			1000	304.8	16.0	7.3	BCCS			5.7Ω/M′							100	5.7	18.7
							120.0Ω/M′			18.7Ω/km							200	8.3	27.2
							393.7Ω/km										400	12.1	39.7
																	700	16.5	54.1
																	900	19.0	62.3
																	1000	20.0	65.6

BCCS = Bare Copper-covered Steel • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Standard Analog Video Cable

75 Ohm High-Frequency Cables
Conformable® Coax Cable

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
29 AWG Solid .011″ Silver-coated Copper-covered Steel • Copper-Tin Composite Shield (100% Coverage)																			
TFE Teflon® Insulation • Unjacketed																			
UL AWM	**1672A***		500†	152.4	8.0	3.6	29 AWG	.062	1.57	CT	.085	2.21	75	69.5%	19.5	64.0	1	1.2	3.9
Style 10245			1000†	304.8	14.0	6.4	(solid)			Composite							10	2.4	7.9
(30V 105°C)							.011″			100% Shield							50	4.5	14.8
							SCCCS			Coverage							100	6.6	21.6
							205.0Ω/M′			10.2Ω/M′							200	10.0	32.8
							672.4Ω/km			33.5Ω/km							400	15.0	49.2
																	500	17.0	55.8
																	700	21.0	68.9
																	900	24.0	78.7
																	1000	26.0	85.3
TFE Teflon Insulation • PVC Jacket (Black or Clear)																			
UL AWM	**1672J***		100†▲	30.5	3.1	1.4	29 AWG	.062	1.57	CT	.127	3.23	75	69.5%	19.5	64.0	1	1.2	3.9
Style 10245			500†	152.4	9.5	4.3	(solid)			Composite							10	2.4	7.9
(30V 105°C)			1000†	304.8	17.0	7.7	.011″			100% Shield							50	4.5	14.8
							SCCCS			Coverage							100	6.6	21.6
							205.0Ω/M′			10.2Ω/M′							200	10.0	32.8
							672.4Ω/km			33.5Ω/km							400	15.0	49.2
																	500	17.0	55.8
																	700	21.0	68.9
																	900	24.0	78.7
▲100 ft. put-up available in Clear only.																	1000	26.0	85.3
29 AWG Solid .011″ Silver-plated Copper • Copper-Tin Composite Shield (100% Coverage)																			
TFE Teflon Insulation • Unjacketed																			
UL AWM	**1672B***		100†	30.5	3.3	1.5	29 AWG	.062	1.57	CT	.087	2.21	75	69.5%	19.5	64.0	1	1.2	3.9
Style 10245	new		500†	152.4	8.0	3.6	(solid)			Composite							10	2.4	7.9
(30V 105°C)			1000†	304.8	14.0	6.4	.011″			100% Shield							50	4.5	14.8
							SPC			Coverage							100	6.6	21.7
							81.2Ω/M′			10.2Ω/M′							200	10.0	32.8
							266.4Ω/km			33.5Ω/km							400	15.0	49.2
																	500	17.0	55.8
																	700	21.0	68.9
																	900	24.0	78.7
Non-ferrous design.																	1000	26.0	85.3

CT = Copper Tin • DCR = DC Resistance • SCCCS = Silver-coated Copper-covered Steel • SPC = Silver-plated Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

*Protected by one or more of U.S. Patent Nos. 4,694,122 and 5,292,001. Patent held in the U.S., Singapore, Australia, Germany, France and England. Patent pending in Japan.

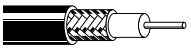
†50 ft. put-up: Exact 1 piece
100 ft. put-up: Exact 2 pieces (maximum), 25 feet minimum length
250 ft. put-up: Exact 3 pieces (maximum), 25 feet minimum length
500 ft. put-up: Exact 4 pieces (maximum), 25 feet minimum length
1000 ft. put-up: Exact 3 pieces (maximum), 328 feet minimum length

Teflon is a DuPont trademark.

Standard Analog Video Cable

75 Ohm Coax
RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
23 AWG Solid .023″ Bare Copper or Bare Copper-covered Steel Conductor • 95% Bare Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**8241**	NEC:	100	30.5	5.0	2.3	23 AWG	.146	3.71	BC Braid	.242	6.15	75	66%	20.5	67.3	1	.6	2.0
Style 1354		CMX	U-500	U-152.4	20.5	9.3	(solid)			95% Shield							10	1.1	3.6
(30V 75°C)		CEC:	500	152.4	22.5	10.2	.023″			Coverage							50	2.4	7.9
		CMX	U-1000▲	U-304.8	40.0	18.2	BCCS			2.6Ω/M′							100	3.4	11.2
			1000	304.8	41.0	18.6	49.0Ω/M′			8.5Ω/km	For Plenum versions of 8241, see 88241 or 82241.						200	4.9	16.1
			2000	609.6	82.0	37.3	160.7Ω/km										400	7.0	23.0
			5000	1524.0	205.0	93.2											700	9.7	31.8
																	900	11.1	36.4
																	1000	12.0	39.4
▲U-1000 ft. put-up also available in Red, Yellow, Green, Lt. Blue, White, Orange and Black.																			
Flame-retardant Semi-foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**8241A**	NEC:	U-1000	U-304.8	42.0	19.1	23 AWG	.146	3.71	BC Braid	.242	6.15	75	66%	20.5	67.3	1	.6	2.0
Style 1354		CMG	1000	304.8	43.0	19.5	(solid)			95% Shield							5	.9	3.0
(30V 75°C)		CEC:					.023″			Coverage							10	1.1	3.6
		CMG FT4					BCCS			2.6Ω/M′							50	2.4	7.9
							49.0Ω/M′			8.5Ω/km							100	3.4	11.2
							160.7Ω/km										200	4.9	16.1
																	400	7.0	23.0
																	700	10.1	33.1
																	900	11.7	38.2
																	1000	13.2	43.3
Polyethylene Insulation • Black PVC Jacket																			
UL AWM	**8241B**	NEC:	U-1000	U-304.8	37.0	17.3	23 AWG	.146	3.71	BC Braid	.242	6.15	75	66%	20.5	67.3	1	.4	1.3
Style 1354		CM	1000	304.8	38.0	16.8	(solid)			95% Shield							10	1.1	3.6
(30V 80°C)		CEC:					.023″			Coverage							50	2.4	7.9
		CM					BC			2.9Ω/M′							100	3.4	11.2
							20.4Ω/M′			9.5Ω/km							200	4.9	16.1
							66.9Ω/km										400	7.0	23.0
																	700	9.7	31.8
																	900	11.1	36.4
																	1000	12.0	39.4
22 AWG Stranded (7x30) .030″ Bare Copper • 95% Bare Copper Braid Shield																			
Foam Polyethylene Insulation • PVC Jacket (Available in Matte Black, Red, Blue, Green, Yellow, White or Gray)																			
High-Flex	**8241F**		1000	304.8	34.0	15.5	22 AWG	.146	3.71	BC Braid	.242	6.15	75	78%	17.3	56.8	1	.3	1.0
60°C							(7x30)			95% Shield							10	.9	3.0
							.030″			Coverage							50	2.1	6.9
							BC			2.6Ω/M′							100	3.0	9.8
							15.0Ω/M′			8.5Ω/km							200	4.5	14.8
							49.2Ω/km										400	6.6	21.7
																	700	8.9	29.2
																	900	10.1	33.1
																	1000	10.9	35.8
23 AWG Solid .023″ Bare Copper-covered Steel Conductor • 97% Bare Copper Braid Shield																			
Plenum • FEP Insulation • Black FEP Jacket																			
200°C	**88241**	NEC:	500†	152.4	20.5	9.3	23 AWG	.132	3.35	BC Braid	.190	4.83	75	69.5%	19.5	64.0	1	.5	1.6
		CMP	1000†	304.8	40.0	18.2	(solid)			97% Shield							10	1.0	3.3
		CEC:					.023″			Coverage							50	2.3	7.5
		CMP FT6					BCCS			2.6Ω/M′							100	3.3	10.8
							49.0Ω/M′			8.5Ω/km							200	5.2	17.1
							160.7Ω/km										400	8.4	27.6
																	700	11.6	38.0
																	900	13.8	45.3
Suitable for Outdoor and Direct Burial applications.																	1000	14.8	48.5
Plenum • FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**82241**	NEC:	U-500†	U-152.4	16.0	7.3	23 AWG	.132	3.35	BC Braid	.190	4.83	75	69.5%	19.5	64.0	1	.5	1.6
		CMP	U-1000†	U-304.8	32.0	14.5	(solid)			97% Shield							10	1.0	3.3
		CEC:	1000†	304.8	32.0	14.5	.023″			Coverage							50	2.3	7.5
		CMP FT6					BCCS			2.6Ω/M′							100	3.3	10.8
							49.0Ω/M′			8.5Ω/km							200	5.2	17.1
							160.7Ω/km										400	8.4	27.6
																	700	11.6	38.0
																	900	13.8	45.3
																	1000	14.8	48.5

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

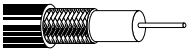
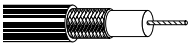
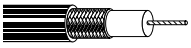
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Standard Analog Video Cable

75 Ohm Coax
RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
22 AWG Solid Bare Copper-covered Steel • Bare Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 60°C)	**8263**	NEC: CMX CEC: CMX	U-500 U-1000 1000	U-152.4 U-304.8 304.8	19.5 39.0 38.0	8.9 17.7 17.3	23 AWG (solid) .023″ BCCS 49.0Ω/M′ 160.7Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.242	6.15	75	66%	20.5	67.3	1 10 50 100 200 400 700 900 1000	.6 1.1 2.4 3.4 4.9 7.0 9.7 11.1 12.0	2.0 3.6 7.9 11.2 16.1 23.0 31.8 36.4 39.4
Non-contaminating Black PVC Jacket.																			
UL AWM Style 1354 (30V 80°C)	**9244**	NEC: CMX CEC: CMX	U-500 U-1000 1000 3280	U-152.4 U-304.8 304.8 1000.0	18.0 36.0 36.0 118.1	8.2 16.4 16.4 53.8	22 AWG (solid) .025″ BCCS 50.0Ω/M′ 164.0Ω/km	.146	3.71	BC Braid 85% Shield Coverage 4.5Ω/M′ 14.8Ω/km	.242	6.15	75	66%	19.4	63.6	1 10 50 100 200 400 700 900 1000	.6 1.1 2.4 3.4 4.9 7.0 9.7 11.1 12.0	2.0 3.6 7.9 11.2 16.1 23.0 31.8 36.4 39.4
											100% Sweep tested. 5 MHz to 450 MHz.								
Foam Polyethylene Insulation • Black PVC Jacket																			
75°C	**8221**		U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	18.5 18.5 36.0 36.0	8.4 8.4 16.4 16.4	22 AWG (solid) .025″ BCCS 50.0Ω/M′ 164.0Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.242	6.15	80	78%	16.3	53.5	1 10 50 100 200 400 700 900 1000	.4 .9 2.0 2.9 4.1 5.9 7.8 8.8 9.9	1.4 3.0 6.6 9.5 13.4 19.4 25.6 28.9 32.5
																			
22 AWG Stranded (7x30) .030″ Bare Copper • 95% Bare Copper Braid Shield																			
Foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 60°C) VW-1	**9659**	NEC: CMX CEC: CMX	U-500 U-1000 1000	U-152.4 U-304.8 304.8	18.0 36.0 36.0	8.2 16.4 16.4	22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M 8.5Ω/km	.242	6.15	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.3 .9 2.1 3.0 4.5 6.6 8.9 10.1 10.9	1.0 3.0 6.9 9.8 14.8 21.6 29.2 33.1 35.8
											100% Sweep tested. 5 MHz to 450 MHz.								
Non-contaminating PVC Jacket. For CCTV applications.																			
UL AWM Style 1354 (30V 80°C)	**9259**	NEC: CM CEC: CM	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.6 18.5 20.5 36.0 36.0	2.1 8.4 9.3 16.4 16.4	22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.6Ω/M 8.5Ω/km	.241	6.12	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.3 .9 2.1 3.0 4.5 6.6 8.9 10.1 10.9	1.0 3.0 6.9 9.8 14.8 21.7 29.2 33.1 35.8
											For Plenum versions of 9259, see 89259 or 82259.								
For CCTV applications.																			
Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C	**89259**	NEC: CMP CEC: CMP FT6	100 500 † 1000 †	30.5 152.4 304.8	5.1 18.0 34.0	2.3 8.2 15.5	22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km	.135	3.43	BC Braid 95% Shield Coverage 2.6Ω/M 8.5Ω/km	.193	4.90	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.3 .9 2.1 3.0 4.5 6.6 9.0 10.1 11.0	1.0 3.0 6.9 9.8 14.8 21.6 29.5 33.1 36.1
Suitable for Outdoor and Direct Burial applications.																			
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**82259**	NEC: CMP CEC: CMP FT6	U-1000 † 1000 †	U-304.8 304.8	31.0 33.0	14.1 15.0	22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km	.135	3.43	BC Braid 95% Shield Coverage 2.6Ω/M 8.5Ω/km	.193	4.90	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.3 .9 2.1 3.0 4.5 6.6 9.0 10.1 11.0	1.0 3.0 6.9 9.8 14.8 21.6 29.5 33.1 36.1

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

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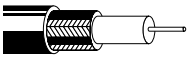
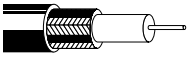
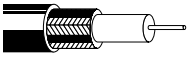
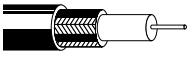
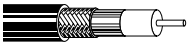
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Standard Analog Video Cable

75 Ohm Coax
RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .032″ Bare Copper-covered Steel • Bare Copper Braid Shield																			
Foam Polyethylene Insulation • Black PVC Jacket																			
75°C 	**9240**		1000†	304.8	30.0	13.6	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.143	3.63	BC Braid 80% Shield Coverage 5.6Ω/M′ 18.4Ω/km	.241	6.12	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.6 1.0 2.1 3.0 4.5 6.6 8.9 10.1 10.9	2.0 3.3 6.9 9.8 14.8 21.6 29.2 33.1 35.8
											100% Sweep tested. 5 MHz to 850 MHz.								
Foam Polyethylene Insulation • Black Polyethylene Jacket																			
80°C 	**8212**		U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	16.5 19.0 32.0 32.0	7.5 8.6 14.5 14.5	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.143	3.63	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.242	6.15	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.6 1.0 2.1 3.0 4.5 6.6 8.9 10.1 10.9	2.0 3.3 6.9 9.8 14.8 21.6 29.2 33.1 35.8
											100% Sweep tested. 5 MHz to 450 MHz.								
Foam Polyethylene Insulation • Black PVC Jacket																			
80°C 	**9274**	NEC: CM CEC: CM	500 1000	152.4 304.8	16.5 32.0	7.5 14.5	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.143	3.63	BC Braid 95% Shield Coverage 3.5Ω/M′ 11.5Ω/km	.240	6.10	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.6 1.0 2.1 3.0 4.5 6.6 8.9 10.1 10.9	2.0 3.3 6.9 9.8 14.8 21.6 29.2 33.1 35.8
											100% Sweep tested. 5 MHz to 450 MHz.								
20 AWG Solid .032″ Bare Copper Conductor • 95% Bare Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 75°C) 	**1426A**	NEC: CM	U-1000	U-304.8	38.0	17.3	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145	3.68	BC Braid 95% Shield Coverage 2.6Ω/M 8.5Ω/km	.242	6.15	75	83%	16.3	53.5	1 10 50 100 200 400 700 900 1000	.3 .9 1.9 2.6 3.6 5.0 7.0 8.0 8.5	1.0 3.0 6.2 8.5 11.8 16.4 23.0 26.3 27.9
Series 59 • 20 AWG Solid .032″ Bare Copper-covered Steel • Foil + Braid Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**9275**	NEC: CATV CM CEC: CM	U-500 500 U-1000▲ 1000	U-152.4 152.4 U-304.8 304.8	12.0 12.5 24.0 24.0	5.5 5.7 10.9 10.9	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.144	3.66	Duofoil® + 40% Aluminum Braid 17.0Ω/M′ 55.8Ω/km	.237	6.02	75	83%	16.2	53.1	See Chart on page 6.88		
											Sweep tested 5 MHz to 550 MHz.								
▲U-1000 ft. put-up also available in White.																			
80°C 	**9100**	NEC: CATV CM CEC: CM	U-500 U-1000◆ 1000	U-152.4 U-304.8 304.8	12.0 24.0 24.0	5.5 10.9 10.9	20 AWG (solid) .032″ BCCS 44.5Ω/M′ 146.0Ω/km	.144	3.66	Duobond® II + 40% Aluminum Braid 17.0Ω/M′ 55.8Ω/km	.237	6.02	75	83%	16.2	53.1	See Chart on page 6.88		
											Sweep tested 5 MHz to 1 GHz.								
◆U-1000 ft. put-up also available in White.																			

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

†Spools and/or UnReel® cartons are one piece, but length may vary ±5% from length shown.

Standard Analog Video Cable

75 Ohm Coax
RG-6/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
21 AWG Solid .028″ Bare Copper-covered Steel • Two Bare Copper Braids (97% Shield Coverage)																			
Polyethylene Insulation • Black Polyethylene Jacket																			
MATV Cable 80°C	**8215**		1000	304.8	74.0	33.6	21 AWG (solid) .028″ BCCS 32.0Ω/M′ 105.0Ω/km	.185	4.70	(2) BC Braids 97% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.332	8.43	75	66%	20.5	67.2	1 10 50 100 200 400 700 900 1000	.4 .8 1.9 2.7 4.1 5.9 8.1 9.4 9.8	1.3 2.6 6.2 8.9 13.4 19.4 26.6 30.8 32.1
											100% Sweep tested. 5 MHz to 450 MHz.								
18 AWG Solid .037″ Bare Copper • Two Bare Copper Braids (98% Shield Coverage)																			
Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**9290**	NEC: CM CEC: CM	1000 2000	304.8 609.6	60.0 120.0	27.3 54.5	18 AWG (solid) .037″ BC 7.5Ω/M′ 24.6Ω/km	.180	4.57	(2) BC Braids 98% Shield Coverage 2.0Ω/M′ 6.6Ω/km	.288	7.32	75	78%	17.3	56.7	1 10 50 100 200 400 700 900 1000	.2 .7 1.7 2.5 3.6 5.3 7.2 8.3 8.8	.7 2.3 5.6 8.2 11.8 17.4 23.6 27.2 28.9
											100% Sweep tested. 5 MHz to 450 MHz.								
18 AWG Solid .040″ Bare Copper • Duofoil® + Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 80°C)	**9248**	NEC: CM CEC: CM	U-500 500 U-1000 1000 1640 3280	U-152.4 152.4 U-304.8 304.8 500.0 1000.0	17.0 18.0 33.0 33.0 55.8 108.2	7.7 8.2 15.0 15.0 25.3 49.2	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duofoil + 60% TC Braid 5.6Ω/M′ 18.4Ω/km	.270	6.86	75	82%	16.2	53.1	1 10 50 100 200 400 700 900 1000	.3 .7 1.5 2.0 2.8 4.0 5.3 6.1 6.5	1.0 2.3 4.9 6.6 9.2 13.1 17.4 20.0 21.3
											For Plenum versions of 9248, see 89248 or 82248. 100% Sweep tested. 5 MHz to 450 MHz.								
Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C	**89248**	NEC: CMP CEC: CMP FT6	500† 1000† 2000†	152.4 304.8 609.6	18.0 36.0 70.0	8.2 16.4 31.8	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.170	4.32	Duofoil + 65% TC Braid 5.1Ω/M′ 16.7Ω/km	.222	5.64	75	82%	16.2	53.1	1 10 50 100 200 400 700 900 1000	.3 .7 1.5 2.1 3.1 4.5 6.0 6.9 7.3	1.0 2.3 4.9 6.9 10.2 14.8 19.7 22.6 23.9
											100% Sweep tested. 5 MHz to 450 MHz.								
Suitable for Outdoor and Direct Burial applications.																			
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**82248**	NEC: CMP CEC: CMP FT6	U-1000† 1000†	U-304.8 304.8	32.0 33.0	14.5 15.0	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.170	4.32	Duofoil + 65% TC Braid 5.1Ω/M′ 16.7Ω/km	.222	5.64	75	82%	16.2	53.1	1 10 50 100 200 400 700 900 1000	.3 .7 1.6 2.2 3.0 4.6 6.6 7.7 8.2	1.0 2.3 5.2 7.2 9.8 15.1 21.6 25.3 26.9
											100% Sweep tested. 5 MHz to 450 MHz.								

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

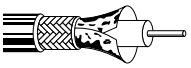
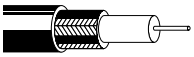
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Standard Analog Video Cable

75 Ohm Coax
RG-11/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
18 AWG Stranded (7x26) .048″ Tinned Copper • 97% Bare Copper Braid Shield																			
Flame-retardant Semi-foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**8238**	NEC: CM CEC: CM	500 1000	152.4 304.8	59.0 117.0	26.8 53.2	18 AWG (7x26) .048″ TC 6.1Ω/M′ 20.0Ω/km	.285	7.24	BC Braid 97% Shield Coverage 1.2Ω/M′ 3.9Ω/km	.405	10.29	75	66%	20.5	67.2	1 10 50 100 200 400 700 900 1000	.2 .7 1.3 2.0 2.9 4.2 5.8 6.8 7.1	.6 2.2 4.3 6.6 9.5 13.8 19.0 22.3 23.3
Polyethylene Insulation • Non-contaminating Black PVC Jacket																			
60°C VW-1	**8261**		500 1000	152.4 304.8	52.5 104.0	23.9 47.3	18 AWG (7x26) .048″ TC 6.1Ω/M′ 20.0Ω/km	.285	7.24	BC Braid 97% Shield Coverage 1.2Ω/M′ 3.9Ω/km	.405	10.29	75	66%	20.5	67.2	1 10 50 100 200 400 700 900 1000	.2 .7 1.3 2.0 2.9 4.2 5.8 6.8 7.1	.6 2.2 4.3 6.6 9.5 13.8 19.0 22.3 23.3
14 AWG Solid .064″ Bare Copper • Duofoil® + Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
80°C 	**9292**		1000	304.8	81.0	36.8	14 AWG (solid) .064″ BC 2.6Ω/M′ 8.5Ω/km	.280	7.11	Duofoil + 60% TC Braid 3.0Ω/M′ 9.8Ω/km	.405	10.29	75	84%	16.1	52.8	1 10 50 100 200 400 700 900 1000	.2 .5 .9 1.3 1.6 2.3 3.3 4.0 4.3	.6 1.6 3.0 4.3 5.3 7.6 10.8 13.1 14.1
											For Plenum versions of 9292, see 89292. 100% Sweep tested. 5 MHz to 450 MHz.								
Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C	**89292**	NEC: CMP CATVP CEC: CMP FT6	500† 1000†	152.4 304.8	39.5 77.0	18.0 35.0	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.274	6.96	Duofoil + 63% TC Braid 3.0Ω/M′ 9.8Ω/km	.346	8.79	75	83%	16.2	53.1	1 10 50 100 200 400 700 900 1000	.2 .4 1.0 1.5 2.2 3.3 4.5 5.2 5.5	.5 1.3 3.3 4.9 7.2 10.8 14.8 17.1 18.0
											100% Sweep tested. 5 MHz to 450 MHz.								
14 AWG Solid .064″ Bare Copper • 97% Bare Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket																			
80°C 	**8213**		500 1000 2000	152.4 304.8 609.6	44.0 87.0 172.0	20.0 39.5 78.2	14 AWG (solid) .064″ BC 2.6Ω/M′ 8.5Ω/km	.285	7.24	BC Braid 97% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.405	10.29	75	84%	16.1	52.8	1 10 50 100 200 400 700 900 1000	.2 .4 .9 1.3 1.9 2.9 4.1 4.8 5.2	.6 1.1 3.0 4.3 6.2 9.5 13.5 15.7 17.1
											100% Sweep tested. 5 MHz to 450 MHz.								

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Precision Video Cable for Analog and Digital

Overview

Analog Video

Belden® precision video cables are used in critical analog and digital video circuits and high quality applications such as live broadcast in network studios and pre- or post-production facilities. They should be used where superior signal integrity is required.

Precision video cables usually have solid center conductors and dual shields. The dielectrics can either be foamed or solid. Tighter impedance and attenuation tolerances, superior Return Loss (RL) specifications, and improved shielding give precision video cables their no-compromise performance.

The frequency response loss curves of the solid dielectric cables, such as 8281, are different from those with foam dielectric, like 1505A. Therefore, different equalization equipment is necessary and commercially available. Avoid mixing 8281 and 1505A for this reason.

Digital Video

Precision video cables are also recommended for the latest digital video applications. Since its inception in the early ‘80s, digital broadcast is quickly becoming the preferred video format. The advantages of the digital format are many. Digital is very stable, minimizing equipment adjustments. Copies or reproductions retain the quality of the original. Signal degradation is virtually eliminated, and noise immunity is greatly improved. Digital video is transmitted over a cable in either a Parallel or Serial format.

Parallel Digital Video (D_1, D_2 & D_3)

The Parallel format transmits each bit of an 8 or 10 bit digital word simultaneously or parallel down a separate signal path at a frequency of 27 Mb/s. This type of transmission requires the use of a 100 to 120 ohm 12-1/2 pair data cable (Belden part nos. 8142 or 8112 page 12.55). These cables are limited to a transmission distance of less than 30 meters.

Serial Digital Video (SDI)

The Society of Motion Picture and Television Engineers (SMPTE) has developed two different standards for serial digital transmissions (SDI). A third format that transmits at 540 Mb/s is under development. There is also a European standards body known as ITU (formerly CCIR) that developed the specifications for Europe known as PAL. Each of these specifications differs in frequency and transmission technology, i.e., composite or component.

- **SMPTE 259M** — Covers digital video transmissions of composite NTSC 143 Mb/s (Level A) and PAL 177 Mb/s (Level B). It also covers 525/625 component transmissions of 270 Mb/s (Level C) and 360 Mb/s (Level D).
- **SMPTE 292M** — Covers the newest format for HDTV transmissions at 1.458 Gb/s.
- **SMPTE 344M** — Covers component widescreen transmissions of 540 Mb/s.
- **ITU-R BT.601** — International standard covers component PAL transmissions of 177 Mb/s.

Precision Video Cable for Analog and Digital

Sub-Miniature RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
25 AWG Stranded (19x37) .021″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*																			
SDI/HDTV Digital Video 75°C	**1865A**	NEC: CMR CEC: CMG FT4	1000	304.8	16.0	7.3	25 AWG (19x37) .021″ BC 27.4Ω/M′ 89.9Ω/km	.094	2.39	Duofoil + 95% TC Braid 5.4Ω/M′ 17.7Ω/km	.150	3.81	75	82%	16.5	54.1	1	.5	1.5
																	3.6	1.0	3.1
																	10	1.6	5.2
																	71.5	3.7	12.1
																	135	5.0	16.4
																	270	7.1	23.3
																	360	8.2	26.9
											100% Sweep tested. 5 MHz to 3 GHz.						540	10.1	33.1
																	720	11.8	38.7
																	750	12.0	39.4
																	1000	13.9	45.6
																	1500	17.0	55.8
																	2250	20.8	68.2
																	3000	24.0	78.7
23 AWG Solid .023″ Bare Copper • Duofoil + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*																			
SDI/HDTV Digital Video 75°C	**1855A**	NEC: CMR CEC: CMG FT4	500▲ 1000 U-1000◆	152.4 304.8 U-304.8	9.0 18.0 18.0	4.1 8.2 8.2	23 AWG (solid) .023″ BC 20.1Ω/M′ 65.9Ω/km	.102	2.59	Duofoil + 95% TC Braid 7.6Ω/M′ 24.9Ω/km	.159	4.03	75	83%	16.3	53.5	1	.4	1.3
																	3.6	.8	2.6
																	10	1.2	3.9
																	71.5	3.1	10.0
																	135	3.8	12.5
																	270	5.4	17.7
											Also available in multiples, bundled. See 7787A through 7792A.						360	6.2	20.3
																	540	7.7	25.3
											100% Sweep tested. 5 MHz to 3 GHz.						720	9.5	31.1
																	750	9.6	31.5
																	1000	10.5	34.4
																	1500	13.0	42.6
																	2250	16.0	52.5
																	3000	18.5	60.7

▲500 ft. put-up available in Black only.
◆U-1000 ft. put-up available in Gray only.

BC = Bare Copper • DCR = DC Resistance • HDPE = Foam High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

*Available in Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White or Black.

Precision Video Cable for Analog and Digital

RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
23 AWG Stranded (7x32) .023″ Bare Compacted Copper* • 95% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black Polyethylene Jacket																			
80°C	**8279**		500 1000	152.4 304.8	14.5 28.0	6.6 12.7	23 AWG (7x32) .023″ BCC 19.1Ω/M′ 62.6Ω/km	.146	3.71	TC + 95% Shield Coverage 4.5Ω/M′ 14.8Ω/km	.220	5.59	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.4 .6 1.2 3.3 4.7 6.8 8.0 9.9 11.6 11.9 13.8	1.1 2.0 3.9 10.8 15.4 22.3 26.2 32.5 38.0 39.0 45.3
											100% Sweep tested. 5 MHz to 850 MHz.								
23 AWG Solid .022″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																			
Polyethylene Insulation • Black Polyethylene Jacket																			
80°C	**9209**		U-500 U-1000	U-152.4 U-304.8	15.0 29.0	6.8 13.2	23 AWG (solid) .022″ BC 20.4Ω/M′ 66.9Ω/km	.146	3.71	Duofoil + 95% TC Braid 4.5Ω/M′ 14.8Ω/km	.220	5.59	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.4 .5 1.2 2.9 4.0 5.6 6.6 8.3 9.7 9.9 11.6	1.2 1.8 3.8 9.5 13.0 18.4 21.5 27.2 31.7 32.5 38.0
											100% Sweep tested. 5 MHz to 850 MHz.								
Flame-retardant Semi-foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 75°C)	**9209A**	NEC: CMR CEC: CMG FT4	U-1000	U-304.8	35.0	15.9	23 AWG (solid) .022″ BC 20.4Ω/M′ 66.9Ω/km	.146	3.71	Duofoil + 95% TC Braid 4.5Ω/M′ 14.8Ω/km	.220	5.59	75	66%	20.5	67.2	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.4 .5 1.2 2.9 4.0 5.6 6.6 8.6 10.1 10.4 12.8	1.2 1.8 3.8 9.5 13.0 18.4 21.5 28.3 33.2 34.1 41.9
											100% Sweep tested. 5 MHz to 850 MHz.								

BC = Bare Copper • BCC = Bare Compacted Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

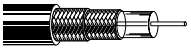
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

*Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.

Precision Video Cable for Analog and Digital

RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .032″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)◆																			
SDI/HDTV Digital Video 75°C	**1505A**	NEC: CMR CEC: CMG FT4	500▲ 1000◆ 5000◆	152.4 304.8 1524.0	17.5 36.0 165.4	8.0 16.4 75.2	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145	3.68	Duofoil + 95% TC Braid 3.8Ω/M′ 12.5Ω/km	.234	5.94	75	83%	16.3	53.5	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.3 .6 .9 2.1 2.7 3.8 4.4 5.5 6.4 6.5 7.6 9.3 11.6 13.4	1.0 1.8 2.9 6.9 8.9 12.5 14.4 18.0 21.0 21.3 24.9 30.5 38.0 44.0
											For Plenum version of 1505A, see 1506A. Also available in bundled versions. See 7794A through 7798A. 100% Sweep tested. 5 MHz to 3 GHz.								
▲500 ft. put-up available in Black, Red or Blue only. ◆1000 ft. and 5000 ft. put-ups available in all ten colors: Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or White.																			
22 AWG Stranded (7x29) .031″ Bare Compacted Copper* • Double Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Matte Black, Red, Green, Blue, Yellow, White or Violet)																			
High-Flex SDI/HDTV Video Patch 75°C	**1505F** new	NEC: CM CEC: CM	1000	304.8	44.0	20.0	22 AWG (7x29) .031″ BCC 12.2Ω/M′ 40.0Ω/km	.145	3.68	TC Double Braid 95% Shield Coverage 2.4Ω/M′ 7.8Ω/km	.242	6.15	75	80%	17.0	55.7	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .5 .9 2.5 3.5 5.1 6.0 7.4 8.7 8.9 10.5 13.3 16.9 20.3	.7 1.6 2.9 8.2 11.5 16.7 19.7 24.3 28.5 29.2 34.4 43.6 55.4 66.6
											100% Sweep tested. 5 MHz to 3 GHz.								
20 AWG Solid .032″ Bare Copper • Duofoil + 95% Tinned Copper Braid Shield																			
Plenum • Foam FEP Insulation • Flamarrest® Jacket (Available in 10 colors)◗																			
SDI/HDTV Digital Video 75°C	**1506A**	NEC: CMP CEC: CMP FT6	500†▼ 1000†◗	152.4 304.8	16.5 33.0	7.5 15.0	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.133	3.38	Duofoil + 95% TC Braid 3.8Ω/M′ 10.5Ω/km	.199	5.05	75	84%	16.1	52.8	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.3 .6 1.1 2.3 3.2 4.6 5.3 6.4 7.3 7.5 9.4 12.8 17.5 21.9	1.0 2.0 3.4 7.4 10.5 14.9 17.2 21.0 23.9 24.6 30.8 42.0 57.4 71.8
											100% Sweep tested. 5 MHz to 3 GHz.								
Suitable for Outdoor and Direct Burial applications. ▼500 ft. put-up available in Black or Natural only. ◗1000 ft. put-up available in all ten colors: Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or Natural.																			
20 AWG Solid .031″ Bare Copper • 98% Tinned Copper Double Braid Shield																			
Polyethylene Insulation • Gray Non-contaminating PVC Jacket																			
60°C VW-1 	**9231**	NEC: CMH CEC: CMH FT1	500 1000	152.4 304.8	38.0 76.0	17.3 34.5	20 AWG (solid) .031″ BC 9.9Ω/M′ 32.5Ω/km	.198	5.03	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.305	7.75	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .8 2.0 3.5 4.3 5.0 6.2 7.2 7.4 9.1	1.0 1.6 2.6 6.6 11.5 14.1 16.4 20.3 23.6 24.3 29.8
											100% Sweep tested. 5 MHz to 850 MHz.								

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

*Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.
†Spools are one piece, but length may vary ±10% from length shown.

Precision Video Cable for Analog and Digital

Double Braided RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .031″ Bare Copper • 98% Tinned Copper Double Braid Shield *(continued)*																			
Polyethylene Insulation • Clear Polyethylene Jacket																			
Indoor Use 80°C	**9141**		1000	304.8	73.0	33.2	20 AWG (solid) .031″ BC 9.9Ω/M′ 32.5Ω/km	.200	5.06	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.305	7.75	75	66%	20.0	65.6	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .8 2.0 3.5 4.3 5.0 6.2 7.2 7.4 9.1	1.0 1.6 2.6 6.6 11.5 14.1 16.4 20.3 23.6 24.3 29.8
											100% Sweep tested. 5 MHz to 850 MHz.								
20 AWG Solid .031″ Bare Copper • 98% Tinned Copper Double Braid Shield																			
Polyethylene Insulation • Polyethylene Jacket (Available in Red, Yellow, Green, Light Blue, White, Orange or Black)																			
80°C	**8281**		500▲ 1000	152.4 304.8	37.0 74.0	16.8 33.6	20 AWG (solid) .031″ BC 9.9Ω/M′ 32.5Ω/km	.198	5.03	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.305	7.75	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .8 2.1 3.0 4.3 5.1 6.3 7.4 7.6 9.2	.8 1.8 2.6 6.9 9.8 14.1 16.6 20.7 24.3 24.9 30.2
											For Plenum version of 8281, see 88281. 100% Sweep tested. 5 MHz to 850 MHz.								
▲500 ft. put-up not available in White.																			
Flame-retardant Semi-Foam Polyethylene Insulation • PVC Jacket (Available in 10 colors)◆																			
UL AWM Style 1354 (30V 80°C)	**8281B**	NEC: CMR CEC: CMG FT4	1000	304.8	85.0	38.6	20 AWG (solid) .031″ BC 9.9Ω/M′ 32.5Ω/km	.198	5.03	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.305	7.75	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .8 2.1 3.0 4.4 5.1 6.6 7.8 8.0 10.2	.8 1.8 2.6 6.9 9.8 14.4 16.6 21.5 25.4 26.2 33.5
											For Plenum version of 8281B, see 88281. 100% Sweep tested. 5 MHz to 850 MHz.								
◆8281B available in Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White or Black.																			
22 AWG Stranded (7x29) .031″ Bare Compacted Copper* • Double Tinned Copper Braid Shield																			
Polyethylene Insulation • PVC Jacket (Matte Red, Blue, Green, Gray or Black)																			
High-Flex 60°C	**8281F**		500◆ 1000	152.4 304.8	32.0 65.0	14.5 29.5	22 AWG (7x29) .031″ BCC 12.2Ω/M′ 40.0Ω/km	.193	4.90	TC Double Braid 98% Shield Coverage 1.7Ω/M′ 5.6Ω/km	.305	7.75	75	66%	21.0	68.9	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.3 .5 .9 2.5 3.6 5.1 6.0 7.4 8.7 8.9 10.5	.9 1.7 2.9 8.0 11.6 16.7 19.7 24.3 28.5 29.2 34.4
											100% Sweep tested. 5 MHz to 850 MHz.								
◆500 ft. put-up available in Black only.																			
20 AWG Solid .031″ Bare Copper • 98% Tinned Copper Double Braid Shield																			
Plenum • FEP Insulation • Black Fluorocopolymer Jacket																			
150°C	**88281**	NEC: CMP CEC: CMP FT6	500† 1000†	152.4 304.8	46.0 86.0	20.9 39.1	20 AWG (solid) .032″ BC 9.9Ω/M′ 32.5Ω/km	.185	4.70	TC Double Braid 98% Shield Coverage 1.1Ω/M′ 3.6Ω/km	.271	6.88	75	71%	19.0	62.4	1 3.6 10.0 71.5 135 270 360 540 720 750 1000	.2 .5 .8 2.3 3.3 5.1 6.1 8.0 9.7 10.0 12.3	.7 1.6 2.6 7.5 10.8 16.7 20.0 26.2 31.8 32.8 40.3
											100% Sweep tested. 5 MHz to 216 MHz.								
Suitable for Outdoor and Direct Burial applications.																			

BC = Bare Copper • BCC = Bare Compacted Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.

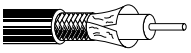
*Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductor.
†Spools are one piece, but length may vary ±10% from length shown.

Precision Video Cable for Analog and Digital

Low Loss Serial Digital Coax

RG-6/U, RG-7/U and RG-11/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-6/U Type • 18 AWG Solid .040″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*																			
SDI/HDTV Digital Video 75°C	**1694A** new	NEC: CMR CEC: CMG FT4	500▲ 1000 4500	152.4 304.8 1371.6	23.0 45.0 207.0	10.5 20.5 94.3	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duofoil + 95% TC Braid 2.8Ω/M′ 9.2Ω/km	.275	6.99	75	82%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .5 .7 1.6 2.1 3.0 3.4 4.3 4.9 5.0 5.9 7.3 9.1 10.7	.8 1.5 2.4 5.2 6.9 9.7 11.3 13.9 16.1 16.4 19.3 24.0 30.0 35.0
											For Plenum version of 1694A, see 1695A. Also available in bundled versions. See 7710A through 7713A. 100% Sweep tested. 5 MHz to 3 GHz.								
▲500 ft. put-up available in Black only.																			
Plenum • Foam FEP Insulation • Flamarrest® Jacket (Available in 10 colors)**																			
SDI/HDTV Digital Video 75°C	**1695A** new	NEC: CMP CEC: CMP FT6	500†◆ 1000†	152.4 304.8	22.5 45.0	10.2 20.5	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.170	4.32	Duofoil + 95% TC Braid 2.8Ω/M′ 9.2Ω/km	.234	5.94	75	82%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .5 .8 1.8 2.4 3.4 4.0 5.2 6.1 7.3 7.5 9.2 11.6 13.7	.8 1.5 2.5 5.8 7.9 11.2 13.1 17.1 20.0 23.9 24.6 30.2 38.0 44.9
											100% Sweep tested. 5 MHz to 3 GHz.								
◆500 ft. put-up available in Black, Red, Yellow, Violet or Natural only.																			
RG-7/U Type • 16 AWG Solid .064″ Bare Copper • Duofoil + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)**																			
SDI/HDTV Digital Video 80°C	**7855A**	NEC: CMR CEC: CMR FT4	500▼ 1000	152.4 304.8	32.5 62.0	14.8 28.2	16 AWG (solid) .064″ BC 1.2Ω/M′ 3.9Ω/km	.225	5.71	Duofoil + 95% TC Braid 1.7Ω/M′ 5.6Ω/km	.320	8.13	75	84%	16.1	52.8	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2500 3000	.2 .4 .6 1.1 1.8 2.5 2.9 3.6 4.2 4.3 5.0 6.1 7.9 8.7	.6 1.2 1.9 3.6 5.8 8.1 9.4 11.7 13.7 14.0 16.3 20.0 25.9 28.5
											100% Sweep tested. 5 MHz to 3 GHz.								
▼500 ft. put-up available in Black only.																			
RG-11/U Type • 14 AWG Solid .064″ Bare Copper • Duofoil + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*																			
SDI/HDTV Digital Video 75°C	**7731A**	NEC: CMR CEC: CMG FT4	500▸ 1000 4000	152.4 304.8 1219.2	48.0 94.0 467.0	21.8 42.8 212.3	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.280	7.11	Duofoil + 95% TC Braid 1.5Ω/M′ 4.9Ω/km	.405	10.3	75	85%	16.0	52.4	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .3 .5 1.1 1.5 2.1 2.5 3.1 3.6 3.7 4.3 5.5 6.9 8.2	.5 1.0 1.5 3.6 4.8 6.9 8.0 10.0 11.7 12.0 14.1 18.0 22.6 26.9
											100% Sweep tested. 5 MHz to 3 GHz.								
▸500 ft. put-up available in Red or Black only.																			
Plenum • Foam FEP Insulation • Fluorocopolymer Jacket (Available in 10 colors)**																			
SDI/HDTV Digital Video 150°C	**7732A** new	NEC: CMP CEC: CMP FT6	500✱ 1000 2000✱	152.4 304.8 609.6	45.0 88.0 176.0	20.5 40.0 80.0	14 AWG (solid) .064″ BC 2.5Ω/M′ 8.2Ω/km	.274	6.96	Duofoil + 95% TC Braid 2.5Ω/M′ 8.2Ω/km	.348	8.84	75	83%	16.3	53.5	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .3 .4 1.2 1.8 2.6 3.1 3.9 4.6 4.7 5.5 6.9 9.2 10.2	.5 .9 1.3 4.1 5.8 8.5 10.2 12.8 15.0 15.4 18.0 22.7 30.2 33.5
											100% Sweep tested. 5 MHz to 3 GHz.								
✱500 ft. put-up available in Black or Natural only. ✱2000 ft. put-up available in Natural only. Suitable for Outdoor and Direct Burial applications.																			

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG-U cables not listed.

* Available in Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or White.
** Available in Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or Natural.
† Spools are one piece, but length may vary ±10% from length shown.

VideoFLEX® Snake Cable for Precision Digital and Analog

Bundled Miniature and RG-59/U Type

BRILLIANCE®

Miniature • 23 AWG Solid .023″ Bare Copper • Duofoil® + 95% Tinned Copper Braid (100% Shield Coverage)

Solid Copper, Gas-injected Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: See chart below)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
SDI/HDTV Digital Video 75°C (1855A Bundled)	7787A new	NEC: CMR CEC: CMG FT4	3	500 1000	152.4 304.8	47.5 94.0	21.6 42.7	23 AWG (solid) .023″ BC 20.1Ω/M′ 65.9Ω/km	.102 Coax OD: .159	2.55 4.03	Duofoil + 95% TC Braid 7.6Ω/M′ 24.9Ω/km	.432	10.97	75	83%	16.5	54.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2500 3000	.4 .8 1.2 3.1 3.8 5.4 6.2 7.7 9.1 9.5 10.5 13.0 16.9 18.5	1.3 2.6 3.9 10.0 12.5 17.7 20.3 25.3 29.8 31.2 34.4 42.6 55.4 60.7
	7788A new	NEC: CMR CEC: CMG FT4	4	1000	304.8	111.0	50.5	same as above	.102 Coax OD: .159	2.55 4.03	same as above	.481	12.22							
	7789A new	NEC: CMR CEC: CMG FT4	5	500 1000	152.4 304.8	72.5 141.0	33.0 64.1	same as above	.102 Coax OD: .159	2.55 4.03	same as above	.539	13.69							
	7790A new	NEC: CMR CEC: CMG FT4	6	500 1000	152.4 304.8	88.5 175.0	40.2 79.5	same as above	.102 Coax OD: .159	2.55 4.03	same as above	.597	15.16							
	7791A new	NEC: CMR CEC: CMG FT4	10	500 1000	152.4 304.8	155.5 303.0	70.7 137.7	same as above	.102 Coax OD: .159	2.55 4.03	same as above	.796	20.22		Sweep tested 5 MHz to 3 GHz.					
	7792A new	NEC: CMR CEC: CMG FT4	12	500 1000	152.4 304.8	171.5 353.0	78.0 160.5	same as above	.102 Coax OD: .159	2.55 4.03	same as above	.825	20.96							

RG-59/U Type • 20 AWG Solid .032″ Bare Copper • Duofoil + 95% Tinned Copper Braid (100% Shield Coverage)

Gas-injected Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: See chart below)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
SDI/HDTV Digital Video 75°C (1505A Bundled)	7794A new	NEC: CMR CEC: CMG FT4	3	500 1000	152.4 304.8	94.5 188.0	43.0 85.5	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145 Coax OD: .235	3.68 5.97	Duofoil + 95% TC Braid 3.8Ω/M′ 12.5Ω/km	.631	16.03	75	83%	16.3	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2500 3000	.3 .6 .9 2.1 2.7 3.8 4.4 5.5 6.4 6.5 7.6 9.4 12.4 13.8	1.0 1.8 2.9 6.9 8.9 12.5 14.4 18.0 21.0 21.3 24.9 30.8 40.7 45.3
	7795A new	NEC: CMR CEC: CMG FT4	4	500 1000	152.4 304.8	116.5 237.0	53.0 107.7	same as above	.145 Coax OD: .235	3.68 5.97	same as above	.706	17.93							
	7796A new	NEC: CMR CEC: CMG FT4	5	500 1000	152.4 304.8	150.0 293.0	68.2 133.2	same as above	.145 Coax OD: .235	3.68 5.97	same as above	.790	20.07							
	7798A new	NEC: CMR CEC: CMG FT4	10	500 1000	152.4 304.8	319.5 625.0	145.2 284.1	same as above	.145 Coax OD: .235	3.68 5.97	same as above	1.166	29.62		Sweep tested 5 MHz to 3 GHz.					

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

See Connector Reference Guide at www.belden.com for connector recommendations.

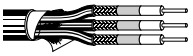
Color Code Chart

Cond.	Color	Cond.	Color	Cond.	Color
1	Red	5	Yellow	9	Violet
2	Green	6	Brown	10	Black
3	Blue	7	Orange	11	Pink
4	White	8	Gray	12	Tan

VideoFLEX® Snake Cable for Precision Digital and Analog

RG-6/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-6/U Type • 18 AWG Solid .040″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																				
Gas-injected Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: See chart below)																				
SDI/HDTV Digital Video 60°C **(1694A Bundled)** 	**7710A**	NEC: CMR CEC: CMG FT4	3	500 1000	152.4 304.8	131.5 273.0	59.8 124.1	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180 Coax OD: .257	4.57 6.99	Duofoil + 95% TC Braid 2.8Ω/M′ 9.2Ω/km	.770	19.56	75	82%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2500 3000	.2 .5 .7 1.6 2.1 3.0 3.4 4.3 4.9 5.0 5.9 7.3 9.7 10.0	.8 1.5 2.4 5.2 6.9 9.7 11.3 13.9 16.1 16.4 19.3 24.0 31.8 32.8
	7711A	NEC: CMR CEC: CMG FT4	4	500 1000	152.4 304.8	174.0 339.0	79.1 154.1	same as above	.180 Coax OD: .257	4.57 6.99	same as above	.900	22.86							
	7712A	NEC: CMR CEC: CMG FT4	5	500 1000	152.4 304.8	209.5 440.0	95.2 200.0	same as above	.180 Coax OD: .257	4.57 6.99	same as above	.942	23.93							
	7713A	NEC: CMR CEC: CMG FT4	10	500 1000	152.4 304.8	450.0 878.0	204.5 399.1	same as above	.180 Coax OD: .257	4.57 6.99	same as above	1.386	35.20							

Sweep tested 5 MHz to 3 GHz.

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.
See Connector Reference Guide at www.belden.com for connector recommendations.

Color Code Chart

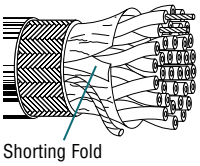
Cond.	Color	Cond.	Color
1	Red	**6**	Brown
2	Green	**7**	Orange
3	Blue	**8**	Gray
4	White	**9**	Violet
5	Yellow	**10**	Black

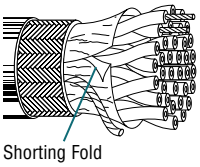
Precision Video Cable for Analog and Digital

Parallel Digital Video

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
28 AWG Stranded (7x36) Tinned Copper • Twisted Pairs • Overall 100% Beldfoil® + 65% TC Braid Shield • 28 AWG Stranded TC Drain Wire																		
Datalene® Insulation • Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C)	**8142**	NEC: CL2	12.5 (12 pairs + 1 single)	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	7.0 34.5 69.0	3.2 15.7 31.4	65.0Ω/M′ 213.0Ω/km	3.1Ω/M′ 10.1Ω/km	.407	10.34	120	78%	11.0	36.1	20.0	65.6
24 AWG Stranded (7x32) Tinned Copper • Twisted Pairs • Overall 100% Beldfoil + 65% TC Braid Shield • 24 AWG Stranded TC Drain Wire																		
Datalene Insulation • Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C)	**8112**	NEC: CM NEC: CM	12.5 (12 pairs + 1 single)	See Chart 5 (Tech Info Section)	100 500 1000	30.5 152.4 304.8	10.5 49.0 97.0	4.8 22.3 44.1	24.0Ω/M′ 78.7Ω/km	2.4Ω/M′ 7.9Ω/km	.440	11.18	100	78%	12.5	41	22	72.2





DCR = DC Resistance • TC = Tinned Copper

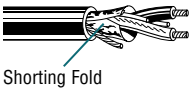
*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Precision Video Cable for Analog and Digital

Digital Video Time Code and
Precision Video Twinax

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
110 Ohm • 26 AWG Stranded (7x34) .018″ Tinned Copper • Twisted Pair • Beldfoil® Shield • 26 AWG Stranded TC Drain Wire																			
Datalene® Insulation (Color Code: Black, White) • **PVC Jacket** (Chrome or Purple)																			
80°C	**9180**	NEC: CMR CEC: CMG FT4	1000	304.8	11.0	5.0	26 AWG (7x34) .018″ TC 37.3Ω/M′ 122.3Ω/km	.049	1.24	Beldfoil w/Stranded TC Drain Wire 23.1Ω/M′ 75.8Ω/km	.144	3.66	110	78%	13.0	42.7	1 3 5 7 9 12 20 30 40 50	1.0 1.6 1.9 2.2 2.5 2.8 3.6 4.4 5.2 5.6	3.3 5.2 6.2 7.2 8.2 9.2 11.8 14.4 17.1 18.4
 Shorting Fold																			
Twinax • 124 Ohm • 16 AWG Solid .051″ Bare Copper • Duofoil® + 90% Tinned Copper Braid Shield (100% Shield Coverage)																			
Foam Polyethylene Insulation (Color Code: Clear, Blue) • **Black PVC Jacket**																			
UL AWM Style 2448 (30V 60°C)	**9860**	NEC: CMX CEC: CMX	500 1000 2000	152.4 304.8 609.6	52.0 103.0 202.0	23.6 46.8 91.8	16 AWG (solid) .051″ BC 4.2Ω/M′ 13.8Ω/km	.322	8.18	Duofoil + 90% TC Braid 1.3Ω/M′ 4.3Ω/km	.440	11.18	124	78%	10.9	35.8	1 10 50 100 200 400	.2 .7 1.8 2.9 4.1 6.2	.6 2.3 5.9 9.5 13.5 20.3

BC = Bare Copper • DCR = DC Resistance • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.

Maximum Transmission Distance at Serial Digital Data Rates

Data Rate:	143 Mb/s		177 Mb/s		270 Mb/s		360 Mb/s		540 Mb/s		1.5 Gb/s	
Spec:	SMPTE 259M		ITU-R BT. 601		SMPTE 259M		SMPTE 259M		SMPTE 344M*		SMPTE 252M	
Application:	Composite NTSC		Composite PAL		Component Video		Component Widescreen		Component Widescreen		HDTV	
Part No.	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m
1865A	810	247	760	232	600	183	520	158	420	128	170	52
8279	910	277	810	247	640	195	550	168	440	134	170	52
1855A–7787A	1000	305	910	277	750	229	650	198	530	162	210	64
9209	1030	314	930	283	750	229	650	198	540	165	200	61
9209A	1030	314	930	283	750	229	650	198	540	165	200	61
1505A–7794A	1430	436	1320	402	1110	338	960	293	790	241	300	91
1505F	1200	366	1071	326	857	261	732	223	588	179	225	69
1506A	1360	415	1200	366	940	286	810	247	670	204	270	82
9231	1430	436	1270	387	1000	305	850	259	680	207	260	79
9141	1430	436	1270	387	1000	305	850	259	680	207	260	79
8281	1430	436	1270	387	1000	305	860	262	700	213	260	79
8281B	1430	436	1270	387	1000	305	850	259	680	207	250	76
8281F	1250	381	1100	335	860	262	730	222	590	180	240	73
88281	1300	396	1150	351	910	277	770	235	600	183	200	61
1694A–7710A	1760	536	1620	494	1360	415	1180	360	970	296	370	113
1695A	1670	509	1520	463	1250	381	1080	329	880	268	310	94
7855A	2220	677	2000	610	1670	509	1460	445	1210	369	470	143
7731A	2730	832	2460	750	2000	610	1740	530	1430	436	540	165
7732A	2420	738	2140	652	1690	515	1440	439	1150	351	430	131

*Values proposed at time of printing.

The serial digital interconnect standards are designed to operate where the signal loss at 1/2 the clock frequency does not exceed the approximate loss values listed below. The maximum length values shown are based on typical attenuation values for the cables listed and the following criteria:

Maximum length = 30 dB loss at 1/2 the clock frequency: SMPTE 259M, PAL, Widescreen.
Maximum length = 20 dB loss at 1/2 the clock frequency: SMPTE 292M.

The bit error rate (BER) can vary dramatically as the calculated distances are approached. BER is dependent on receiver design and the losses of the actual coax used. Distribution and routing equipment manufacturers should be contacted to verify their maximum recommended transmission.

Return Loss Headroom — Refer to graph on page 12.70.

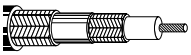
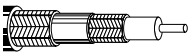
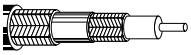
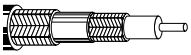
Video Triax Cable

RG-59/U Type

BRILLIANCE®

Triaxial cable is used to interconnect video cameras to related equipment. Triax cables contain 2 isolated shields and a solid or stranded center conductor. Isolated shields allow the triax to provide multiple functions over 1 cable through multiplexing techniques. Examples include: DC power to camera, intercom to operator, teleprompter feeds, monitoring feeds and even automatic or robotic functions.

Triax is usually either RG-59/U or RG-11/U. The second shield makes the OD of either type larger, so size and flexibility can be an issue. RG-11 styles have lower losses for long runs while RG-59 styles are smaller and generally more flexible. Part numbers 9267 and 9232 are designed with Hypalon® jackets for applications requiring even greater flexibility and ruggedness.

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
22 AWG Stranded (19x34) .031″ Bare Copper • Two Bare Copper Braids (95% Shield Coverage)																			
Foam Polyethylene Insulation • Belflex® Jacket (Red, Yellow, Green, Blue, Violet or Black.) Polyethylene Insulation between Braids																			
High-Flex 80°C 	**1857A**		500 1000	152.4 304.8	42.5 86.0	19.3 39.1	22 AWG (19x34) .031″ BC 14.0Ω/M′ 45.9Ω/km	.143	3.63	(2) BC Braids 95% Coverage Inner: 2.5Ω/M′ 8.2Ω/km Outer: 1.6Ω/M′ 5.3Ω/km	.360	9.14	75	79%	17.0	55.8	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.3 .5 .8 2.2 3.1 4.5 5.4 6.8 8.1 8.4 10.1 13.3 17.6 21.4	1.0 1.6 2.6 7.2 10.2 14.8 17.7 22.3 26.6 27.6 33.1 43.6 57.7 70.2
											100% Sweep tested. 5 MHz to 850 MHz.								
20 AWG Solid .032″ Bare Copper • Two Bare Copper Braids (95% Shield Coverage)																			
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket (Polyethylene Insulation between Braids)																			
80°C 	**8232**		500 1000 2000	152.4 304.8 609.6	30.0 60.0 118.0	13.6 27.3 53.6	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145	3.68	(2) BC Braids 95% Coverage Inner: 2.5Ω/M′ 8.2Ω/km Outer: 2.8Ω/M′ 9.2Ω/km	.315	8.00	75	83%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.3 .6 .9 2.1 3.0 4.2 4.8 5.9 7.0 7.1 8.3 10.5 13.4 15.9	1.0 2.0 3.0 6.9 9.8 13.8 15.7 19.4 23.0 23.3 27.2 34.4 44.0 52.2
											For Plenum version of 8232, see 88232. 100% Sweep tested. 5 MHz to 3 GHz.								
Suitable for Outdoor and Direct Burial applications.																			
Gas-injected Foam HDPE Insulation • Black PVC Jacket (PVC Insulation between Braids)																			
75°C 	**8232A**	NEC: CMR CEC: CMG FT4	1000	304.8	69.0	31.4	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145	3.68	(2) BC Braids 95% Coverage Inner: 2.5Ω/M′ 8.2Ω/km Outer: 2.8Ω/M′ 9.2Ω/km	.315	8.00	75	83%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.3 .6 .9 2.1 3.0 4.2 4.8 5.9 7.0 7.1 8.3 10.5 13.4 15.9	1.0 2.0 3.0 6.9 9.8 13.8 15.7 19.4 23.0 23.3 27.2 34.4 44.0 52.2
											For Plenum version of 8232A, see 88232. 100% Sweep tested. 5 MHz to 3 GHz.								
Plenum • Foam FEP Insulation • Black FEP Jacket (FEP Insulation between Braids)																			
200°C 	**88232**	NEC: CMP CEC: CMG FT4	500† 1000†	152.4 304.8	31.0 61.0	14.1 27.7	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.140	3.56	(2) BC Braids 95% Coverage Inner: 2.6Ω/M′ 8.5Ω/km Outer: 2.6Ω/M′ 8.5Ω/km	.246	6.25	75	80%	16.9	55.4	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.4 .6 .8 2.2 3.1 4.5 5.3 6.6 7.7 7.9 9.4 12.1 15.6 18.7	1.3 2.0 2.6 7.2 10.2 14.8 17.4 21.6 25.3 25.9 30.8 39.7 51.2 61.3
											100% Sweep tested. 5 MHz to 3 GHz.								

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

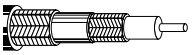
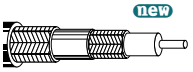
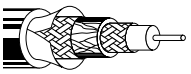
†Spools are one piece, but length may vary ±10% from length shown.

Hypalon is a DuPont trademark.

Video Triax Cable

RG-59/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
20 AWG Solid .032″ Bare Copper • Two Bare Copper Braids (95% Shield Coverage) *(continued)*																			
Gas-injected Foam HDPE Insulation • Belflex® Jacket (Red, Yellow, Green, Blue, Violet or Black.) Polyethylene Insulation between Braids																			
80°C	**1856A**		500	152.4	41.0	18.6	20 AWG	.145	3.68	(2) BC Braids	.360	9.14	75	83%	16.2	53.1	1	.3	1.0
			1000	304.8	83.0	37.7	(solid) .032″ BC 10.6Ω/M′ 34.8Ω/km			95% Coverage Inner: 2.5Ω/M′ 8.2Ω/km Outer: 1.6Ω/M′ 5.3Ω/km	100% Sweep tested. 5 MHz to 3 GHz.						3.6	.6	1.8
																	10	.8	2.7
																	71.5	2.2	7.2
																	135	3.0	9.8
																	270	4.2	13.8
																	360	4.8	15.7
																	540	5.9	19.4
																	720	6.9	22.6
																	750	7.1	23.3
																	1000	8.8	28.9
																	1500	12.0	39.4
																	2250	16.4	53.8
																	3000	20.4	66.9
Gas-injected Foam HDPE Insulation • Belflex Jacket (Red, Yellow, Green, Blue, Violet or Black.) PVC Insulation between Braids																			
75°C	**1856B** new	NEC: CMR CEC: CMG FT4	1000	304.8	86.0	39.1	20 AWG (solid) .032″ BC 10.1Ω/M′ 33.1Ω/km	.145	3.68	(2) BC Braids 95% Coverage Inner: 2.5Ω/M′ 8.2Ω/km Outer: 1.6Ω/M′ 5.2Ω/km	.360	9.14	75	83%	16.2	53.1	1	.3	1.0
											100% Sweep tested. 5 MHz to 3 GHz.						3.6	.6	1.8
																	10	.8	2.7
																	71.5	2.2	7.2
																	135	3.0	9.8
																	270	4.2	13.8
																	360	4.8	15.7
																	540	5.9	19.4
																	720	6.9	22.6
																	750	7.1	23.3
																	1000	8.8	28.9
																	1500	12.0	39.4
																	2250	16.4	53.8
																	3000	20.4	66.9
Gas-injected Foam HDPE Insulation • Paper Tape Separator • Black Hypalon® Jacket (Polyethylene Insulation between Braids)																			
80°C VW-1	**9267**		500	152.4	39.5	18.0	20 AWG	.145	3.68	(2) BC Braids	.360	9.14	75	82%	16.3	53.5	1	.3	1.0
			1000	304.8	77.0	35.0	(solid) .032″ BC 10.0Ω/M′ 32.8Ω/km			95% Coverage Inner: 2.5Ω/M′ 8.3Ω/km Outer: 2.6Ω/M′ 8.6Ω/km	100% Sweep tested. 5 MHz to 3 GHz.						3.6	.6	2.0
																	10	.9	3.0
																	71.5	2.1	6.9
																	135	2.9	9.5
																	270	4.2	13.8
																	360	4.8	15.7
																	540	6.0	19.7
																	720	6.7	22.0
																	750	6.9	22.6
																	1000	8.3	27.2
																	1500	10.5	34.4
																	2250	13.4	44.0
Suitable for Outdoor and Direct Burial applications.																	3000	15.9	52.2

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene

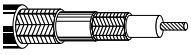
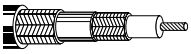
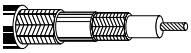
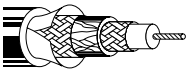
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

Hypalon is a DuPont trademark.

Video Triax Cable

RG-11/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
15 AWG Stranded (19x27) .064″ Bare Copper • Two Bare Copper Braids (95% Shield Coverage)																			
Foam Polyethylene Insulation • Belflex® Jacket (Red, Yellow, Green, Blue, Violet or Black.) Polyethylene Insulation between Braids																			
High-Flex 80°C 	**1858A**		500 1000	152.4 304.8	81.0 158.0	36.8 71.8	15 AWG (19x27) .064″ BC 3.0Ω/M′ 9.8Ω/km	.312	7.92	(2) BC Braids 95% Coverage Inner: 1.6Ω/M′ 5.2Ω/km Outer: 1.4Ω/M′ 4.6Ω/km	.520	13.20	75	78%	17.3	56.8	1 3.6 10 71.5 135 270 360 540 720 750 1000	.1 .3 .5 1.2 1.8 2.6 3.1 3.9 4.7 4.8 5.7	.3 1.0 1.6 3.9 5.9 8.5 10.2 12.8 15.4 15.7 18.7
											100% Sweep tested. 5 MHz to 850 MHz.								
Plenum • Foam FEP Insulation • Black Fluorocopolymer Jacket (Fluorocopolymer Insulation between Braids)																			
125°C 	**1859A**	NEC: CMP CEC: CMP FT6	500 1000	152.4 304.8	66.5 134.0	30.2 60.9	15 AWG (19x27) .064″ BC 3.0Ω/M′ 9.8Ω/km	.285	7.24	(2) BC Braids 95% Coverage Inner: 1.4Ω/M′ 4.6Ω/km Outer: 1.4Ω/M′ 4.6Ω/km	.406	10.30	75	80%	16.5	54.1	1 3.6 10 71.5 135 270 360 540 720 750 1000	.1 .2 .5 1.3 1.9 3.0 3.6 4.5 5.4 5.6 6.6	.3 .7 1.6 4.3 6.2 9.8 11.8 14.8 17.7 18.4 21.6
											100% Sweep tested. 5 MHz to 850 MHz.								
Suitable for Outdoor and Direct Burial applications.																			
15 AWG Stranded (19x27) .064″ Bare Copper • Two Bare Copper Braids (90% Shield Coverage)																			
Foam Polyethylene Insulation • Yellow PVC Jacket (Polyethylene Insulation between Braids)																			
UL AWM Style 1641 (30V 80°C) VW-1 	**9192**	NEC: CL2X	1000	304.8	150.0	68.2	15 AWG (19x27) .064″ BC 3.0Ω/M′ 9.8Ω/km	.312	7.92	(2) BC Braids 90% Coverage Inner: 1.6Ω/M′ 5.2Ω/km Outer: 1.6Ω/M′ 5.2Ω/km	.520	13.20	75	78%	17.3	56.8	1 3.6 10 71.5 135 270 360 540 720 750 1000	.1 .3 .5 1.2 1.8 2.6 3.1 3.9 4.7 4.8 5.7	.3 1.0 1.6 3.9 5.9 8.5 10.2 12.8 15.4 15.7 18.7
											100% Sweep tested. 5 MHz to 850 MHz.								
Foam Polyethylene Insulation • Paper Tape Separator • Black Hypalon® Jacket (Polyethylene Insulation between Braids)																			
UL AWM Style 1641 (30V 60°C) VW-1 	**9232**		500 1000	152.4 304.8	42.5 145.0	19.3 65.9	15 AWG (19x27) .064″ BC 3.0Ω/M′ 9.8Ω/km	.312	7.92	(2) BC Braids 90% Coverage Inner: 1.6Ω/M′ 5.2Ω/km Outer: 1.7Ω/M′ 5.2Ω/km	.520	13.20	75	78%	17.3	56.8	1 3.6 10 71.5 135 270 360 540 720 750 1000	.1 .3 .5 1.2 1.8 2.6 3.1 3.9 4.7 4.8 5.7	.3 1.0 1.6 3.9 5.9 8.5 10.2 12.8 15.4 15.7 18.7
											100% Sweep tested. 5 MHz to 850 MHz.								
Suitable for Outdoor and Direct Burial applications.																			

BC = Bare Copper • DCR = DC Resistance

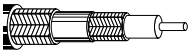
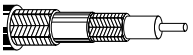
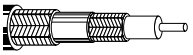
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

Hypalon is a DuPont trademark.

Video Triax Cable

RG-11/U Type

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
14 AWG Solid .064″ Bare Copper • Two Bare Copper Braids (95% Shield Coverage)																			
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket (Polyethylene Insulation between Braids)																			
80°C	**8233**		500	152.4	63.0	28.6	14 AWG	.285	7.24	(2) BC Braids	.475	12.07	75	84%	16.1	52.8	1	.2	.7
			1000	304.8	122.0	55.5	(solid)			95%							3.6	.3	1.0
			2000	609.6	240.0	109.1	.064″			Coverage							10	.4	1.3
							BC			Inner:							71.5	1.1	3.6
							2.5Ω/M′			1.6Ω/M′							135	1.5	4.9
							8.2Ω/km			5.2Ω/km							270	2.3	7.5
																	360	2.7	8.9
										Outer:	100% Sweep tested. 5 MHz to 3 GHz.						540	3.5	11.5
										1.4Ω/M′							720	4.2	13.8
										4.6Ω/km							750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
Suitable for Outdoor and Direct Burial applications.																	3000	12.0	39.4
Gas-injected Foam HDPE Insulation • Black PVC Jacket (PVC Insulation between Braids)																			
80°C	**8233A**	NEC:	1000	304.8	142.0	64.5	14 AWG	.285	7.24	(2) BC Braids	.475	12.07	75	84%	16.1	52.8	1	.2	.7
		CMR	2000	609.6	240.0	109.1	(solid)			95%							3.6	.3	1.0
		CEC:	4000	1219.2	574.0	260.9	.064″			Coverage							10	.4	1.3
		CMG FT4					BC			Inner:							71.5	1.1	3.6
							2.5Ω/M′			1.6Ω/M′							135	1.5	4.9
							8.2Ω/km			5.2Ω/km							270	2.3	7.5
																	360	2.7	8.9
										Outer:	100% Sweep tested. 5 MHz to 3 GHz.						540	3.5	11.5
										1.4Ω/M′							720	4.2	13.8
										4.6Ω/km							750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
																	3000	12.0	39.4
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket (PE Insulation between Braids; Flooding Compound on Outer Braid)																			
Flooded	**7803A**		500	152.4	64.0	29.1	14 AWG	.285	7.24	(2) BC Braids	.475	12.07	75	84%	16.1	52.8	1	.2	.7
80°C	new		1000	304.8	123.0	55.9	(solid)			95%							3.6	.3	1.0
			3000	914.4	381.0	173.2	.064″			Coverage							10	.4	1.3
							BC			Inner:							71.5	1.1	3.6
							2.5Ω/M′			1.6Ω/M′							135	1.5	4.9
							8.2Ω/km			5.2Ω/km							270	2.3	7.5
																	360	2.7	8.9
										Outer:	100% Sweep tested. 5 MHz to 3 GHz.						540	3.5	11.5
										1.4Ω/M′							720	4.2	13.8
										4.6Ω/km							750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
Suitable for Outdoor and Direct Burial applications.																	3000	12.0	39.4

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • PE = Polyethylene

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

Audio and Video Composite Camera Cable

Overview

Audio and Video Composite Camera Cables

Audio/video composite cables are used in camera cable applications requiring one or more coaxes for video and one or more shielded pairs for audio and power.

Applications for such cables include interconnect of remote field cameras for Electronic News Gathering (ENG), Electronic Field Production (EFP) and Closed Circuit Television (CCTV).

ENG cameras are used in shooting on-site News reports which may be live or recorded. EFP applications involve on-site recording of videos produced for companies or private enterprises (i.e., advertisement or training films).

The three most common audio/video configurations are one coax-one pair, one coax-three pair and two coax-three pair designs.

One Coax-One Pair

The most common use for cable of this design is the interconnection of cameras requiring one coax for the video connection to the camera and one pair for audio.

The audio pair may be connected either to the camera itself, to an audio junction box or directly into a microphone.

Another common application for this design is the connection of CCTV surveillance cameras where the coax is used for the video connection and the twisted pair to power the camera.

One Coax-Three Pair

This cable is used in camera applications requiring a coaxial video feed, one audio pair for a MIC hook-up, and two audio pairs for the Interrupted Feedback (IFB) connections to the camera person and talent (anchor). IFB is the audio feed(s) to the talent and camera person's headset which enables them to listen and receive information and directions from the news director as they make the recording.

Two Coax-Three Pair

Camera applications utilizing this design again utilize one coax for the camera video connection and three audio pairs for the MIC and IFB hook-ups. The additional coax can be used to provide video to a portable TV monitor so the talent can view him or herself as the report is being recorded.

HDTV Fiber/Copper Composite Cable

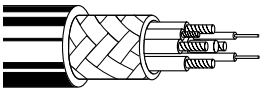
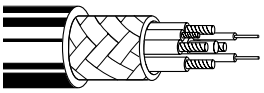
Designed specifically for high-definition cameras, these composite cables can multiplex audio and video signals and power. The cables meet all the requirements of the SMPTE 311 standard developed by the Society of Motion Picture and Television Engineers (SMPTE). They are also compatible with industry standard SMPTE 304M connectors.

Audio and Video Composite Camera Cable

SMPTE 311M HDTV Cables

Single-mode Fiber with Copper Conductors

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nominal Optical Attenuation (@1310nm) dB/1000 Ft.	Nominal Optical Attenuation (@1310nm) dB/km
4 Power Conductors • SM Fiber w/ 24 and 20 AWG Stranded (7x32 and 19x32) Tinned Copper • Overall 95% TC Braid Shield														
PVC Insulation • Black Belflex® Jacket														
	**7804R** new	NEC: CMR CEC: CMG FT4	328 500 1000 1640 3280	100.0 152.4 304.8 500.0 1000.0	33.5 50.0 98.0 155.8 321.4	15.2 22.7 44.5 70.8 146.1	(2) Fibers: SM/125µ/900µ (core/clad/buffer)	.079	2.00	36 AWG TC Braid 95% Shield Coverage 2.9Ω/M′ 9.5Ω/km	.362	9.20	.14	.45
							(2) Cond.: 24 AWG (7x32) .024″ Tinned Copper 23.3Ω/M′ 76.4Ω/km	.050	1.27		Plenum version and other conductor counts/diameters available by special order.			
							(4) Cond.: 20 AWG (19x32) .037″ Tinned Copper 8.8Ω/M′ 28.9Ω/km	.063	1.60					
2 Power Conductors • SM Fiber w/ 24 and 16 AWG Stranded (7x32 and 65x34) Tinned Copper • Overall 95% TC Braid Shield														
PVC Insulation • Black Belflex Jacket														
	**7804C** new	NEC: CMR CEC: CMG FT4	328 500 1000 1640 3280	100.0 152.4 304.8 500.0 1000.0	32.0 46.0 87.0 140.0 288.0	14.5 20.9 39.5 63.6 130.9	(2) Breakout Fibers: SM/125µ/900µ (core/clad/buffer)	.079	2.00	38 AWG TC Braid 95% Shield Coverage 2.8Ω/M′ 9.2Ω/km	.362	9.20	.14	.45
							(2) Cond.: 24 AWG (7x32) .024″ Tinned Copper 23.3Ω/M′ 76.4Ω/km	.050	1.27		Plenum version and other conductor counts/diameters available by special order.			
							(2) Cond.: 16 AWG (65x34) .037″ Tinned Copper 4.3Ω/M′ 14.1Ω/km	.093	2.36					

DCR = DC Resistance • SM = Single-mode • TC = Tinned Copper

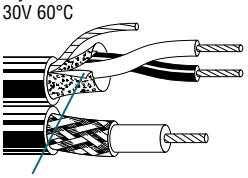
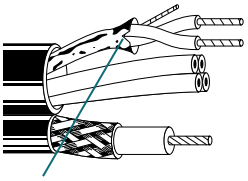
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

Audio and Video Composite Camera Cable

ENG, EFP and CCTV Cables

RG-59/U Type Coax with Shielded Twisted Pair(s)

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
22 AWG Stranded (7x30) Coax with Bare Copper Braid Shield (95% Coverage) • (1) Twisted Pair with 100% Beldfoil® Shield																			
Foam Polyethylene (Coax) **and PVC** (Pairs) **Insulation • Black PVC Jacket**																			
UL AWM Style 20006 30V 60°C	**9265**	NEC: CL2	500 1000	152.4 304.8	31.0 59.0	14.4 26.8	(1) Coax: 22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km	.146 Coax OD: .242	3.71 6.15	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.242 x .470	6.15 x 11.94	75	78%	17.3	56.8	1 5 10 50 100	.3 .7 1.0 2.1 3.0	1.0 2.3 3.3 6.9 9.8
 Z-Fold® Siamese Type Construction							(2) Cond: 22 AWG (7x30) .030″ TC 15.0Ω/M′ 49.2Ω/km Black, Red	.054 Pair OD: .112	1.37 2.84	Pair: Beldfoil Shielded 100% Shield Coverage 11.0Ω/M′ 36.1Ω/km	—	—	35	58%	51.0	167.3	—	—	—
22 AWG Stranded (7x30) Coax with BC Braid Shield (95% Coverage) • (3) Twisted Pairs + Drain Wire Individually 100% Beldfoil Shielded																			
Foam Polyethylene (Coax) **and PVC** (Pairs) **Insulation • Black PVC Jacket**																			
UL AWM Style 20006 30V 60°C	**9165**	NEC: CL2X	500 1000	152.4 304.8	50.0 94.0	22.7 42.7	(1) Coax: 22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km	.146 Coax OD: .242	3.71 6.15	BC Braid 95% Shield Coverage 2.6Ω/M′ 8.5Ω/km	.290 x .561	7.37 x 14.25	75	78%	17.3	56.8	1 5 10 50 100 400	.3 .7 1.0 2.1 3.0 7.4	1.0 2.3 3.3 6.9 9.8 24.3
 Z-Fold® Siamese Type Construction							(3) Pairs: 22 AWG (7x30) .030″ TC 15.0Ω/M′ 49.2Ω/km Red & Black, Orange & Brown, Green & White	.054 Pair OD: .116	1.37 2.95	Each Pair: Individually Beldfoil Shielded 100% Shield Coverage 11.0Ω/M′ 36.1Ω/km	—	—	35	58%	51.0	167.3	—	—	—

BC = Bare Copper • DCR = DC Resistance • EFP = Electronic Field Production • ENG = Electronic News Gathering • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

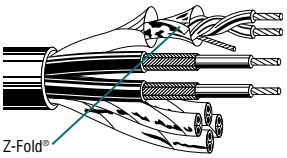
Audio and Video Composite Camera Cable

ENG and EFP Cables

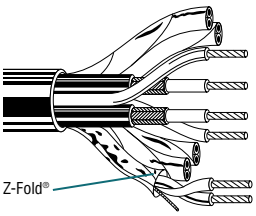
Multiple Coax with Shielded Twisted Pairs

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
12-conductor EFP and ENG Camera Cable																			
Foam Polyethylene (Coax) **and Polypropylene** (Pairs) **Insulation • Overall Chrome Jacket**																			
75°C VW-1	**9170**		1000	304.8	113.0	51.4	(2) Coax: 25 AWG (7x33) .022″ BC 31.2Ω/M′ 102.0Ω/km Black, Black with Hash Marks	.100 Coax OD: .150	2.54 3.81	Each Coax: TC Braid 93% Shield Coverage 6.0Ω/M′ 19.7Ω/km	.490	12.45	75	78%	17.3	56.8	1 10 50 100 300 500	.4 1.5 3.8 5.6 10.6 13.8	1.3 4.9 12.5 18.4 34.8 45.3
							(5) Pairs: 24 AWG (7x32) .024″ TC 24.0Ω/M′ 78.0Ω/km Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow	.044 Pair OD: .095	1.12 2.41	Each Pair: Beldfoil® Shielded 100% Shield Coverage with Drain Wire 18.0Ω/M′ 59.1Ω/km	—	—	—	66%	27.0	88.6	—	—	—



Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
14-conductor EFP and ENG Camera Cable																			
Foam Polyethylene (Coax) **and PVC** (Pairs and Conductors) **Insulation • Overall Chrome Jacket**																			
75°C	**9171**		500 1000	152.4 304.8	97.5 193.0	44.3 87.7	(2) Coax: 22 AWG (7x30) .030″ BC 15.0Ω/M′ 49.2Ω/km Black, Black with Hash Marks	.146 Coax OD: .242	3.71 6.15	Each Coax: BC Braid 95% Shield Coverage 2.5Ω/M′ 8.6Ω/km	.585	14.86	75	78%	17.3	56.8	1 2 10 50 100	.3 .6 1.0 2.3 3.2	1.0 2.0 3.3 7.5 10.5
							(5) Pairs: 22 AWG (7x30) .030″ TC 15.0Ω/M′ 49.2Ω/km Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow	.054 Pair OD: .110	1.37 2.79	Each Pair: Beldfoil Shielded 100% Shield Coverage with Drain Wire 11.6Ω/M′ 38.0Ω/km	—	—	—	—	51.0	167.3	—	—	—
							(2) Cond: 16 AWG (26x30) .060″ TC 4.0Ω/M′ 13.1Ω/km Black, White	Each Cond. OD: .092	 2.34	—	—	—	—	—	—	—	—	—



BC = Bare Copper • DCR = DC Resistance • EFP = Electronic Field Production • ENG = Electronic News Gathering • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

Composite Camera Cable

Cables for TV Cameras and CCTV

BRILLIANCE®

TPE TV Camera Cable

28-Conductor

Product Description

A 75 Ohm cable designed to remain flexible in cold weather. Recommended for transistorized TV cameras.

(4) Conductors — 18 AWG: (16x30) Tinned copper, PVC insulation, ring band stripe color coded. Beldfoil® shield wrapped around four conductors with stranded drain wire. Polyester tape over this shielded group.

(21) Conductors — 22 AWG: (7x30) Tinned copper, PVC insulation, cabled in three groups of seven, ring band stripe color coded. One group of seven has Beldfoil shield wrapped overall with drain wire. Polyester tape over this shielded group. Other two groups are unshielded.

(3) 75 Ohm Coaxial Cables — 25 AWG: (7x33) .021″ (.53mm) bare copper-covered steel. Polyethylene insulation. Core OD .121″ (3.07mm). Tinned copper braid shield (95% coverage) plus cotton braid. Coax OD .178″ (4.52mm).

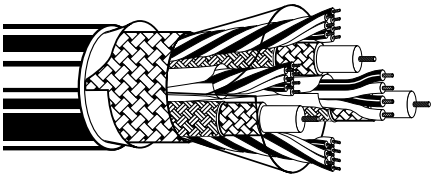
Overall: Tinned copper braid shield (85% coverage). Black thermoplastic elastomer jacket.

Specifications

Conductor	
(25) Conductors	Tinned Copper
(3) Coax	Bare Copper-covered Steel
Insulation	
Conductors	PVC
Coax	PE
Shield	
(4) 18 AWG Conductors	Beldfoil + PE Tape
(7) 22 AWG Conductors	Beldfoil + PE Tape
(14) 22 AWG Conductors	Unshielded
(3) Coax	95% TC Braid + Cotton Braid
Overall	85% Tinned Copper Braid
Jacket	Black TPE
Nominal OD	.730″ (18.54mm)
Nominal Impedance (Coax)	75Ω
Temperature Rating	80°C

Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight	
		Ft.	m	Lbs.	kg
TPE TV Camera					
28-conductor					
8286		500†	152.4	164.0	74.5
		1000†	304.8	327.0	148.6

† Spools are one piece, but length may vary -0% to +20% from length shown.



Remote Control and Video Cable

13-Conductor

Product Description

Recommended for use in installations requiring external drive signals, tallies, intercom, switching and video operations.
UL recognized component (Style 2594).
Passes VW-1 Vertical Wire Flame Test.

(12) Conductors — 20 AWG: (7x28) Tinned copper, PVC insulation, color coded.

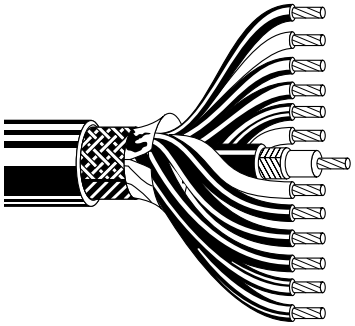
(1) 75 Ohm Coaxial — 22 AWG: (7x30) .031″ (.79mm) bare copper. Foam polyethylene insulation. Core OD .146″ (3.71mm). Bare copper braid shield (95% coverage). Black PVC jacket. Coax OD .208″ (5.28mm).

Overall: Tinned copper braid shield (80% coverage). Gray PVC jacket.

Specifications

Conductor	
(12) Conductors	Tinned Copper
(1) Coax	Bare Copper
Insulation	
Conductors	PVC
Coax	Foam PE
Shield	
(12) Conductors	Unshielded
(1) Coax	95% Bare Copper Braid
Overall	80% Tinned Copper Braid
Jacket	Gray PVC
Nominal OD	.406″ (11.70mm)
Nominal Impedance (Coax)	75Ω
Temperature Rating	60°C
Approvals/Rating	
UL AWM Style	2594
NEC Rating	CL2X

Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight	
		Ft.	m	Lbs.	kg
Remote Control and Video					
13-conductor					
9262	NEC	100	30.5	16.7	7.6
	CL2X	1000	304.8	161.0	73.2



Composite Camera Cable

Cables for TV Cameras and CCTV

BRILLIANCE®

Audio and Video Composite Cable

3 Paired, RG-59U Type

Product Description

Recommended for Electronic News Gathering (ENG) applications.

(3) Pairs — 22 AWG: (7x30) Tinned copper, polypropylene insulation. Nominal insulated conductor OD .046″ (1.17 mm). Individually Beldfoil® shielded with drain wire. PVC jacket, OD .125″ (3.20mm). Jacket colors: Brown, Red and Orange. Nominal impedance: 50Ω. Nominal velocity of propagation: 66%. Nominal capacitance: 32 pF/ft. (105 pF/m)*, 58 pF/ft. (191 pF/m)**.

(2) 75 Ohm Coaxial Cables — 25 AWG: (7x33) .021″ (.53mm) Bare copper. Foam high density polyethylene insulation. Nominal Core OD .100″ (2.54mm). Duofoil® plus tinned copper braid shield (95% coverage). PVC Jacket OD .160″ (4.06mm). Jacket colors: Red and Black. Nominal Impedance: 75Ω. Nominal velocity of propagation: 78%. Nominal capacitance: 17.3 pF/ft. (56.8 pF/m). Nominal attenuation value for respective frequencies:

1 MHz	.5 db/100 ft.	1.5 db/100m
5 MHz	1.1 db/100 ft.	3.6 db/100m
10 MHz	1.5 db/100 ft.	4.9 db/100m
50 MHz	3.2 db/100 ft.	10.5 db/100m
100 MHz	4.3 db/100 ft.	14.1 db/100m
300 MHz	10.6 db/100 ft.	34.8 db/100m
500 MHz	13.8 db/100 ft.	45.3 db/100m

Overall: Matte Black PVC jacket.

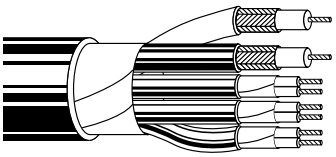
Specifications

Conductor	
(3) Pairs	Tinned Copper
(2) Coax	Bare Copper
Insulation	
Pairs	Polypropylene
Coax	Foam High Density Polyethylene
Shield	
(3) 22 AWG Pairs	Beldfoil
(2) Coax	Tinned Copper Braid
Jacket	Matte Black PVC
Nominal OD	.492″ (12.50mm)
Nominal Impedance (Coax)	75Ω

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight	
		Ft.	m	Lbs.	kg
Audio and Video Composite Cable					
RG-59/U Type • 3 Paired					
1263B		500†	152.4	58.5	26.6
		1000†	304.8	113.0	51.4

†Spools are one piece, but length may vary -0% to +20% from length shown.



Camera Extension Cable

13-Conductor

Product Description

UL Recognized Component (Style 2497). Recommended for remote control, closed circuit and cue line applications. Style 2497 is specified for the Dage 800 and other similar cameras. Passes VW-1 Vertical Wire Flame Test.

(2) Conductors — 20 AWG: (10x30) Tinned copper, PVC insulation, color coded, twisted pair, Mylar® tape wrapped.

(9) Conductors — 22 AWG: (7x30) Tinned copper, PVC insulation. (2) conductors cabled with Beldfoil shield. (2) conductors cabled, unshielded. (5) conductors unshielded.

(2) 75 Ohm Coaxial Cables — 26 AWG: (7x34) .019″ (.48mm) bare copper-covered steel. Foam polyethylene insulation. Core OD .088″ (2.24mm). Tinned copper braid shield (95% coverage). PVC jacket, color coded. Coax OD .142″ (3.61mm).

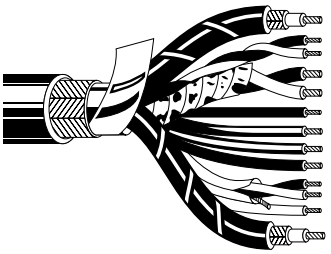
Overall: Tinned copper braid shield (85% coverage). Chrome PVC jacket.

Specifications

Conductor	
(11) Conductors	Tinned Copper
(2) Coax	Bare Copper-covered Steel
Insulation	
Conductors	PVC
Coax	Foam PE
Shield	
(7) Conductors	Unshielded
(2) Conductors	Beldfoil
(2) Conductors	Mylar Tape
(2) Coax	95% Tinned Copper Braid
Overall	85% Tinned Copper Braid
Jacket	Chrome PVC
Nominal OD	.550″ (13.97mm)
Nominal Impedance (Coax)	75Ω
Temperature Rating	60°C
Approvals/Rating	
UL AWM Style	2497
NEC Rating	CL2X

Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight	
		Ft.	m	Lbs.	kg
Camera Extension Cable					
13-conductor					
9254	NEC	250†	30.5	45.5	20.7
	CL2X	1000†	304.8	177.0	80.5

†Spools are one piece, but length may vary -0% to +20% from length shown.



Mylar is a DuPont trademark.

RGB and SVHS Cable

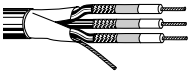
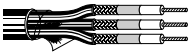
Bundled RGB Coaxial Cables
Miniature and High-Flex Type

BRILLIANCE®

RGB coaxial cables are used for sending red, green and blue signals through separate coaxes in COMPONENT video applications. This type of video transmission provides a sharper, clearer picture than does the composite video format. Ideal for use in graphics, animation and computer display applications.

These bundled coaxial cables are available in 3, 4 or 5 conductor versions and are color coded for easy identification. Cable selection depends on whether the component transmission is RGB (3 cond.), RGB and Sync (4 cond.), or RGB, Sync and Hold (5 cond.).

All Belden® RGB cables are pre-timed to less than 5.0 ns/100 ft. delay difference between each coax. This allows for cut-and-connect installation with no TDR or Vectorscope timing required.

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
				Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
Miniature • 30 AWG Stranded (7x38) .012″ Tinned Copper • Duofoil® + 90% TC Braid (Coaxes) • 100% Overall Beldfoil® Shield																				
Foam HDPE Insulation • Overall Black PVC Jacket (Color Code: Red, Green, Blue, White, Yellow)																				
UL AWM Style 1354 (30V 60°C) 	**1520A**	NEC: CL2	3	500 1000	152.4 304.8	25.0 50.0	11.4 22.7	30 AWG (7x38) .012″ TC 100.0Ω/M′ 328.0Ω/km	.056 Coax OD: .102	1.42 2.59	Coaxes: Duofoil + 90% TC Braid Overall: Beldfoil 9.5Ω/M′ 31.2Ω/km	.283	7.19	75	78%	17.3	56.7	1 5 10 30 50 100 200 400 700 900 1000	.8 1.5 2.2 4.0 5.4 8.2 12.5 18.9 26.5 30.8 32.8	2.6 4.9 7.2 13.1 17.7 26.9 41.0 62.0 86.9 101.0 107.6
	1521A	NEC: CL2	4	500 1000	152.4 304.8	30.0 60.0	13.6 27.3	same as above	.056 Coax OD: .102	1.42 2.59	same as above	.310	7.87							
	1522A	NEC: CL2	5	500 1000	152.4 304.8	34.0 68.0	15.5 30.9	same as above	.056 Coax OD: .102	1.42 2.59	same as above	.338	8.59	100% Sweep tested. 10 MHz to 40 MHz.						
High-Flex • 26 AWG Stranded (7x34) .019″ Bare Copper • Duofoil + 93% Tinned Copper Braid Shield																				
Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: Red, Green, Blue, White, Yellow)																				
60°C 	**1406B**		3	1000†	304.8	75.0	34.1	26 AWG (7x34) .019″ BC 41.5Ω/M′ 136.0Ω/km	.090 Coax OD: .146	2.29 3.71	Duofoil + 93% TC Braid 8.6Ω/M′ 28.2Ω/km	.388	9.86	75	78%	17.3	56.7	1 5 10 30 50 100 200 400 700 900 1000	.6 1.3 1.8 3.1 3.9 5.4 7.5 10.4 13.5 15.2 15.9	2.0 4.3 5.9 10.2 12.8 17.7 24.6 34.1 44.3 49.9 52.2
	1407B		4	1000†	304.8	100.0	45.5	same as above	.090 Coax OD: .146	2.29 3.71	same as above	.455	11.56							
	1417B		5	1000†	304.8	120.0	54.5	same as above	.090 Coax OD: .146	2.29 3.71	same as above	.477	12.12	100% Sweep tested. 10 MHz to 40 MHz.						

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

†Spools are one piece, but length may vary ±10% from length shown.

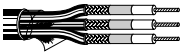
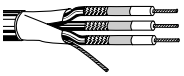
Color Code Chart

Cond.	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow

RGB and SVHS Cable

Bundled RGB Coaxial Cables
CM and CMP Rated

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
26 AWG Stranded (7x34) .019″ Bare Copper • Duofoil® + 93% Tinned Copper Braid Shield • Overall Polyester Tape																				
Foam HDPE Insulation • Overall Black PVC Jacket • Inner PVC Jacket (Color Code: Red, Green, Blue, White, Yellow)																				
UL AWM Styles 1354 and 2668 (30V 60°C) 	**1164B**	NEC: CM	3	500† 1000†	152.4 304.8	39.5 78.0	18.0 35.5	26 AWG (7x34) .019″ BC 41.5Ω/M′ 136.1Ω/km	.090 Coax OD: .146	2.29 3.71	Duofoil + 93% TC Braid 8.6Ω/M′ 28.2Ω/km	.388	9.86	75	78%	17.3	56.7	1 5 10 30 50 100 200 400 700 900 1000	.6 1.3 1.8 3.1 3.9 5.4 7.5 10.4 13.5 15.2 15.9	2.0 4.3 5.9 10.2 12.8 17.7 24.6 34.1 44.3 49.9 52.2
	1167B	NEC: CM	4	1000†	304.8	105.0	47.7	same as above	.090 Coax OD: .146	2.29 3.71	same as above	.455	11.56							
	1418B	NEC: CM	5	500† 1000†	152.4 304.8	61.0 118.0	27.7 53.6	same as above	.090 Coax OD: .146	2.29 3.71	same as above	.477	12.12	100% Sweep tested. 10 MHz to 40 MHz.						
RG-59/U Type • 22 AWG Stranded (7x30) .030″ Bare Copper • Duofoil + 95% TC Braid (Coaxes) • 100% Overall Beldfoil® Shield																				
Plenum • Foam FEP Insulation • Overall Natural Flamarrest® Jacket • Inner Fluorocopolymer Jacket (See Chart)																				
60°C 	**1824A**	NEC: CMP	3	500 1000	152.4 304.8	63.5 127.0	28.9 57.7	22 AWG (7x30) .030″ BC 15.3Ω/M′ 50.2Ω/km	.135 Coax OD: .200	3.43 5.08	Coaxes: Duofoil + 95% TC Braid 2.5Ω/km 8.3Ω/km Overall: Beldfoil 100% Shield Coverage 11.1Ω/M′ 36.4Ω/km	.475	12.07	75	81%	17.3	56.7	1 5 10 30 50 100 200 400 700 900 1000	.3 .6 .8 1.5 2.0 2.9 4.3 6.6 9.4 11.1 11.9	.8 1.9 2.7 4.9 6.4 9.5 14.2 21.6 30.9 36.4 39.0
	1825A	NEC: CMP	4	500 1000	152.4 304.8	84.5 167.0	38.4 75.9	same as above	.135 Coax OD: .200	3.43 5.08	same as above	.527	13.39							
	1826A	NEC: CMP	5	500 1000	152.4 304.8	101.5 201.0	46.1 91.4	same as above	.135 Coax OD: .200	3.43 5.08	same as above	.585	14.86	100% Sweep tested. 10 MHz to 40 MHz.						

BC = Bare Copper DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a more Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

†Spools are one piece, but length may vary ±10% from length shown.

Color Code Chart

Cond.	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow

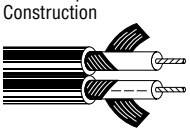
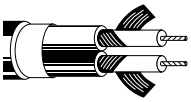
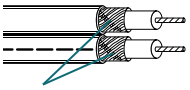
RGB and SVHS Cable

High-Flex SVHS Cables

BRILLIANCE®

The Super VHS (SVHS) video format (also known as Y/C or S-video) requires two coaxial cables to allow for separate transmission of the two parts of a VHS video signal; the luminance (Y) and chrominance (C). The chrominance signal contains the color information and the luminance the black and white or brightness information of the video signal. This separated transmission of the VHS video signal provides better picture resolution with less noise than does the standard VHS format.

Belden's SVHS cables have been designed specifically for use in this format. Belden's SVHS cables are available in two popular constructions; a Zip style dual coax and a Round jacketed version. The Zip construction provides for quick and easy termination. The Round design provides better aesthetics and is more rugged. Both cables are highly flexible.

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
30 AWG Stranded (7x38) .012″ Tinned Copper • Tinned Copper Serve (90% Shield Coverage)																			
Foam HDPE Insulation • Matte Black PVC Jacket (One Coax Printed and Striped for Identification)																			
Parallel Zip Construction 	**1807A**		U-500	U-152.4	8.0	3.6	30 AWG (7x38) .012″ TC 100.0Ω/M′ 328.0Ω/km	.058	1.47	TC Serve 90% Shield Coverage 7.5Ω/M′ 24.6Ω/km	.110 x .230	2.79 x 5.84	75	78%	17.3	56.7	1	.6	2.0
			500	152.4	8.5	3.9											5	1.4	4.6
			U-1000	U-304.8	15.0	6.8											10	2.1	6.9
			1000	304.8	19.0	8.6											30	3.8	12.5
																	50	5.1	16.7
																	100	7.6	24.9
											For Plenum version of 1807A, see 7700A.						200	11.3	37.1
																	400	16.9	55.4
																	700	23.3	76.4
																	900	26.9	88.2
																	1000	28.6	93.8
Foam HDPE Insulation • Matte Black PVC Jacket (Inner PVC Jackets Color Code: Black and Yellow)																			
Round Construction 	**1808A**		U-500	U-152.4	15.0	6.8	30 AWG (7x38) .012″ TC 100.0Ω/M′ 328.0Ω/km	.058	1.47	TC Serve 90% Shield Coverage 7.5Ω/M′ 24.6Ω/km	.255	.84	75	78%	17.3	56.7	1	.6	2.0
			500	152.4	15.5	7.0		Coax OD:									5	1.4	4.6
			U-1000	U-304.8	30.0	13.7		.100	2.54								10	2.1	6.9
			1000	304.8	31.0	14.1											30	3.8	12.5
																	50	5.1	16.7
																	100	7.6	24.9
											Available in Plenum versions by special order only.						200	11.3	37.1
																	400	16.9	55.4
																	700	23.3	76.4
																	900	26.9	88.2
																	1000	28.6	93.8
30 AWG Stranded (7x38) .012″ Tinned Copper • Tinned Copper "French Braid" (98% Shield Coverage)																			
Plenum • Foam FEP Insulation • Black Flamarrest® Jacket (One Coax Printed and Striped for Identification)																			
Parallel Zip Construction  French Braid	**7700A**	NEC: CMP	500	152.4	10.5	4.8	30 AWG (7x38) .012″ TC 100.0Ω/M′ 328.0Ω/km	.053	1.35	TC "French Braid" 98% Shield Coverage 7.4Ω/M′ 24.3Ω/km	.107 x .214	2.72 x 5.44	75	78%	17.3	56.7	1	.7	2.3
			1000	304.8	19.0	8.6											5	1.7	5.6
																	10	2.3	7.5
																	30	4.1	13.4
																	50	5.3	17.4
																	100	7.6	24.9
																	200	11.8	38.7
																	400	17.6	57.7
																	700	24.2	79.4
																	900	28.0	91.8
																	1000	29.8	97.7

DCR = DC Resistance • TC = Tinned Copper • HDPE = High-density Polyethylene

Contact the Belden Wire & Cable Customer Service Department for a more Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

Technical Information

BRILLIANCE®

Maximum Transmission Distance at Serial Digital Data Rates

Data Rate:	143 Mb/s		177 Mb/s		270 Mb/s		360 Mb/s		540 Mb/s		1.5 Gb/s	
Spec:	SMPTE 259M		ITU-R BT. 601		SMPTE 259M		SMPTE 259M		SMPTE 344M*		SMPTE 252M	
Application:	Composite NTSC		Composite PAL		Component Video		Component Widescreen		Component Widescreen		HDTV	
Part No.	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m
1865A	810	247	760	232	600	183	520	158	420	128	170	52
8279	910	277	810	247	640	195	550	168	440	134	170	52
1855A–7787A	1000	305	910	277	750	229	650	198	530	162	210	64
9209	1030	314	930	283	750	229	650	198	540	165	200	61
9209A	1030	314	930	283	750	229	650	198	540	165	200	61
1505A–7794A	1430	436	1320	402	1110	338	960	293	790	241	300	91
1505F	1200	366	1071	326	857	261	732	223	588	179	225	69
1506A	1360	415	1200	366	940	286	810	247	670	204	270	82
9231	1430	436	1270	387	1000	305	850	259	680	207	260	79
9141	1430	436	1270	387	1000	305	850	259	680	207	260	79
8281	1430	436	1270	387	1000	305	860	262	700	213	260	79
8281B	1430	436	1270	387	1000	305	850	259	680	207	250	76
8281F	1250	381	1100	335	860	262	730	222	590	180	240	73
88281	1300	396	1150	351	910	277	770	235	600	183	200	61
1694A–7710A	1760	536	1620	494	1360	415	1180	360	970	296	370	113
1695A	1670	509	1520	463	1250	381	1080	329	880	268	310	94
7855A	2220	677	2000	610	1670	509	1460	445	1210	369	470	143
7731A	2730	832	2460	750	2000	610	1740	530	1430	436	540	165
7732A	2420	738	2140	652	1690	515	1440	439	1150	351	430	131

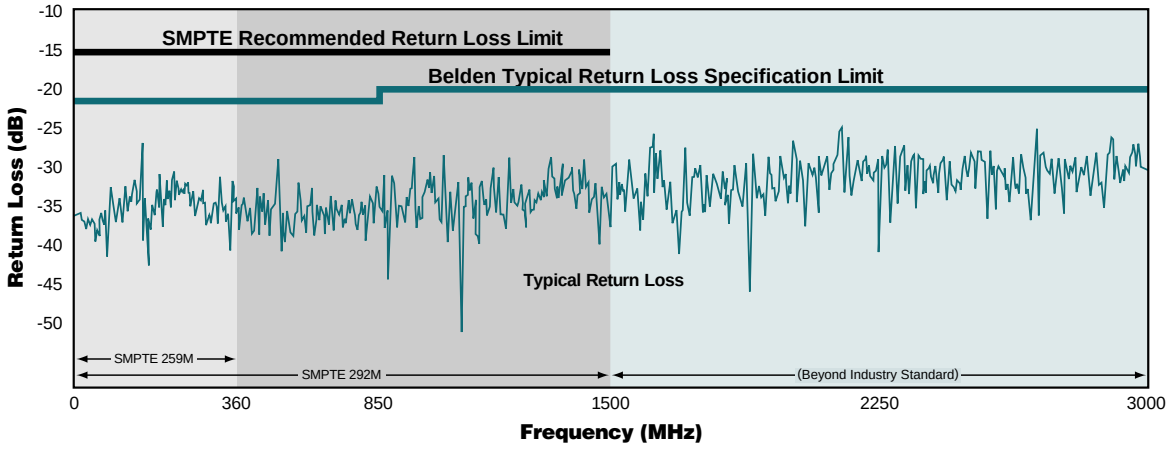
*Values proposed at time of printing.

The serial digital interconnect standards are designed to operate where the signal loss at 1/2 the clock frequency does not exceed the approximate loss values listed below. The maximum length values shown are based on typical attenuation values for the cables listed and the following criteria:

Maximum length = 30 dB loss at 1/2 the clock frequency: SMPTE 259M, PAL, Widescreen.
Maximum length = 20 dB loss at 1/2 the clock frequency: SMPTE 292M.

The bit error rate (BER) can vary dramatically as the calculated distances are approached. BER is dependent on receiver design and the losses of the actual coax used. Distribution and routing equipment manufacturers should be contacted to verify their maximum recommended transmission.

Return Loss Headroom (1694A)



Belden

NEW GENERATION®

13 New Generation® Cables

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Unshielded Multi-conductor: CMR Rated, FT4	13.8
Unshielded Multi-conductor: CL3R Rated	13.10
Shielded Multi-conductor: CMR Rated, FT4	13.11
Shielded Multi-conductor: CL3R Rated	13.12
Water-blocked, Unshielded Multi-conductor: CM Rated, FT1	13.13
Water-blocked, Shielded Multi-conductor: CM Rated, FT1	13.13
Unshielded Twisted Pairs: CMR Rated, FT4	13.14
Shielded Twisted Pairs: CMR Rated, FT4	13.15
Shielded Twisted Pairs + Conductors: CMR Rated, FT4	13.17
Water-blocked, Shielded Twisted Pairs + Conductors: CM Rated, FT1	13.18
Plenum Unshielded Multi-conductor: CMP Rated, FT6	13.19
Plenum Unshielded Multi-conductor: CL2P Rated	13.21
Plenum Shielded Multi-conductor: CMP Rated, FT6	13.22
Plenum Shielded Multi-conductor: CL2P Rated	13.23
Plenum Unshielded Twisted Pairs: CMP Rated, FT6	13.24
Plenum Overall Shielded Twisted Pairs: CMP Rated, FT6	13.25
Plenum Shielded Twisted Pairs+Conductors: CMP Rated, FT6	13.26
Communication and Control Cable	**13.27–13.29**
Plenum Shielded Multi-conductor: CMP Rated, FT6	13.27
Plenum Overall Shielded Pairs: CMP Rated, FT6	13.28
Plenum Shielded Twisted Pairs: CMP Rated, FT6	13.29
Security Coax Cable	**13.30–13.34**
CCTV Coax: CM Rated, FT1	13.30
Water-blocked Coax: CM Rated, FT1	13.30
CATV or MATV Coax: CM Rated, FT1	13.31
Schlage Systems Coax: CM Rated, FT1	13.31
Composite Coax+Pairs: CM Rated, FT1	13.32
Plenum Composite Coax+Pairs: CMP Rated, FT6	13.32
Plenum CCTV Coax: CMP Rated, FT6	13.33
Plenum CATV or MATV Commercial Coax: CMP Rated, FT6	13.34
Fire Alarm Cable	**13.35–13.40**
Unshielded Multi-conductor: FPLR Rated, FT4	13.35
Shielded Multi-conductor: FPLR Rated, FT4	13.36
Unshielded Multi-conductor: FPL Rated	13.37
Shielded Multi-conductor: FPL Rated	13.37
Unshielded Multi-conductor: NPLF Rated	13.38
Shielded Multi-conductor: NPLF Rated	13.38
Plenum Unshielded Multi-conductor: FPLP Rated	13.39
Plenum Shielded Multi-conductor: FPLP Rated	13.39
Plenum Unshielded Multi-conductor: FPLP Rated, Mid-Cap	13.40
Plenum Shielded Multi-conductor: FPLP Rated, Mid-Cap	13.40
Audio Cable	**13.41–13.46**
Unshielded Multi-conductor: CMR Rated, FT4	13.41
Unshielded Multi-conductor: CL3R Rated	13.41
High Strand Unshielded Multi-conductor: CM, CL3 or CL2 Rated	13.42
Shielded Multi-conductor: CMR FT4 or CL3R Rated	13.43
Plenum Unshielded Multi-conductor: CMP FT6 or CL2P Rated	13.44
Plenum Shielded Multi-conductor: CMP FT6 or CL2P Rated	13.45

Please refer to “Terms of Use of Master Catalog” on page 16.30.

Sound, Security and Alarm Cables

Introduction

Market needs are continually challenging the limits of cable technology. And nowhere is the demand for uncompromising quality and leading-edge technology more critical than in sound and security applications.

Belden's answer to this challenge is a line of low voltage, electronic cables that provide the selection, imagination, technical expertise and quality required to meet the demands of increasingly complex sound and security systems. We call this line New Generation.

Unmatched Selection, Quality And Service

Our New Generation cable line includes one of the largest, most economical, and up-to-date selections of reliable multi-conductor and coaxial products on the market today. A full complement of cables for sound, control, computer interconnect, alarm, security, CCTV and other security applications is offered. And behind every one of these cables is years of research and development and Belden's unequaled reputation for quality and service.

Most of our New Generation cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a New Generation cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Innovative and Advanced Cables

For over 90 years, Belden has been committed to the development and support of highly effective cabling solutions. With Belden® New Generation cable products, you can be assured that you're getting the most innovative and advanced cables available today. Here are a few examples of our commitment to making our cables not only work better but also better to work with:

- Sequential footage markings on the cable jacket quickly eliminate guesswork and waste.
- The cables are predominantly NEC Riser Rated (CMR and FPLR) or above to meet even unusually stringent application conditions. All Belden CM, CMR and CMP types are both UL and C(UL) approved.
- A rip cord underneath the jacket provides for easy removal at installation.
- Easy set-up and easy-pulling, space-saving, tangle-free coil packages available for many codes. These revolutionary coil packages vastly reduce job clean-up and waste removal as well.
- Water-blocked options for multi-conductor cables and for coax — where security, surveillance and fire alarm cables are installed in intermittently wet environments.

Quality You Can Count On

A system failure, or loss of continuity, can be catastrophic. That's why you need a cable that is recognized the world over for its quality. And that cable is a Belden cable. All of our New Generation cables are designed with quality as a top priority. Belden was the first major designer and manufacturer of electronic wire and cable products to earn ISO 9001/9002 registration for all its domestic and overseas facilities. In achieving total ISO 9001/9002 registration; United States' Belden passed some of the United States' and Europe's most rigorous tests for quality and, once again, demonstrated the company's dedication to total quality.

New Generation Cable Packaging

UnReel® Dispenser

As with most Belden cables, several New Generation cable products are available in Belden's UnReel cardboard dispenser. The UnReel is a unique packaging dispensing system developed by Belden to save time and labor compared to spools, and eliminate the need for dereeling equipment. Lightweight and more economical than conventional drums or reels, UnReel dispensers have pre-punched handles for easy, individual transport as well as rectangular boxes for easy pallet delivery and storage. UnReel cable pays out smoothly and evenly with less kinking, twisting or backlashing. It also rolls out 60% faster than cable from spools or reels.

Revolutionary Coil Package

New this year, certain New Generation cables are available in a coil package. These revolutionary coils are an easy-to-handle standard package size so pallet loading is uniform. In addition, this densely packaged coil results in less space requirements for your wire, saving shelf space, truck space and cage space at the job. Plus, with no box and no spool, there is far less waste and clean-up required after the job.

Coils are the most tangle-proof package available. And, because the wire pulls from the middle you only have to pull the weight of the length of wire that is your distance from the coil. In pulling spools, you are always pulling the *whole package* weight to get it spinning. And with spools, when you stop pulling, the spool doesn't stop spinning. Help is required to stop this from happening and to keep the payouts tangle free. With coils, that help can be doing something more productive. What's more, five coils may be stacked and pulled in parallel through their common center.

So ask for New Generation's coil package, and leave reel jacks and payout stands behind along with any worries about wet boxes or discarding of empty boxes.

Sound, Security and Alarm Cables

Cable Finder Guide — By Application

NEW GENERATION®

AWG Size	No. of Cond.	Stranding	Non-Shielded						Shielded					
			Non-Plenum			Plenum			Non-Plenum			Plenum		
			Part No.	Rating	Page No.	Part No.	Rating	Page No.	Part No.	Rating	Page No.	Part No.	Rating	Page No.
Security, Alarm and Commercial Audio														
12	2	19	5000UE	CL3R	13.10/41	6000UE	CL2P	13.21/44	5000FE	CL3R	13.12/43	6000FE	CL2P	13.23/45
	3	19	5001UE	CL3R	13.10/41	6001UE	CL2P	13.21/44	—	—	—	—	—	—
	4	19	—	—	—	6002UE	CL2P	13.21	—	—	—	—	—	—
14	2	19	5100UE	CL3R	13.10/41	6100UE	CL2P	13.21/44	5100FE	CL3R	13.12/43	6100FE	CL2P	13.23/45
	3	19	5101UE	CL3R	13.10/41	6101UE	CL2P	13.21/44	5101FE	CL3R	13.12/43	6101FE	CL2P	13.23/45
	4	19	5102UE	CL3R	13.10	6102UE	CL2P	13.21	—	—	—	—	—	—
16	2	19	5200UE	CMR	13.9/41	6200UE	CMP	13.20/44	5200FE	CMR	13.12/43	6200FE	CMP	13.23/45
	3	19	5201UE	CMR	13.9/41	6201UE	CMP	13.20/44	5201FE	CMR	13.12/43	6201FE	CMP	13.23/45
	4	19	5202UE	CMR	13.9	6202UE	CMP	13.20	5202FE	CMR	13.12	6202FE	CMP	13.23
	7	19	5205UE	CMR	13.9	6205UE	CMP	13.20	—	—	—	—	—	—
18	2	Solid	5320UE	CMR	13.9/41	6320UE	CMP	13.20/44	5320FE	CMR	13.12/43	6320FE	CMP	13.23/45
	2	7	5300UG	CM	13.7	6300UE	CMP	13.20/44	5300FE	CMR	13.12/43	6300FE	CMP	13.23/45
	2	7	5300UE	CMR	13.9/41	6300UE	CMP	13.20/44	5300FE	CMR	13.12/43	6300FE	CMP	13.23/45
	3	Solid	5321UE	CMR	13.9/41	6321UE	CMP	13.20/44	—	—	—	—	—	—
	3	7	5301UE	CMR	13.9/41	6301UE	CMP	13.20/44	5301FE	CMR	13.12/43	6301FE	CMP	13.23/45
	4	Solid	5322UE	CMR	13.9	6322UE	CMP	13.20	—	—	—	—	—	—
	4	7	5302UE	CMR	13.9	6302UE	CMP	13.20	5302FE	CMR	13.12	6302FE	CMP	13.23
	5	7	5303UE	CMR	13.9	6303UE	CMP	13.20	5303FE	CMR	13.12	—	—	—
	6	7	5304UE	CMR	13.9	6304UE	CMP	13.20	5304FE	CMR	13.12	6304FE	CMP	13.23
	7	7	5305UE	CMR	13.9	—	—	—	5305FE	CMR	13.12	—	—	—
	8	7	5306UE	CMR	13.9	6306UE	CMP	13.20	5306FE	CMR	13.12	6306FE	CMP	13.23
	9	7	5307UE	CMR	13.9	6307UE	CMP	13.20	5307FE	CMR	13.12	6307FE	CMP	13.23
	10	7	5308UE	CMR	13.9	6308UE	CMP	13.20	—	—	—	—	—	—
	12	7	5309UE	CMR	13.9	6309UE	CMP	13.20	—	—	—	6309FE	CMP	13.23
	20	7	530BUE	CMR	13.9	—	—	—	—	—	—	—	—	—
20	2	Solid	—	—	—	—	—	—	—	—	—	6420FE	CMP	13.22/45
	2	7	5400UE	CMR	13.8/41	6400UE	CMP	13.19/44	5400FE	CMR	13.11/43	6400FE	CMP	13.22/45
	3	Solid	—	—	—	—	—	—	5421FE	CMR	13.43	—	—	—
	3	7	5401UE	CMR	13.8/41	6401UE	CMP	13.19/44	5401FE	CMR	13.11/43	6401FE	CMP	13.22/45
	4	7	5402UE	CMR	13.8	6402UE	CMP	13.19	5402FE	CMR	13.11	6402FE	CMP	13.22
	5	7	5403UE	CMR	13.8	6403UE	CMP	13.19	5403FE	CMR	13.11	—	—	—
	7	7	5405UE	CMR	13.8	—	—	—	5405FE	CMR	13.11	6405FE	CMP	13.22
	8	7	5406UE	CMR	13.8	6406UE	CMP	13.19	—	—	—	—	—	—
	9	7	5407UE	CMR	13.8	—	—	—	5407FE	CMR	13.11	6407FE	CMP	13.22
	10	7	5408UE	CMR	13.8	—	—	—	—	—	—	—	—	—
	12	7	5409UE	CMR	13.8	—	—	—	—	—	—	—	—	—
	20	7	540BUE	CMR	13.8	—	—	—	—	—	—	—	—	—
22	2	Solid	5520UE	CMR	13.8/41	6520UE	CMP	13.19/44	5520FE	CMR	13.11/43	6520FE	CMP	13.22/45
	2	7	5500UG	CM	13.7	6500UE	CMP	13.19/44	5500FE	CMR	13.11/43	6500FE	CMP	13.22/45
	2	7	5500UE	CMR	13.8/41	6500UE	CMP	13.19/44	5500FE	CMR	13.11/43	6500FE	CMP	13.22/45
	3	Solid	—	—	—	6521UE	CMP	13.19/44	5521FE	CMR	13.11/43	6521FE	CMP	13.22/45
	3	7	5501UE	CMR	13.8/41	6501UE	CMP	13.19/44	5501FE	CMR	13.11/43	6501FE	CMP	13.22/45
	4	Solid	5582UG	CM	13.7	—	—	—	—	—	—	—	—	—
	4	Solid	5522UE	CMR	13.8	6522UE	CMP	13.19	—	—	—	—	—	—
	4	Solid	5582UE	CMR	13.8	6522UE	CMP	13.19	—	—	—	—	—	—
	4	7	5502UG	CM	13.7	6502UE	CMP	13.19	5502FE	CMR	13.11	6502FE	CMP	13.22
	4	7	5502UE	CMR	13.8	6502UE	CMP	13.19	5502FE	CMR	13.11	6502FE	CMP	13.22
	5	7	5503UE	CMR	13.8	—	—	—	5503FE	CMR	13.11	—	—	—
	6	Solid	5524UE	CMR	13.8	6524UE	CMP	13.19	—	—	—	—	—	—
	6	7	5504UE	CMR	13.8	6504UE	CMP	13.19	5504FE	CMR	13.11	6504FE	CMP	13.22
	8	Solid	5526UE	CMR	13.8	—	—	—	—	—	—	—	—	—
	8	7	5506UE	CMR	13.8	6506UE	CMP	13.19	5506FE	CMR	13.11	6506FE	CMP	13.22
	10	7	5508UE	CMR	13.8	6508UE	CMP	13.19	5508FE	CMR	13.11	6508FE	CMP	13.22
	12	Solid	5529UE	CMR	13.8	—	—	—	—	—	—	—	—	—
	12	7	5509UE	CMR	13.8	6509UE	CMP	13.19	—	—	—	—	—	—
24	2	7	—	—	—	—	—	—	5600FE	CMR	13.11/43	—	—	—

Sound, Security and Alarm Cables

Cable Finder Guide — By Application

NEW GENERATION®

AWG Size	No. of Cond. or Pairs	Stranding	Non-Shielded						Shielded					
			Non-Plenum			Plenum			Non-Plenum			Plenum		
			Part No.	Rating	Page No.	Part No.	Rating	Page No.	Part No.	Rating	Page No.	Part No.	Rating	Page No.
Paired														
18	2 PR	7	5341UE	CMR	13.14	6341UE	CMP	13.24	5341FE	CMR	13.15	—	—	—
	3 PR	7	5342UE	CMR	13.14	6342UE	CMP	13.24	5342FE	CMR	13.15	6342FE	CMP	13.25
	4 PR	7	5343UE	CMR	13.14	6343UE	CMP	13.24	5343FE	CMR	13.15	6343FE	CMP	13.25
	6 PR	7	5345UE	CMR	13.14	6345UE	CMP	13.24	5345FE	CMR	13.15	6345FE	CMP	13.25
	9 PR	7	5347UE	CMR	13.14	6347UE	CMP	13.24	—	—	—	6347FE	CMP	13.25
20	2 PR	7	—	—	—	—	—	—	5441FE	CMR	13.15	6441FE	CMP	13.25
	3 PR	7	—	—	—	—	—	—	5442FE	CMR	13.15	—	—	—
	4 PR	7	—	—	—	—	—	—	—	—	—	6443FE	CMP	13.25
	6 PR	7	—	—	—	—	—	—	5445FE	CMR	13.15	—	—	—
22	2 PR	Solid	—	—	—	6561UE	CMP	13.24	5561FE	CMR	13.15	6561FE	CMP	13.25
	2 PR	7	5541UE	CMR	13.14	6541UE	CMP	13.24	5541FE	CMR	13.15	6541FE	CMP	13.25
	3 PR	Solid	—	—	—	6562UE	CMP	13.24	5562FE	CMR	13.15	—	—	—
	3 PR	7	5542UE	CMR	13.14	6542UE	CMP	13.24	5542FE	CMR	13.15	6542FE	CMP	13.25
	4 PR	Solid	—	—	—	6563UE	CMP	13.24	5563FE	CMR	13.15	6563FE	CMP	13.25
	4 PR	7	5543UE	CMR	13.14	6543UE	CMP	13.24	5543FE	CMR	13.15	6543FE	CMP	13.25
	6 PR	7	—	—	—	6545UE	CMP	13.24	5545FE	CMR	13.15	6545FE	CMP	13.25
	9 PR	7	5547UE	CMR	13.14	6547UE	CMP	13.24	—	—	—	6547FE	CMP	13.25
Shielded Twisted Pairs														
22	4 STP	7	—	—	—	—	—	—	5543PE	CMR	13.16	—	—	—
Combination Pairs + Conductors														
18	1STP +2/C	7	—	—	—	—	—	—	5302GE	CMR	13.17	—	—	—
20	1STP +1/C	7	—	—	—	—	—	—	5401GE	CMR	13.17	6401GE	CMP	13.26
	1STP +2/C	7	—	—	—	—	—	—	5402GE	CMR	13.17	—	—	—
22	1STP +1/C	7	—	—	—	—	—	—	5501GE	CMR	13.17	6501GE	CMP	13.26
	1STP +2/C	7	—	—	—	—	—	—	5502GE	CMR	13.17	6502GE	CMP	13.26
	1STP +2TP	7	—	—	—	—	—	—	5542GE	CMR	13.17	—	—	—
Water-blocked														
18	2/C	7	5300U1	CM	13.13	—	—	—	5300F1	CM	13.13	—	—	—
20	2/C	7	—	—	—	—	—	—	5400F1	CM	13.13	—	—	—
22	2/C	7	—	—	—	—	—	—	5500F1	CM	13.13	—	—	—
	1STP +1/C	Solid	—	—	—	—	—	—	5521G1	CM	13.18	—	—	—
	1STP +1/C	7	—	—	—	—	—	—	5501G1	CM	13.18	—	—	—
	1STP +2/C	Solid	—	—	—	—	—	—	5522G1	CM	13.18	—	—	—
	1STP +2/C	7	—	—	—	—	—	—	5502G1	CM	13.18	—	—	—
	1STP +4/C	7	—	—	—	—	—	—	5504G1	CM	13.18	—	—	—

STP = Shielded Twisted Pair(s) • TP = Twisted Pair(s) • PR = Pair(s) • /C = Conductor(s)

Sound, Security and Alarm Cables

Cable Finder Guide — By Construction

NEW GENERATION®

AWG Size	No. of Cond. or Pairs	Stranding	Non-Shielded						Shielded					
			Non-Plenum			Plenum			Non-Plenum			Plenum		
			Part No.	Rating	Page No.	Part No.	Rating	Page No.	Part No.	Rating	Page No.	Part No.	Rating	Page No.
Pro Audio Plenum, Lower Capacitance														
18	2/C	7	—	—	—	—	—	—	—	—	—	6300FC	CMP	13.27/46
	4/C	7	—	—	—	—	—	—	—	—	—	6302FC	CMP	13.27/46
	2 STP	7	—	—	—	—	—	—	—	—	—	6341PC	CMP	13.29
	3 STP	7	—	—	—	—	—	—	—	—	—	6342PC	CMP	13.29
	4 STP	7	—	—	—	—	—	—	—	—	—	6343PC	CMP	13.29
	6 STP	7	—	—	—	—	—	—	—	—	—	6345PC	CMP	13.29
20	2/C	7	—	—	—	—	—	—	—	—	—	6400FC	CMP	13.27/46
22	2/C	7	—	—	—	—	—	—	—	—	—	6500FC	CMP	13.27/46
	4/C	7	—	—	—	—	—	—	—	—	—	6502FC	CMP	13.27/46
	2 STP	7	—	—	—	—	—	—	—	—	—	6541PA	CMP	13.29
	3 STP	7	—	—	—	—	—	—	—	—	—	6542PA	CMP	13.29
	4 STP	7	—	—	—	—	—	—	—	—	—	6543PA	CMP	13.29
	6 STP	7	—	—	—	—	—	—	—	—	—	6545PA	CMP	13.29
	8 STP	7	—	—	—	—	—	—	—	—	—	6546PA	CMP	13.29
	12 STP	7	—	—	—	—	—	—	—	—	—	6548PA	CMP	13.29
	16 STP	7	—	—	—	—	—	—	—	—	—	6549PA	CMP	13.29
24	2 TP*	7	—	—	—	—	—	—	—	—	—	6641FC	CMP	13.28
High-Strand Commercial Audio														
10	2/C	65	5T00UP	CL2	13.42	6T00UP	CL2P	13.44	—	—	—	—	—	—
12	2/C	65	5000UP	CL3	13.42	—	—	—	—	—	—	—	—	—
	4/C	65	5002UP	CL3	13.42	—	—	—	—	—	—	—	—	—
14	2/C	42	5100UP	CL3	13.42	—	—	—	—	—	—	—	—	—
	4/C	42	5102UP	CL3	13.42	—	—	—	—	—	—	—	—	—
16	2/C	65	5200UP	CM	13.42	—	—	—	—	—	—	—	—	—
	4/C	65	5202UP	CM	13.42	—	—	—	—	—	—	—	—	—
18	2/C	42	5300UP	CM	13.42	—	—	—	—	—	—	—	—	—
	4/C	42	5302UP	CM	13.42	—	—	—	—	—	—	—	—	—
Fire Alarm														
12	2/C	Solid	5020UL	FPLR	13.35	6020UL	FPLP	13.39	5020FL	FPLR	13.36	6020FL	FPLP	13.39
14	2/C	Solid	5120UL	FPLR	13.35	6120UL	FPLP	13.39	5120FL	FPLR	13.36	6120FL	FPLP	13.39
	4/C	Solid	5122UL	FPLR	13.35	6122UL	FPLP	13.39	5122FL	FPLR	13.36	6122FL	FPLP	13.39
16	2/C	Solid	5220UL	FPLR	13.35	6220UL	FPLP	13.39	5220FL	FPLR	13.36	6220FL	FPLP	13.39
	4/C	Solid	5222UL	FPLR	13.35	6222UL	FPLP	13.39	5222FL	FPLR	13.36	6222FL	FPLP	13.39
18	2/C	Solid	5320UL	FPLR	13.35	6320UL	FPLP	13.39	5320FL	FPLR	13.36	6320FL	FPLP	13.39
	3/C	Solid	—	—	—	6321UL	FPLP	13.39	—	—	—	—	—	—
	4/C	Solid	5322UL	FPLR	13.35	6322UL	FPLP	13.39	5322FL	FPLR	13.36	6322FL	FPLP	13.39
	6/C	Solid	5324UL	FPLR	13.35	6324UL	FPLP	13.39	—	—	—	—	—	—
	8/C	Solid	5326UL	FPLR	13.35	6326UL	FPLP	13.39	—	—	—	—	—	—
	10/C	Solid	5328UL	FPLR	13.35	6328UL	FPLP	13.39	—	—	—	—	—	—
	12/C	Solid	5329UL	FPLR	13.35	—	—	—	—	—	—	—	—	—
22	4/C	Solid	5522UL	FPLR	13.35	6522UL	FPLP	13.39	5522FL	FPLR	13.36	—	—	—
	6/C	Solid	5524UL	FPLR	13.35	6524UL	FPLP	13.39	—	—	—	—	—	—
	8/C	Solid	5526UL	FPLR	13.35	—	—	—	—	—	—	—	—	—
Fire Alarm, Mid-Capacitance														
12	2/C	Solid	—	—	—	—	—	—	5020FJ	FPL	13.37	—	—	—
14	2/C	Solid	—	—	—	6120UJ	FPLP	13.40	5120FJ	FPL	13.37	—	—	—
16	2/C	Solid	5220UJ	FPL	13.37	6220UJ	FPLP	13.40	5220FJ	FPL	13.37	6220FK	FPLP	13.40
	4/C	Solid	—	—	—	—	—	—	5222FJ	FPL	13.37	—	—	—
18	2/C	Solid	5320UJ	FPL	13.37	6320UJ	FPLP	13.40	5320FJ	FPL	13.37	6320FK	FPLP	13.40
	4/C	Solid	—	—	—	—	—	—	5322FJ	FPL	13.37	—	—	—
Fire Alarm, Non-Power-Limited														
12	2/C	Solid	—	—	—	—	—	—	5020FN	NPLF	13.38	—	—	—
14	2/C	Solid	5120UN	NPLF	13.38	—	—	—	5120FN	NPLF	13.38	—	—	—
	4/C	Solid	—	—	—	—	—	—	5122FN	NPLF	13.38	—	—	—
16	2/C	Solid	5220UN	NPLF	13.38	—	—	—	5220FN	NPLF	13.38	—	—	—
	4/C	Solid	5222UN	NPLF	13.38	—	—	—	5222FN	NPLF	13.38	—	—	—
18	2/C	Solid	5320UN	NPLF	13.38	—	—	—	5320FN	NPLF	13.38	—	—	—
	4/C	Solid	5322UN	NPLF	13.38	—	—	—	5322FN	NPLF	13.38	—	—	—

STP = Shielded Twisted Pair(s) • TP = Twisted Pair(s) • /C = Conductors(s)
*Overall Shielded

Sound, Security and Alarm Cables

Cable Finder Guide — Coax

Series Type	AWG Size	Stranding	Non-Plenum				Plenum			
			Part No.	Rating	Shield/Braid Coverage	Page No.	Part No.	Rating	Shield/Braid Coverage	Page No.
CCTV Coax										
Mini 59	25	Solid	573945	CM	94% Bare Copper	13.30	673948	CMP	95% Bare Copper	13.33
RG-62	22	Solid	—	—	—	—	6539Y8	CMP	95% Bare Copper	13.33
RG-59/U	22	7	551945	CM	95% Bare Copper	13.30	—	—	—	—
	20	Solid	543945	CM	95% Bare Copper	13.30	643948	CMP	95% Bare Copper	13.33
RG-6/U	18	Solid	533945	CM	95% Bare Copper	13.30	633948	CMP	95% Bare Copper	13.33
RG-11/U	14	Solid	513945	CM	95% Bare Copper	13.30	613948	CMP	95% Bare Copper	13.33
CCTV Coax, Water-blocked										
RG-59/U	20	Solid	5439W5	CM	Duofoil® + 95% TC	13.30	—	—	—	—
RG-6/U	18	Solid	5339W5	CM	Duofoil + 60% Aluminum	13.30	—	—	—	—
CATV Coax										
RG-59/U	20	Solid	—	—	—	—	6439C8	CMP	Duofoil + 80% Aluminum	13.34
	20	Solid	—	—	—	—	6439Q8	CMP	Copper Quad Shield	13.34
RG-6/U	18	Solid	5339B5	CM	Duofoil + 60% Aluminum	13.31	633938	CMP	Duofoil + 80% Aluminum	13.34
	18	Solid	5339Q5	CM	Aluminum Quad Shield	13.31	6339Q8	CMP	Copper Quad Shield	13.34
RG-11/U	14	Solid	—	—	—	—	6139B8	CMP	Duofoil + 60% Aluminum	13.34
Schlage Coax										
RG-6/U	18	Solid	5399B5	CM	Duobond® + 60% Alum.	13.31	—	—	—	—
Composite CCTV Coax with Unshielded Pair for Control or Audio										
RG-59	20 +18TP	Solid + 7	549945	CM	95% Bare Copper + Unshielded	13.32	649948	CMP	95% Bare Copper + Unshielded	13.32
RG-6	18 +18TP	Solid + 7	539945	CM	95% Bare Copper + Unshielded	13.32	639948	CMP	95% Bare Copper + Unshielded	13.32

TC = Tinned Copper • TP = Twisted Pair(s)

Security and Alarm Cable

Residential, Light Commercial and Institutional Applications

NEW GENERATION®

Unshielded Multi-conductor

CM FT1 Rated

Product Description

Bare copper conductors, polypropylene insulation, PVC jacket. Available in Beige, Brown, Orange, Yellow, Green, Blue, Violet, Gray or Natural jacket colors (except as noted in footnote). Conductors may not be cabled. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	Polypropylene
Insulation Thickness	.006″ (.152mm)
Jacket	PVC
Approvals	
NEC	CM
CEC	CM FT1
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls
- Single Line Telephone

Solid Conductor

Stranded Conductor

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC CM and CEC CM FT1)										
22 AWG										
5500UG new	2	7	U-500 U-1000	U-152 U-305	5.0 9.0	2.3 4.1	.015	.38	.114	2.90
5582UG* new	4	solid	U-500 U-1000	U-152 U-305	7.0 13.0	3.2 5.9	.015	.38	.122	3.10
5502UG** new	4	7	U-500 U-1000	U-152 U-305	7.5 14.0	3.4 6.4	.015	.38	.131	3.33
18 AWG										
5300UG† new	2	7	U-500 U-1000	U-152 U-305	8.5 16.0	3.9 7.3	.015	.38	.148	3.76

* 5582UG available in Beige, Brown, Gray or Natural only.
** 5502UG not available in Orange.
† 5300UG available in Black, Gray or Natural only.

Color Code Chart ††

Cond. No.	Color
1	Black
2	Red
3	White
4	Green

††Except 5582UG which is Black, Red, Yellow, Green for use as station wire.

Security and Alarm Cable

Commercial Applications

NEW GENERATION®

Unshielded Multi-conductor

CMR/CMG FT4 Rated

Product Description

Bare copper conductors, PVC insulation, Gray PVC jacket. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

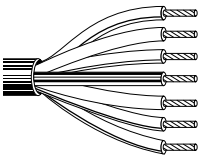
Conductor	Bare Copper
Insulation	PVC
Insulation Thickness	.010″ (.254mm)
Jacket	PVC
Approvals	
NEC	CMR
CEC	CMG FT4
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls
- Single Line Telephone

Solid Conductor

Stranded Conductor



Color Code Chart ††

Cond. No.	Color	Cond. No.	Color
1	Black	11	Pink
2	Red	12	Tan
3	White	13	White/Black
4	Green	14	White/Red
5	Brown	15	White/Green
6	Blue	16	White/Orange
7	Orange	17	White/Blue
8	Yellow	18	White/Brown
9	Purple	19	White/Yellow
10	Gray	20	White/Violet

††Except 5582UE which is Black, Red, Yellow, Green for use as station wire.

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC CMR and CEC CMG FT4)										
22 AWG										
5520UE	2	solid	U-500	U-152	5.0	2.3	.015	.38	.122	3.10
			U-1000	U-305	9.0	4.1				
			1000	305	9.0	4.1				
5500UE	2	7	U-500	U-152	5.5	2.5	.015	.38	.128	3.25
			500	152	5.5	2.5				
			U-1000	U-305	10.0	4.5				
			1000	305	9.0	4.1				
5501UE	3	7	500	152	6.5	3.0	.015	.38	.135	3.43
			U-1000	U-305	13.0	5.9				
			1000	305	13.0	5.9				
5522UE new	4	solid	U-1000	U-305	16.0	7.3	.015	.38	.141	3.58
			1000	305	16.0	7.3				
5582UE*	4	solid	U-500	U-152	6.5	3.0	.015	.38	.141	3.58
			U-1000	U-305	12.0	5.5				
			1000	305	12.0	5.5				
5502UE**	4	7	U-500	U-152	8.5	3.9	.015	.38	.148	3.76
			U-1000	U-305	16.0	7.3				
			1000	305	17.0	7.7				
5503UE new	5	7	U-1000	U-305	20.0	9.1	.015	.38	.162	4.11
			1000	305	20.0	9.1				
5524UE new	6	solid	1000	305	22.0	10.0	.015	.38	.168	4.27
5504UE**	6	7	U-500	U-152	14.0	6.4	.015	.38	.177	4.50
			500	152	13.5	6.1				
			U-1000	U-305	27.0	12.3				
			1000	305	27.0	12.3				
5526UE new	8	solid	1000	305	28.0	12.7	.015	.38	.182	4.62
5506UE	8	7	U-500	U-152	15.0	6.8	.015	.38	.192	4.88
			U-1000	U-305	30.0	13.6				
			1000	305	29.0	13.2				
5508UE	10	7	U-1000	U-305	37.0	16.8	.015	.38	.226	5.74
			1000	305	41.0	18.6				
5529UE	12	solid	U-1000	U-305	41.0	18.6	.015	.38	.221	5.61
			1000	305	46.0	20.9				
5509UE	12	7	U-500	U-152	21.5	9.8	.015	.38	.233	5.92
			U-1000	U-305	42.0	19.1				
			1000	305	47.0	21.4				
20 AWG										
5400UE	2	7	U-1000	U-305	13.0	5.9	.015	.38	.142	3.61
			1000	305	13.0	5.9				
5401UE	3	7	500	152	9.0	4.1	.015	.38	.150	3.81
			U-1000	U-305	18.0	8.2				
			1000	305	18.0	8.2				
5402UE	4	7	U-1000	U-305	23.0	10.5	.015	.38	.165	4.19
			1000	305	23.0	10.5				
5403UE	5	7	U-1000	U-305	28.0	12.7	.015	.38	.181	4.60
			1000	305	28.0	12.7				
5405UE new	7	7	500	152	19.0	8.6	.015	.38	.198	5.03
			1000	305	40.0	18.2				
5406UE new	8	7	U-1000	U-305	41.0	18.6	.015	.38	.215	5.46
			1000	305	44.0	20.0				
5407UE new	9	7	1000	305	52.0	23.6	.015	.38	.233	5.92
5408UE new	10	7	1000	305	53.0	24.1	.015	.38	.254	6.45
5409UE new	12	7	1000	305	62.0	28.2	.015	.38	.262	6.65
540BUE new	20	7	1000	305	109.0	49.5	.025	.64	.347	8.81

* 5582UE also available in Beige, Brown or White.
** 5502UE and 5504UE also available in White.

Security and Alarm Cable

Commercial Applications

NEW GENERATION®

Unshielded Multi-conductor *(cont'd.)*

CMR/CMG FT4 Rated

Product Description

Bare copper conductors, PVC insulation, Gray PVC jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

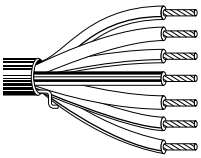
Conductor	Bare Copper
Insulation	PVC
Insulation Thickness	.010″ (.254mm)
Jacket	PVC
Approvals	
NEC	CMR
CEC	CMG FT4
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls
- Single Line Telephone

Solid Conductor

Stranded Conductor



Color Code Chart

Cond. No.	Color	Cond. No.	Color
1	Black	11	Pink
2	Red	12	Tan
3	White	13	White/Black
4	Green	14	White/Red
5	Brown	15	White/Green
6	Blue	16	White/Orange
7	Orange	17	White/Blue
8	Yellow	18	White/Brown
9	Purple	19	White/Yellow
10	Gray	20	White/Violet

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC CMR and CEC CMG FT4)										
18 AWG										
5320UE	2	solid	U-1000	U-305	17.0	7.7	.015	.38	.151	3.84
5300UE*	2	7	U-500	U-152	9.0	4.1	.015	.38	.161	4.09
			500	152	9.5	4.3				
			U-1000	U-305	18.0	8.2				
			1000	305	18.0	8.2				
5321UE	3	solid	500	152	11.5	5.2	.015	.38	.160	4.06
			U-1000	U-305	23.0	10.5				
			1000	305	23.0	10.5				
5301UE	3	7	U-500	U-152	13.0	5.9	.015	.38	.171	4.34
			500	152	12.5	5.7				
			U-1000	U-305	24.0	10.9				
			1000	305	25.0	11.4				
5322UE new	4	solid	1000	305	30.0	13.6	.015	.38	.176	4.47
5302UE	4	7	U-500	U-152	16.0	7.3	.015	.38	.188	4.78
			500	152	16.0	7.3				
			U-1000	U-305	32.0	14.5				
			1000	305	32.0	14.5				
5303UE	5	7	500	152	20.5	9.3	.015	.38	.207	5.26
			U-1000	U-305	39.0	17.7				
			1000	305	39.0	17.7				
5304UE	6	7	500	152	26.0	11.8	.015	.38	.226	5.74
			U-1000	U-305	51.0	23.2				
			1000	305	56.0	25.5				
5305UE new	7	7	U-1000	U-305	51.0	23.2	.015	.38	.226	5.74
			1000	305	52.0	23.6				
5306UE	8	7	500	152	29.5	13.4	.015	.38	.248	6.30
			1000	305	59.0	26.8				
5307UE	9	7	1000	305	66.0	30.0	.015	.38	.269	6.83
5308UE	10	7	500	152	38.5	17.5	.015	.38	.294	7.47
			1000	305	74.0	33.6				
5309UE	12	7	500	152	47.5	21.6	.020	.51	.314	7.98
			1000	305	90.0	40.9				
530BUE new	20	7	1000	305	151.0	68.6	.025	.64	.400	10.16
16 AWG										
5200UE	2	19	U-500	U-152	13.0	5.9	.015	.38	.184	4.67
			500	152	12.5	5.7				
			U-1000	U-305	25.0	11.4				
			1000	305	25.0	11.4				
5201UE	3	19	U-500	U-152	18.0	8.2	.015	.38	.196	4.98
			500	152	18.5	8.4				
			U-1000	U-305	35.0	15.9				
			1000	305	38.0	17.3				
5202UE	4	19	U-500	U-152	23.0	10.5	.015	.38	.216	5.49
			500	152	23.5	10.7				
			U-1000	U-305	46.0	20.9				
			1000	305	51.0	23.2				
5205UE new	7	19	1000	305	77.0	35.0	.015	.38	.261	6.63

*5300UE also available in White or Black.

Security and Alarm Cable

Commercial Applications

NEW GENERATION®

Unshielded Multi-conductor

CL3R Rated

Product Description

Bare copper conductors, PVC insulation, Gray PVC jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	PVC
Insulation Thickness	.014″ (.356mm)
Jacket	PVC
Approvals	
NEC	CL3R
NEC Articles	725
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls
- Single Line Telephone

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC CL3R)										
14 AWG										
5100UE	2	19	500	152	19.5	8.9	.015	.38	.234	5.94
			U-1000	U-305	38.0	17.3				
			1000	305	39.0	17.7				
5101UE	3	19	1000	305	56.0	25.5	.015	.38	.249	6.32
5102UE	4	19	500	152	38.5	17.5	.015	.38	.276	7.01
			1000	305	73.0	33.2				
12 AWG										
5000UE	2	19	500	152	28.5	13.0	.015	.38	.268	6.81
			1000	305	57.0	25.9				
5001UE	3	19	1000	305	82.0	37.3	.015	.38	.286	7.26

Color Code Chart

Cond. No.	Color
1	Black
2	White
3	Red
4	Green

Security and Alarm Cable

Commercial Applications
Shielded

NEW GENERATION®

Shielded Multi-conductor

CMR/CMG FT4 Rated

Product Description

Bare copper conductors, PVC insulation, cabled, Beldfoil® shield tape (aluminum side out) with drain wire, Gray PVC jacket. Sequential footage marking every two feet.

Color Code: See chart below.

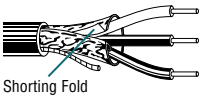
Specifications

Conductor	Bare Copper
Insulation	PVC
Insulation Thickness	.010″ (.254mm)
Shield	Beldfoil
Jacket	PVC
Approvals	
NEC	CMR
CEC	CMG FT4
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

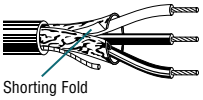
Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls

Solid Conductor



Stranded Conductor



Color Code Chart

Cond. No.	Color
1	Black
2	Red
3	White
4	Green
5	Brown
6	Blue
7	Orange
8	Yellow
9	Purple
10	Gray

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Shielded Multi-conductor (NEC CMR and CEC CMG FT4)										
24 AWG										
5600FE new	2	7	U-1000 1000	U-305 305	11.0 10.0	5.0 4.5	.015	.38	.120	3.05
22 AWG										
5520FE	2	solid	U-1000 1000	U-305 305	14.0 14.0	6.4 6.4	.015	.38	.125	3.18
5500FE	2	7	U-500 500 U-1000 1000	U-152 152 U-305 305	6.5 6.0 12.0 11.0	3.0 2.7 5.5 5.0	.015	.38	.130	3.30
5521FE	3	solid	U-1000 1000	U-305 305	12.0 12.0	5.5 5.5	.015	.38	.132	3.35
5501FE	3	7	U-500 500 U-1000 1000	U-152 152 U-305 305	7.5 8.0 15.0 15.0	3.6 3.4 6.8 6.8	.015	.38	.138	3.51
5502FE	4	7	U-500 500 U-1000 1000	U-152 152 U-305 305	10.0 9.5 18.0 19.0	4.5 4.3 8.2 8.6	.015	.38	.152	3.86
5503FE new	5	7	1000	305	22.0	10.0	.015	.38	.165	4.19
5504FE	6	7	U-500 U-1000 1000	U-152 U-305 305	15.0 29.0 29.0	6.8 13.2 13.2	.015	.38	.179	4.55
5506FE	8	7	U-500 U-1000 1000	U-152 U-305 305	16.5 32.0 32.0	7.5 14.5 14.5	.015	.38	.196	4.98
5508FE	10	7	U-500 U-1000 1000	U-152 U-305 305	20.0 39.0 44.0	9.1 17.7 20.0	.015	.38	.230	5.84
20 AWG										
5400FE	2	7	U-500 500 U-1000 1000	U-152 152 U-305 305	8.5 8.0 16.0 16.0	3.9 3.6 7.3 7.3	.015	.38	.145	3.68
5401FE	3	7	U-500 500 U-1000 1000	U-152 152 U-305 305	11.0 10.5 21.0 21.0	5.0 4.8 9.5 9.5	.015	.38	.153	3.89
5402FE	4	7	U-500 500 U-1000 1000	U-152 152 U-305 305	13.5 13.0 26.0 26.0	6.1 5.9 11.8 11.8	.015	.38	.168	4.27
5403FE	5	7	U-1000 1000	U-305 305	30.0 30.0	13.6 13.6	.015	.38	.184	4.67
5405FE new	7	7	U-1000 1000	U-305 305	40.0 40.0	18.2 18.2	.015	.38	.201	5.11
5407FE new	9	7	1000	305	55.0	25.0	.015	.38	.236	5.99

Security and Alarm Cable

Commercial Applications
Shielded

NEW GENERATION®

Shielded Multi-conductor *(cont'd.)*

CMR/CMG FT4 Rated or CL3R Rated

Product Description

Bare copper conductors, PVC insulation, cabled, Beldfoil® shield tape (aluminum side out) with drain wire, Gray PVC jacket. Sequential footage marking every two feet.

Color Code: See chart below.

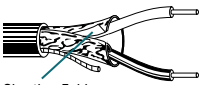
Specifications

Conductor	Bare Copper
Insulation	PVC
Insulation Thickness	
18 to 16 AWG	.010″ (.254mm)
14 to 12 AWG	.014″ (.356mm)
Shield	Beldfoil
Jacket	PVC
Approvals	
NEC (18 to 16 AWG)	CMR
CEC (18 to 16 AWG)	CMG FT4
NEC (14 to 12 AWG)	CL3R
NEC Articles	
18 to 16 AWG	800
14 to 12 AWG	725
Voltage Rating	300V
Temperature Rating	75°C

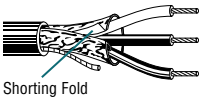
Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls

Solid Conductor



Stranded Conductor



Color Code Chart (18 to 16 AWG)

Cond. No.	Color	Cond. No.	Color
1	Black	6	Blue
2	Red	7	Orange
3	White	8	Yellow
4	Green	9	Purple
5	Brown	10	Gray

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Shielded Multi-conductor (NEC CMR and CEC CMG FT4)										
18 AWG										
5320FE	2	solid	U-1000	U-305	21.0	9.5	.015	.38	.155	3.94
			1000	305	21.0	9.5				
5300FE	2	7	U-500	U-152	11.5	5.2	.015	.38	.165	4.19
			500	152	11.0	5.0				
			U-1000	U-305	22.0	10.0				
			1000	305	22.0	10.0				
5301FE	3	7	U-500	U-152	15.0	6.8	.015	.38	.175	4.45
			500	152	15.0	6.8				
			U-1000	U-305	29.0	13.2				
			1000	305	30.0	13.6				
5302FE	4	7	U-500	U-152	18.5	8.4	.015	.38	.192	4.88
			500	152	20.5	9.3				
			U-1000	U-305	37.0	16.8				
			1000	305	37.0	16.8				
5303FE	5	7	U-500	U-152	22.0	10.0	.015	.38	.211	5.36
			500	152	22.5	10.2				
			U-1000	U-305	44.0	20.0				
			1000	305	45.0	20.5				
5304FE	6	7	U-500	U-152	28.0	12.7	.015	.38	.230	5.84
			500	152	28.5	13.0				
			1000	305	61.0	27.7				
5305FE new	7	7	1000	305	57.0	25.9	.015	.38	.230	5.84
5306FE*	8	7	500	152	32.0	14.5	.015	.38	.270	6.86
			1000	305	64.0	29.1				
5307FE	9	7	1000	305	71.0	32.3	.015	.38	.272	6.91
16 AWG										
5200FE	2	19	U-500	U-152	16.5	7.5	.015	.38	.188	4.78
			500	152	18.0	8.2				
			U-1000	U-305	32.0	14.5				
			1000	305	32.0	14.5				
5201FE	3	19	500	152	22.0	10.0	.015	.38	.200	5.08
			U-1000	U-305	43.0	19.5				
			1000	305	42.0	19.1				
5202FE	4	19	500	152	27.0	12.3	.015	.38	.220	5.59
			1000	305	58.0	26.4				
Shielded Multi-conductor (NEC CL3R)										
14 AWG										
5100FE	2	19	500	152	28.0	12.7	.015	.38	.238	6.05
			U-1000	U-305	48.0	21.8				
			1000	305	53.0	24.1				
5101FE	3	19	1000	305	66.0	30.0	.015	.38	.253	6.43
12 AWG										
5000FE	2	19	500	152	36.5	16.6	.015	.38	.272	6.91
			1000	305	67.0	30.5				

*5306FE also available in Natural.

(14 to 12 AWG)

Cond. No.	Color
1	Black
2	White
3	Red

Security and Alarm Cable

Water-Blocked for Use in Underground Ducts
Unshielded and Shielded

NEW GENERATION®

Water-blocked, Unshielded Multi-conductor

CM FT1 Rated

Product Description

Tinned copper conductors, PVC insulation, cabled with overall water-blocking tape, Gray PVC jacket with rip cord. Sequential footage marking every two feet.

Water-blocked, Shielded Multi-conductor

CM FT1 Rated

Product Description

Tinned copper conductors, PVC insulation, cabled with overall Beldfoil® shield and drain wire, overall water-blocking tape, Gray PVC jacket with rip cord. Sequential footage marking every two feet.

Color Code: Black, Red.

Specifications

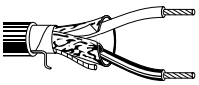
Conductor	Tinned Copper
Insulation	PVC
Insulation Thickness	.010″ (.254mm)
Shield (where applicable)	Beldfoil
Jacket	PVC
Approvals	
NEC	CM
CEC	CM FT1
NEC Articles	800
Voltage Rating	300V
Temperature Rating	105°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls
- Indoor or Outdoor Use

Unshielded Water-blocked

Shielded and Water-blocked



Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Water-blocked, Unshielded Multi-conductor (NEC CM and CEC CM FT1)										
18 AWG										
5300U1 new	2	7	U-500	U-152	12.0	5.5	.025	.64	.207	5.26
			500	152	13.5	6.1				
			U-1000	U-305	23.0	10.5				
			1000	305	24.0	10.9				
Water-blocked, Shielded Multi-conductor (NEC CM and CEC CM FT1)										
22 AWG										
5500F1 new	2	7	U-500	U-152	9.0	4.1	.025	.64	.192	4.88
			500	152	9.0	4.1				
			U-1000	U-305	17.0	7.7				
			1000	305	17.0	7.7				
20 AWG										
5400F1 new	2	7	U-500	U-152	11.0	5.0	.025	.64	.206	5.23
			500	152	10.5	4.8				
			U-1000	U-305	22.0	10.0				
			1000	305	21.0	9.5				
18 AWG										
5300F1 new	2	7	U-500	U-152	15.0	6.8	.025	.64	.222	5.64
			500	152	15.0	6.8				
			U-1000	U-305	29.0	13.2				
			1000	305	29.0	13.2				

Security and Alarm Cable

Commercial Applications

NEW GENERATION®

Unshielded Twisted Pairs

CMR/CMG FT4 Rated

Product Description

Bare copper conductors, PVC insulation. Conductors twisted into pairs, multiple pairs cabled together, Gray PVC jacket with rip cord. Sequential footage marking every two feet.

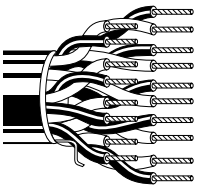
Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	PVC
Insulation Thickness	.010″ (.254mm)
Jacket	PVC
Approvals	
NEC	CMR
CEC	CMG FT4
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls



Part No.	No. of Pairs	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Twisted Pairs (NEC CMR and CEC CMG FT4)										
22 AWG										
5541UE	2	7	U-1000	U-305	19.0	8.6	.015	.38	.206	5.23
			1000	305	19.0	8.6				
5542UE	3	7	U-500	U-152	13.0	5.9	.015	.38	.220	5.59
			U-1000	U-305	25.0	11.4				
			1000	305	25.0	11.4				
5543UE new	4	7	U-1000	U-305	32.0	14.5	.015	.38	.243	6.17
			1000	305	32.0	14.5				
5547UE	9	7	1000	305	70.0	31.8	.020	.51	.334	8.48
18 AWG										
5341UE	2	7	U-1000	U-305	35.0	15.9	.015	.38	.266	6.76
			1000	305	36.0	16.4				
5342UE	3	7	U-1000	U-305	49.0	22.3	.015	.38	.283	7.19
			1000	305	50.0	22.7				
5343UE	4	7	1000	305	67.0	30.5	.018	.46	.320	8.13
5345UE	6	7	1000	305	96.0	43.6	.018	.46	.362	9.19
5347UE	9	7	1000	305	140.0	63.6	.020	.51	.434	11.02

Color Code Chart

Pair No.	Color Combination
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown
7	Black & Orange
8	Red & White
9	Red & Green

Security and Alarm Cable

Commercial Applications
Shielded

NEW GENERATION®

Overall Shielded Twisted Pairs

CMR/CMG FT4 Rated

Product Description

Bare copper conductors, PVC insulation. Conductors twisted into pairs, multiple pairs cabled together, overall Beldfoil® shield (foil side out) and drain wire, overall Gray PVC jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

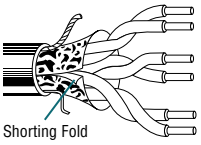
Specifications

Conductor	Bare Copper
Insulation	PVC
Insulation Thickness	.010″ (.254mm)
Shield	Beldfoil
Jacket	PVC
Approvals	
NEC	CMR
CEC	CMG FT4
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

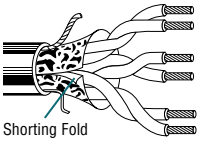
Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls

Solid Conductor



Stranded Conductor



Part No.	No. of Pairs	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Overall Shielded Twisted Pairs (NEC CMR and CEC CMG FT4)										
22 AWG										
5561FE new	2	solid	U-1000 1000	U-305 305	22.0 22.0	10.0 10.0	.015	.38	.200	5.08
5541FE	2	7	U-500 U-1000 1000	U-152 U-305 305	11.0 22.0 22.0	5.0 10.0 10.0	.015	.38	.209	5.31
5562FE new	3	solid	U-1000 1000	U-305 305	27.0 28.0	12.3 12.7	.015	.38	.212	5.38
5542FE	3	7	U-1000 1000	U-305 305	28.0 28.0	12.7 12.7	.015	.38	.223	5.66
5563FE new	4	solid	U-1000 1000	U-305 305	33.0 38.0	15.0 17.3	.015	.38	.246	6.25
5543FE new	4	7	1000	305	39.0	17.7	.015	.38	.252	6.40
5545FE	6	7	U-1000 1000	U-305 305	47.0 48.0	21.4 21.8	.015	.38	.278	7.06
20 AWG										
5441FE new	2	7	500 U-1000 1000	152 U-305 305	15.0 29.0 29.0	6.8 13.2 13.2	.015	.38	.235	5.97
5442FE new	3	7	U-1000 1000	U-305 305	38.0 43.0	17.3 19.5	.015	.38	.252	6.40
5445FE new	6	7	1000	305	72.0	32.7	.020	.51	.323	8.20
18 AWG										
5341FE	2	7	500 U-1000 1000	152 U-305 305	21.0 41.0 42.0	9.5 18.6 19.1	.015	.38	.270	6.86
5342FE	3	7	1000	305	52.0	23.6	.015	.38	.275	6.99
5343FE	4	7	1000	305	70.0	31.8	.015	.38	.318	8.08
5345FE	6	7	500 1000	152 305	52.5 103.0	23.9 46.8	.020	.51	.373	9.47

Color Code Chart

Pair No.	Color Combination	Pair No.	Color Combination
1	Black & Red	4	Black & Blue
2	Black & White	5	Black & Yellow
3	Black & Green	6	Black & Brown

Security and Alarm Cable

Commercial Applications
Shielded

NEW GENERATION®

Individually Shielded Twisted Pairs

CMR/CMG FT4 Rated

Product Description

Bare copper conductors, PVC insulation. Conductors twisted into pairs and individually shielded with Beldfoil® tape (aluminum side facing in) and a drain wire, multiple pairs cabled together, Gray PVC jacket with rip cord. Sequential footage marking every two feet.

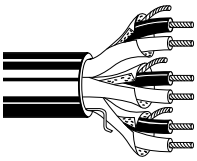
Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	PVC
Insulation Thickness	.010″ (.254mm)
Shield	Beldfoil
Jacket	PVC
Approvals	
NEC	CMR
CEC	CMG FT4
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls



Part No.	No. of Pairs	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Individually Shielded Twisted Pairs (NEC CMR and CEC CMG FT4)										
22 AWG										
5543PE new	4	7	1000	305	54.0	24.5	.033	.84	.303	7.70

Color Code Chart

Pair No.	Color Combination
1	Black/Red & Red
2	Black/White & White
3	Black/Green & Green
4	Black/Blue & Blue

Security and Alarm Cable

Commercial Applications
Shielded

NEW GENERATION®

Shielded
Twisted Pair plus Conductor(s)

CMR/CMG FT4 Rated

Product Description

Bare copper conductors, PVC insulation, Black/Red pair shielded with Beldfoil® tape (aluminum side facing in) and tinned copper drain wire, cabled with additional insulated conductor(s) as indicated, Gray PVC jacket with rip cord. Sequential footage marking every two feet.

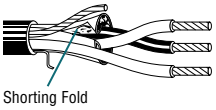
Color Code: Black & Red (shielded pair), White, Green. (5542GE Black & Red, Black & White, Black & Green pairs).

Specifications

Conductor	Bare Copper
Insulation	PVC
Insulation Thickness	.010″ (.254mm)
Shield	Beldfoil
Jacket	PVC
Approvals	
NEC	CMR
CEC	CMG FT4
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls



Part No.	No. of Pairs + No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
STP plus Conductor(s) (NEC CMR and CEC CMG FT4)										
22 AWG										
5501GE	1 STP +1/C	7	U-1000	U-305	17.0	7.7	.015	.38	.171	4.34
5502GE	1 STP +2/C	7	U-500 U-1000 1000	U-152 U-305 305	10.0 19.0 19.0	4.5 8.6 8.6	.015	.38	.186	4.72
5542GE	1 STP +2TP	7	U-1000	U-305	26.0	11.8	.015	.38	.220	5.59
20 AWG										
5401GE	1 STP +1/C	7	U-1000 1000	U-305 305	23.0 24.0	10.5 10.9	.015	.38	.196	4.98
5402GE new	1 STP +2/C	7	U-1000	U-305	27.0	12.3	.015	.38	.200	5.08
18 AWG										
5302GE new	1 STP +2/C	7	1000	305	31.5	14.3	.015	.38	.225	5.72

STP = Shielded Twisted Pair(s) • /C = Conductor(s)

Security and Alarm Cable

Water-Blocked for Use in Underground Ducts

NEW GENERATION®

Water-blocked, Shielded Twisted Pair plus Conductor(s)

CM FT1 Rated

Product Description

Tinned copper conductors, PVC insulation, Black/Red conductors twisted into a pair and shielded with Beldfoil® tape (aluminum side facing in) and drain wire, cabled with additional insulated conductor(s) as indicated, water-blocking tape overall, Gray PVC jacket with rip cord. Sequential footage marking every two feet.

Color Code: Black & Red (shielded pair); White, Green, Brown, Blue.

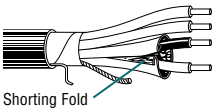
Specifications

Conductor	Tinned Copper
Insulation	PVC
Insulation Thickness	.010″ (.254mm)
Shield	
Twisted Pair	Beldfoil
Overall	Water-blocking Tape
Jacket	PVC
Approvals	
NEC	CM
CEC	CM FT1
NEC Articles	800
Voltage Rating	300V
Temperature Rating	105°C

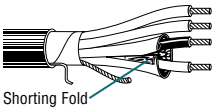
Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls
- Indoor or Outdoor Use

Solid Conductor



Stranded Conductor



Part No.	No. of Pairs + No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Water-blocked, STP plus Conductor(s) (NEC CM and CEC CM FT1)										
22 AWG										
5521G1 new	1 STP +1/C	solid	U-500	U-152	11.5	5.2	.025	.64	.212	5.38
			500	152	13.0	5.9				
			U-1000	U-305	23.0	10.5				
			1000	305	22.0	10.0				
5501G1 new	1 STP +1/C	7	U-500	U-152	12.0	5.5	.025	.64	.222	5.64
			500	152	12.5	5.7				
			U-1000	U-305	24.0	10.9				
			1000	305	25.0	11.4				
5522G1 new	1 STP +2/C	solid	U-500	U-152	13.5	6.1	.025	.64	.224	5.69
			500	152	15.0	6.8				
			U-1000	U-305	26.0	11.8				
			1000	305	27.0	12.3				
5502G1 new	1 STP +2/C	7	U-500	U-152	14.5	6.6	.025	.64	.240	6.10
			500	152	14.5	6.6				
			U-1000	U-305	28.0	12.7				
			1000	305	29.0	13.2				
5504G1 new	1 STP +4/C	7	U-500	U-152	18.0	8.2	.025	.64	.268	6.81
			500	152	18.0	8.2				
			U-1000	U-305	35.0	15.9				
			1000	305	36.0	16.4				

STP = Shielded Twisted Pair(s) • /C = Conductor(s)

Security and Alarm Cable

Commercial Applications
Plenum-Rated

NEW GENERATION®

Unshielded Multi-conductor

CMP FT6 Rated

Product Description

Bare copper conductors, Flamarrest® insulation, conductors cabled, Natural Flamarrest jacket, rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	Flamarrest
Insulation Thickness	.009″ (.229mm)
Jacket	Flamarrest
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls

Solid Conductor

Stranded Conductor

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC CMP and CEC CMP FT6)										
22 AWG										
6520UE	2	solid	U-1000 1000	U-305 305	10.0 9.0	4.5 4.1	.015	.38	.118	3.00
6500UE	2	7	U-500 U-1000 1000	U-152 U-305 305	5.5 10.0 10.0	2.5 4.5 4.5	.015	.38	.124	3.15
6521UE	3	solid	1000	305	13.0	5.9	.015	.38	.125	3.18
6501UE	3	7	U-1000 1000	U-305 305	14.0 13.0	6.4 5.9	.015	.38	.131	3.33
6522UE new	4	solid	U-1000 1000	U-305 305	16.0 16.0	7.3 7.3	.015	.38	.136	3.45
6502UE	4	7	U-500 500 U-1000 1000	U-152 152 U-305 305	9.0 8.5 17.0 17.0	4.1 3.9 7.7 7.7	.015	.38	.143	3.63
6524UE new	6	solid	U-1000	U-305	23.0	10.5	.015	.38	.162	4.11
6504UE	6	7	500 U-1000 1000	152 U-305 305	12.0 24.0 24.0	5.5 10.9 10.9	.015	.38	.171	4.34
6506UE	8	7	U-500 U-1000 1000	U-152 U-305 305	15.5 31.0 31.0	7.0 14.1 14.1	.015	.38	.186	4.72
6508UE	10	7	U-1000 1000	U-305 305	38.0 43.0	17.3 19.5	.015	.38	.218	5.54
6509UE	12	7	U-500 U-1000 1000	U-152 U-305 305	22.0 44.0 49.0	10.0 20.0 22.3	.015	.38	.225	5.72
20 AWG										
6400UE	2	7	500 U-1000 1000	152 U-305 305	7.0 13.0 14.0	3.2 5.9 6.4	.015	.38	.138	3.51
6401UE	3	7	U-1000 1000	U-305 305	18.0 18.0	8.2 8.2	.015	.38	.146	3.71
6402UE	4	7	U-1000 1000	U-305 305	24.0 24.0	10.9 10.9	.015	.38	.160	4.06
6403UE	5	7	U-1000 1000	U-305 305	28.0 28.0	12.7 12.7	.015	.38	.176	4.47
6406UE new	8	7	1000	305	44.0	20.0	.015	.38	.209	5.21

Color Code Chart

Cond. No.	Color	Cond. No.	Color
1	Black	7	Orange
2	Red	8	Yellow
3	White	9	Purple
4	Green	10	Gray
5	Brown	11	Pink
6	Blue	12	Tan

Security and Alarm Cable

Commercial Applications
Plenum-Rated

NEW GENERATION®

Unshielded Multi-conductor *(cont'd.)*

CMP FT6 Rated

Product Description

Bare copper conductors, Flamarrest® insulation, conductors cabled, Natural Flamarrest jacket, rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	Flamarrest
Insulation Thickness	.009″ (.229mm)
Jacket	Flamarrest
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls

Solid Conductor

Stranded Conductor

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC CMP and CEC CMP FT6)										
18 AWG										
6320UE	2	solid	U-1000	U-305	17.0	7.7	.015	.38	.147	3.73
6300UE	2	7	U-500	U-152	9.5	4.3	.015	.38	.157	3.99
			500	152	9.0	4.1				
			U-1000	U-305	18.0	8.2				
			1000	305	18.0	8.2				
6321UE	3	solid	500	152	12.0	5.5	.015	.38	.156	3.96
			U-1000	U-305	24.0	10.9				
			1000	305	24.0	10.9				
6301UE	3	7	U-500	U-152	13.0	5.9	.015	.38	.168	4.27
			500	152	12.5	5.7				
			U-1000	U-305	25.0	11.4				
			1000	305	25.0	11.4				
6322UE new	4	solid	U-1000	U-305	30.0	13.6	.015	.38	.171	4.34
6302UE	4	7	U-500	U-152	18.5	8.4	.015	.38	.186	4.72
			500	152	20.0	9.1				
			U-1000	U-305	36.0	16.4				
			1000	305	39.0	17.7				
6303UE	5	7	U-1000	U-305	39.0	17.7	.015	.38	.203	5.16
			1000	305	41.0	18.6				
6304UE	6	7	500	152	23.5	10.7	.015	.38	.222	5.64
			1000	305	51.0	23.2				
6306UE	8	7	500	152	30.5	13.9	.015	.38	.242	6.15
			1000	305	65.0	29.5				
6307UE	9	7	1000	305	68.0	30.9	.015	.38	.262	6.65
6308UE	10	7	500	152	40.5	18.4	.015	.38	.286	7.26
			1000	305	75.0	34.1				
6309UE	12	7	1000	305	84.0	38.2	.015	.38	.296	7.52
16 AWG										
6200UE	2	19	500	152	13.0	5.9	.015	.38	.180	4.57
			U-1000	U-305	26.0	11.8				
			1000	305	26.0	11.8				
6201UE	3	19	500	152	18.0	8.2	.015	.38	.191	4.85
			U-1000	U-305	36.0	16.4				
			1000	305	38.0	17.3				
6202UE	4	19	500	152	25.5	11.6	.015	.38	.211	5.36
			U-1000	U-305	47.0	21.4				
			1000	305	52.0	23.6				
6205UE new	7	19	500	152	41.5	18.9	.015	.38	.255	6.48

Color Code Chart

Cond. No.	Color	Cond. No.	Color
1	Black	7	Orange
2	Red	8	Yellow
3	White	9	Purple
4	Green	10	Gray
5	Brown	11	Pink
6	Blue	12	Tan

Security and Alarm Cable

Commercial Applications
Plenum-Rated

NEW GENERATION®

Unshielded Multi-conductor

CL2P Rated

Product Description

Bare copper conductors, Flamarrest® insulation, conductors cabled, Natural Flamarrest jacket, rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	Flamarrest
Insulation Thickness	.011″ (.279mm)
Jacket	Flamarrest
Approvals	
NEC	CL2P
NEC Articles	725
Voltage Rating	150V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC CL2P)										
14 AWG										
6100UE	2	19	500 U-1000 1000	152 U-305 305	20.0 39.0 40.0	9.1 17.7 18.2	.015	.38	.222	5.64
6101UE	3	19	1000	305	60.0	27.3	.015	.38	.236	5.99
6102UE	4	19	1000	305	73.0	33.2	.015	.38	.261	6.63
12 AWG										
6000UE	2	19	500 1000	152 305	32.0 58.0	14.5 26.4	.015	.38	.256	6.50
6001UE	3	19	1000	305	83.0	37.7	.015	.38	.273	6.93
6002UE new	4	19	1000	305	111.0	50.5	.018	.46	.308	7.82

Color Code Chart

Cond. No.	Color
1	Black
2	White
3	Red
4	Green

Security and Alarm Cable

Commercial Applications
Shielded, Plenum-Rated

NEW GENERATION®

Shielded Multi-conductor

CMP FT6 Rated

Product Description

Bare copper conductors, Flamarrest® insulation, conductors cabled, overall Beldfoil® tape shield (aluminum side out) and drain wire, Natural Flamarrest jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

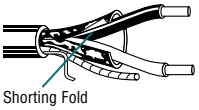
Specifications

Conductor	Bare Copper
Insulation	Flamarrest
Insulation Thickness	.009″ (.229mm)
Shield	Beldfoil
Jacket	Flamarrest
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

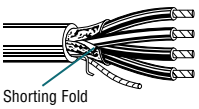
Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls

Solid Conductor



Stranded Conductor



Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Shielded Multi-conductor (NEC CMP and CEC CMP FT6)										
22 AWG										
6520FE	2	solid	U-1000 1000	U-305 305	13.0 13.0	5.9 5.9	.015	.38	.125	3.18
6500FE	2	7	U-500 500 U-1000 1000	U-152 152 U-305 305	7.0 7.0 13.0 13.0	3.2 3.2 5.9 5.9	.015	.38	.132	3.35
6521FE	3	solid	1000	305	17.0	7.7	.015	.38	.132	3.35
6501FE	3	7	500 U-1000 1000	152 U-305 305	8.0 16.0 16.0	3.6 7.3 7.3	.015	.38	.140	3.56
6502FE	4	7	500 U-1000 1000	152 U-305 305	10.0 20.0 20.0	4.5 9.1 9.1	.015	.38	.150	3.81
6504FE	6	7	U-500 500 U-1000 1000	U-152 152 U-305 305	13.5 15.0 26.0 26.0	6.1 6.8 11.8 11.8	.015	.38	.178	4.52
6506FE	8	7	U-1000 1000	U-305 305	34.0 37.0	15.5 16.8	.015	.38	.193	4.90
6508FE	10	7	U-1000 1000	U-305 305	41.0 46.0	18.6 20.9	.015	.38	.225	5.72
20 AWG										
6420FE	2	solid	U-1000 1000	U-305 305	16.0 15.0	7.3 6.8	.015	.38	.137	3.48
6400FE	2	7	U-1000 1000	U-305 305	17.0 17.0	7.7 7.7	.015	.38	.145	3.68
6401FE	3	7	U-1000 1000	U-305 305	22.0 22.0	10.0 10.0	.015	.38	.153	3.89
6402FE	4	7	U-1000 1000	U-305 305	27.0 27.0	12.3 12.3	.015	.38	.167	4.24
6405FE new	7	7	1000	305	44.0	20.0	.015	.38	.199	5.05
6407FE new	9	7	1000	305	56.0	25.5	.015	.38	.232	5.89

Color Code Chart

Cond. No.	Color	Cond. No.	Color
1	Black	7	Orange
2	Red	8	Yellow
3	White	9	Purple
4	Green	10	Gray
5	Brown	11	Pink
6	Blue	12	Tan

Security and Alarm Cable

Commercial Applications
Shielded, Plenum-Rated

NEW GENERATION®

Shielded Multi-conductor *(cont'd.)*

CMP FT6 Rated or CL2P Rated

Product Description

Bare copper conductors, Flamarrest® insulation, conductors cabled, overall Beldfoil® tape shield (aluminum side out) and drain wire, Natural Flamarrest jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

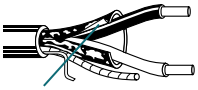
Specifications

Conductor	Bare Copper
Insulation	Flamarrest
Insulation Thickness	
18 and 16 AWG	.009″ (.229mm)
14 and 12 AWG	.011″ (.279mm)
Shield	Beldfoil
Jacket	Flamarrest
Approvals	
NEC (18 and 16 AWG)	CMP
CEC (18 and 16 AWG)	CMP FT6
NEC (14 and 12 AWG)	CL2P
NEC Articles	
18 and 16 AWG	800
14 and 12 AWG	725
Voltage Rating	
18 and 16 AWG	300V
14 and 12 AWG	150V
Temperature Rating	75°C

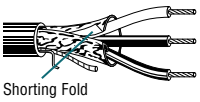
Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls

Solid Conductor



Stranded Conductor



Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Shielded Multi-conductor (NEC CMP and CEC CMP FT6)										
18 AWG										
6320FE	2	solid	1000	305	22.0	10.0	.015	.38	.153	3.89
6300FE	2	7	U-500	U-152	12.0	5.5	.015	.38	.162	4.11
			500	152	12.0	5.5				
			U-1000	U-305	23.0	10.5				
			1000	305	23.0	10.5				
6301FE	3	7	U-500	U-152	15.5	7.0	.015	.38	.175	4.45
			U-1000	U-305	30.0	13.6				
			1000	305	30.0	13.6				
6302FE	4	7	U-500	U-152	19.0	8.6	.015	.38	.191	4.85
			500	152	19.0	8.6				
			U-1000	U-305	38.0	17.3				
			1000	305	37.0	16.8				
6304FE	6	7	1000	305	56.0	25.5	.015	.38	.229	5.82
6306FE new	8	7	1000	305	66.0	30.0	.015	.38	.259	6.58
6307FE	9	7	500	152	39.5	18.0	.015	.38	.269	6.83
			1000	305	73.0	33.2				
6309FE	12	7	500	152	54.5	24.8	.018	.46	.309	7.85
			1000	305	99.0	45.0				
16 AWG										
6200FE	2	19	500	152	16.5	7.5	.015	.38	.187	4.75
			1000	305	33.0	15.0				
6201FE	3	19	500	152	22.5	10.2	.015	.38	.198	5.03
			U-1000	U-305	44.0	20.0				
			1000	305	45.0	20.5				
6202FE	4	19	500	152	29.0	13.2	.015	.38	.218	5.54
			1000	305	59.0	26.8				
Shielded Multi-conductor (NEC CL2P)										
14 AWG										
6100FE	2	19	500	152	26.0	11.8	.015	.38	.229	5.82
			U-1000	U-305	49.0	22.3				
			1000	305	54.0	24.5				
6101FE	3	19	1000	305	70.0	31.8	.015	.38	.243	6.17
12 AWG										
6000FE	2	19	500	152	36.0	16.4	.015	.38	.263	6.68
			1000	305	68.0	30.9				

Color Code Chart (18 to 16 AWG)

Cond. No.	Color	Cond. No.	Color
1	Black	**7**	Orange
2	Red	**8**	Yellow
3	White	**9**	Purple
4	Green	**10**	Gray
5	Brown	**11**	Pink
6	Blue	**12**	Tan

(14 to 12 AWG)

Cond. No.	Color
1	Black
2	White
3	Red

Security and Alarm Cable

Commercial Applications
Plenum-Rated

NEW GENERATION®

Unshielded Twisted Pairs

CMP FT6 Rated

Product Description

Bare copper conductors, Flamarrest® insulation, twisted into pairs, multiple pairs cabled together, Natural Flamarrest jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

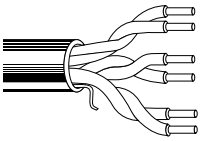
Specifications

Conductor	Bare Copper
Insulation	Flamarrest
Insulation Thickness	.009″ (.229mm)
Jacket	Flamarrest
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

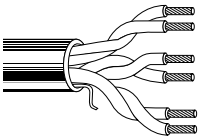
Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls

Solid Conductor



Stranded Conductor



Part No.	No. of Pairs	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Twisted Pairs (NEC CMP and CEC CMP FT6)										
22 AWG										
6561UE new	2	solid	1000	305	19.0	8.6	.015	.38	.188	4.78
6541UE	2	7	U-1000 1000	U-305 305	20.0 20.0	9.1 9.1	.015	.38	.199	5.05
6562UE new	3	solid	1000	305	25.0	11.4	.015	.38	.200	5.08
6542UE	3	7	1000	305	26.0	11.8	.015	.38	.212	5.38
6563UE new	4	solid	1000	305	30.0	13.6	.015	.38	.221	5.61
6543UE new	4	7	1000	305	38.0	17.3	.015	.38	.234	5.94
6545UE	6	7	1000	305	47.0	21.4	.015	.38	.264	6.71
6547UE	9	7	1000	305	69.0	31.4	.018	.46	.318	8.08
18 AWG										
6341UE	2	7	500 U-1000 1000	152 U-305 305	21.0 37.0 38.0	9.5 16.8 17.3	.015	.38	.260	6.60
6342UE	3	7	U-1000 1000	U-305 305	49.0 50.0	22.3 22.7	.015	.38	.278	7.06
6343UE	4	7	500 1000	152 305	37.5 66.0	17.0 30.0	.015	.38	.314	7.98
6345UE	6	7	1000	305	95.0	43.2	.018	.46	.355	9.02
6347UE	9	7	1000	305	138.0	62.7	.019	.48	.423	10.74

Color Code Chart

Pair No.	Color Combination	Pair No.	Color Combination
1	Black & Red	6	Black & Brown
2	Black & White	7	Black & Orange
3	Black & Green	8	Red & White
4	Black & Blue	9	Red & Green
5	Black & Yellow		

Security and Alarm Cable

Commercial Applications
Shielded, Plenum-Rated

NEW GENERATION®

Overall Shielded Twisted Pairs

CMP FT6 Rated

Product Description

Bare copper conductors, Flamarrest® insulation, twisted into pairs, multiple pairs cabled together, overall Beldfoil® shield tape (aluminum side out) with drain wire, Natural Flamarrest jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

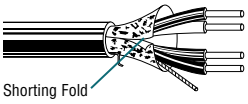
Specifications

Conductor	Bare Copper
Insulation	Flamarrest
Insulation Thickness	.009″ (.229mm)
Shield	Beldfoil
Jacket	Flamarrest
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

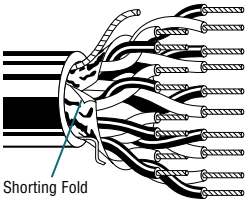
Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls

Solid Conductor



Stranded Conductor



Part No.	No. of Pairs	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Overall Shielded Twisted Pairs (NEC CMP and CEC CMP FT6)										
22 AWG										
6561FE new	2	solid	1000	305	21.0	9.5	.015	.38	.196	4.98
6541FE	2	7	U-500 U-1000 1000	U-152 U-305 305	11.5 22.0 23.0	5.2 10.0 10.5	.015	.38	.206	5.23
6542FE	3	7	U-1000 1000	U-305 305	29.0 28.0	13.2 12.7	.015	.38	.224	5.69
6563FE new	4	solid	1000	305	39.0	17.7	.015	.38	.229	5.82
6543FE new	4	7	U-1000 1000	U-305 305	36.0 41.0	16.4 18.6	.015	.38	.241	6.12
6545FE	6	7	U-1000 1000	U-305 305	49.0 50.0	22.3 22.7	.015	.38	.271	6.88
6547FE	9	7	1000	305	72.0	32.7	.018	.46	.329	8.36
20 AWG										
6441FE new	2	7	U-500 1000	U-152 305	15.5 30.0	7.0 13.6	.015	.38	.231	5.87
6443FE new	4	7	U-1000 1000	U-305 305	50.0 51.0	22.7 23.2	.015	.38	.271	6.88
18 AWG										
6342FE	3	7	500 1000	152 305	28.0 56.0	12.7 25.5	.015	.38	.285	7.24
6343FE	4	7	500 1000	152 305	39.5 74.0	18.0 33.6	.015	.38	.319	8.10
6345FE	6	7	500 1000	152 305	50.0 101.0	22.7 45.9	.018	.46	.355	9.02
6347FE	9	7	1000	305	144.0	65.5	.019	.48	.430	10.92

Color Code Chart

Pair No.	Color Combination	Pair No.	Color Combination
1	Black & Red	6	Black & Brown
2	Black & White	7	Black & Orange
3	Black & Green	8	Red & White
4	Black & Blue	9	Red & Green
5	Black & Yellow		

Security and Alarm Cable

Commercial Applications
Plenum-Rated

NEW GENERATION®

Shielded
Twisted Pair plus Conductor(s)

CMP FT6 Rated

Product Description

Bare copper conductors, Flamarrest® insulation, Black/Red twisted pair shielded with Beldfoil® tape (aluminum side facing in), drain wire, cabled with additional insulated conductor(s) as indicated, Natural Flamarrest jacket with rip cord. Sequential footage marking every two feet.

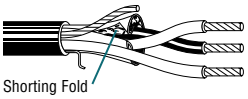
Color Code: Black & Red pair, White, Green.

Specifications

Conductor	Bare Copper
Insulation	Flamarrest
Insulation Thickness	.009″ (.229mm)
Shield	Beldfoil
Jacket	Flamarrest
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls



Part No.	No. of Pairs + No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Shielded Twisted Pair plus Conductor(s) (NEC CMP and CEC CMP FT6)										
22 AWG										
6501GE	1 STP +1/C	7	1000	305	18.0	8.2	.015	.38	.174	4.42
6502GE	1 STP +2/C	7	U-1000 1000	U-305 305	21.0 21.0	9.5 9.5	.015	.38	.180	4.57
20 AWG										
6401GE	1 STP +1/C	7	U-1000 1000	U-305 305	24.0 24.0	10.9 10.9	.015	.38	.195	4.95

STP = Shielded Twisted Pair(s) • /C = Conductor(s)

Communication and Control Cable

Pro Audio and Intercom Systems
Shielded, Plenum-Rated

NEW GENERATION®

Shielded Multi-conductor

CMP FT6 Rated

Product Description

Bare copper conductors, Halar® insulation, conductors cabled with a Beldfoil® shield tape (aluminum side out) and drain wire. Natural Flamarrest® jacket with rip cord. Sequential footage marking every two feet.

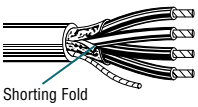
Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	Halar
Insulation Thickness	
22 AWG	.0055″ (.140mm)
20 AWG	.0060″ (.152mm)
18 AWG	.0065″ (.165mm)
Shield	Beldfoil
Jacket	Flamarrest
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Pro Audio Systems
- Intercom/PA Systems
- Security Systems



Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Shielded Multi-conductor (NEC CMP and CEC CMP FT6)										
22 AWG										
6500FC	2	7	U-1000 1000	U-305 305	11.0 11.0	5.0 5.0	.015	.38	.116	2.95
6502FC new	4	7	1000	305	17.0	7.7	.015	.38	.133	3.38
20 AWG										
6400FC new	2	7	U-1000	U-305	15.0	6.8	.015	.38	.130	3.30
18 AWG										
6300FC	2	7	U-1000 1000	U-305 305	21.0 21.0	9.5 9.5	.015	.38	.152	3.86
6302FC	4	7	U-1000 1000	U-305 305	34.0 35.0	15.5 15.9	.015	.38	.176	4.47

Color Code Chart

Cond No.	Color
1	Black
2	Red
3	White
4	Green

Halar is a trademark of the Ausimont Corporation.

Communication and Control Cable

Pro Audio and Intercom Systems
Overall Shielded, Plenum-Rated

NEW GENERATION®

Overall Shielded Pairs

CMP FT6 Rated

Product Description

Bare copper conductors, Halar® insulation, twisted pairs cabled with a Beldfoil® shield tape (aluminum side out) and drain wire. Natural Flamarrest® jacket.

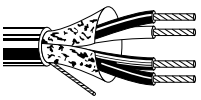
Color Code: Black & Red and Black & White pairs.

Specifications

Conductor	Bare Copper
Insulation	Halar
Insulation Thickness	.0065″ (.165mm)
Shield	Beldfoil
Jacket	Flamarrest
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Pro Audio Systems
- Intercom/PA Systems
- Security Systems



Part No.	No. of Pairs	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Overall Shielded Pairs (NEC CMP and CEC CMP FT6)										
24 AWG										
6641FC new	2	7	U-500	U-152	8.0	3.6	.015	.38	.164	4.17

Halar is a trademark of the Ausimont Corporation.

Communication and Control Cable

Pro Audio and Intercom Systems
Individually Shielded, Plenum-Rated

NEW GENERATION®

Individually Shielded Twisted Pairs

CMP FT6 Rated

Product Description

Bare copper conductors, FEP or Halar® insulation (per table). Conductors twisted into pairs and individually shielded with Beldfoil® tape (aluminum side facing in) and a drain wire, multiple pairs cabled together, Gray Fluorocopolymer (22 AWG) or Natural Flamarrest® (18 AWG) jacket, rip cord. Sequential footage marking every two feet.

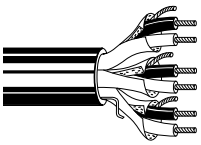
Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	
22 AWG	FEP
18 AWG	Halar
Insulation Thickness	.010″ (.254mm)
Shield	Beldfoil
Jacket	
22 AWG	Gray Fluorocopolymer
18 AWG	Natural Flamarrest
Nominal Capacitance	
22 AWG	27.5 pF/ft.
18 AWG	44 pF/ft.
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Security Systems
- Intercom/PA Systems
- Sound/Audio Systems
- Power-Limited Controls



Part No.	No. of Pairs	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Individually Shielded Twisted Pairs (NEC CMP and CEC CMP FT6)										
22 AWG										
6541PA	2	7	500 U-1000 1000	152 U-305 305	13.5 26.0 26.0	6.1 11.8 11.8	.015	.38	.214	5.44
6542PA	3	7	1000	305	36.0	16.4	.015	.38	.228	5.79
6543PA	4	7	1000	305	46.0	20.9	.015	.38	.252	6.40
6545PA	6	7	1000	305	62.0	28.2	.015	.38	.300	7.62
6546PA	8	7	1000	305	82.0	37.3	.015	.38	.328	8.53
6548PA	12	7	1000	305	121.5	55.2	.015	.38	.404	9.14
6549PA	16	7	1000	305	161.0	73.2	.018	.46	.459	9.53
18 AWG										
6341PC new	2	7	500 U-1000 1000	152 U-305 305	25.5 46.0 48.0	11.6 20.9 21.8	.015	.38	.278	7.06
6342PC new	3	7	500 1000	152 305	33.0 67.0	15.0 30.5	.015	.38	.297	7.54
6343PC new	4	7	1000	305	85.0	38.6	.015	.38	.329	8.36
6345PC new	6	7	500 1000	152 305	65.0 128.0	29.5 58.2	.019	.48	.402	10.21

Color Code Chart

Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	Black & Red	6	Black & Brown	11	Red & Yellow
2	Black & White	7	Black & Orange	12	Red & Brown
3	Black & Green	8	Red & White	13	Red & Orange
4	Black & Blue	9	Red & Green	14	Green & White
5	Black & Yellow	10	Red & Blue	15	Green & Blue
				16	Green & Yellow

Halar is a trademark of the Ausimont Corporation.

Security Coaxial Cable

Surveillance and CCTV Applications
Shielded or Flooded for Use in Underground Ducts

NEW GENERATION®

Coax

CM FT1 Rated

Product Description

Bare copper conductor, foam polyolefin insulation, bare copper braid shield. Black PVC jacket. Sequential footage marking every two feet.

Water-blocked Coax

CM FT1 Rated

Product Description

Bare copper conductor, foam polyolefin insulation, foil plus braid shield as shown per item, braid impregnated with CoreGuard® flame retardant flooding compound, Black UV resistant PVC jacket. Sequential footage marking every two feet.

Specifications

Conductor	Bare Copper
Insulation	FPO
Shield	
Coax	Bare Copper Braid
Water-blocked Coax	Foil + Braid
Jacket	PVC
Approvals	
NEC	CM
CEC	CM FT1
NEC Articles	800
Nominal Impedance	75Ω
Temperature Rating	75°C

Applications

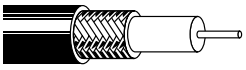
- CCTV

Part No.	AWG	Stranding and Conductor	Shield/ Braid Coverage	Insulation Nominal OD		Nominal OD		Standard Lengths		Standard Unit Weight	
				Inch	mm	Inch	mm	Ft.	m	Lbs.	kg
Coax (NEC CM and CEC CM FT1)											
Mini RG-59 Type											
573945* new	25	solid BC	94% BC	.085	2.16	.146	3.71	U-1000 1000	U-305 305	16.0 17.0	7.3 7.7
RG-59 Type											
551945	22	7/w BC	95% BC	.140	3.56	.232	5.89	U-1000 1000	U-305 305	33.0 32.0	15.0 14.5
543945*	20	solid BC	95% BC	.145	3.68	.232	5.89	U-500 500 U-1000 1000	U-152 152 U-305 305	16.0 16.0 32.0 32.0	7.3 7.3 14.5 14.5
RG-6 Type											
533945	18	solid BC	95% BC	.180	4.57	.266	6.76	500 U-1000 1000	152 U-305 305	22.5 40.0 41.0	10.2 18.2 18.6
RG-11 Type											
513945	14	solid BC	95% BC	.280	7.11	.405	10.29	500 1000	152 305	49.0 97.0	22.3 44.1
Water-blocked Coax (NEC CM and CEC CM FT1)											
RG-59 Type											
5439W5 new	20	solid BC	Duobond® II + 95% tinned copper braid	.145	3.68	.236	5.99	U-500 500 U-1000 1000	U-152 152 U-305 305	13.0 13.5 26.0 27.0	5.9 6.1 11.8 12.3
RG-6 Type											
5339W5 new	18	solid BC	Duofoil® + 60% aluminum braid	.180	4.57	.270	6.86	U-500 500 U-1000 1000	U-152 152 U-305 305	16.0 16.0 32.0 32.0	7.3 7.3 14.5 14.5

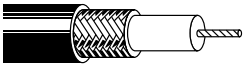
BC = Bare Copper

*Other jacket colors available. Consult www.belden.com.

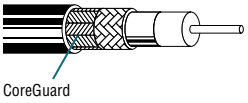
Solid Conductor



Stranded Conductor



Water-blocked



Security Coaxial Cable

CATV and MATV Applications
Commercial or Schlage Systems

NEW GENERATION®

Commercial and Schlage Coax

CM FT1 Rated

Product Description

Bare copper conductor, foam polyolefin insulation, foil plus braid shield(s) as indicated, Black PVC jacket. Sequential footage marking every two feet.

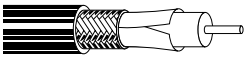
Specifications

Conductor	Bare Copper
Insulation	FPO
Shield	
Coax	Duofoil® + Aluminum Braid(s)
Schlage	Duobond® + Aluminum Braid(s)
Jacket	PVC
Approvals	
NEC	CM
CEC	CM FT1
NEC Articles	820
Nominal Impedance	75Ω
Temperature Rating	75°C

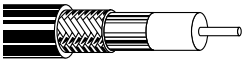
Applications

- CATV
- MATV

Duofoil Shield



Duobond Shield (Schlage Systems)



Quad Shield

Part No.	AWG	Stranding and Conductor	Shield/ Braid Coverage	Insulation Nominal OD		Nominal OD		Standard Lengths		Standard Unit Weight	
				Inch	mm	Inch	mm	Ft.	m	Lbs.	kg
Coax (NEC CM and CEC CM FT1)											
Series 6 • RG-6 Type											
5339B5*	18	solid BC	Duofoil + 60% AL braid	.180	4.57	.266	6.76	U-500	U-152	18.0	8.2
								U-1000	U-305	36.0	16.4
								1000	305	36.0	16.4
5339Q5	18	solid BC	Quad**	.180	4.57	.298	7.57	U-1000	U-305	38.0	17.3
								100	305	38.0	17.3
Schlage Coax (NEC CM and CEC CM FT1)											
Series 6 • RG-6 Type											
5399B5	18	solid BC	Duobond + 60% AL braid	.180	4.50	.270	6.86	U-500	U-152	15.0	6.8
								500	152	15.5	7.0
								U-1000	U-305	31.0	14.1
								1000	305	30.0	13.6

AL = Aluminum • BC = Bare Copper

* Other jacket colors available. Consult www.belden.com.
** Quad Shield = Duofoil tape + 60% aluminum braid + Duofoil tape + 40% aluminum braid.

Security Composite Cable

CCTV plus Audio or Pan and Tilt CCTV Control Applications
Plenum-Rated and Non-Plenum

NEW GENERATION®

Composite: Coax plus Twisted Pair

CM FT1 Rated

Product Description

Coax: Bare copper conductor, foam polyolefin insulation, bare copper braid shield. Black PVC jacket.

Pair: PVC insulation, PVC jacket.
Color coded: Black & Red.

Plenum-Rated Composite

CMP FT6 Rated

Product Description

Coax: Bare copper conductor, foam FEP insulation, bare copper braid shield, Natural Flamarrest® jacket.

Pair: Halar® insulation, Natural Flamarrest jacket.
Color coded: Black & Red.

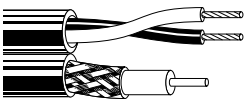
Coax and pair in Siamese configuration.
Sequential footage marking every two feet.

Specifications

Conductor	Bare Copper
Insulation (Non-Plenum)	
Coax	FPO
Pair	PVC
Insulation (Plenum)	
Coax	Foam FEP
Pair	Halar
Shield (Coax)	Bare Copper Braid
Jacket	
Non-Plenum	PVC
Plenum	Flamarrest
Approvals (Non-Plenum)	
NEC	CM
CEC	CM FT1
NEC Articles	800
Approvals (Plenum)	
NEC	CMP
CEC	CMP FT6
Nominal Impedance (Coax)	75Ω
Temperature Rating	75°C

Applications

- CCTV plus Audio
- Pan and Tilt CCTV Control



Part No.	AWG	Stranding and Conductor	Shield/ Braid Coverage	Insulation Nominal OD Inch	Insulation Nominal OD mm	Nominal OD Inch	Nominal OD mm	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg
Composite: Coax plus Twisted Pair (NEC CM and CEC CM FT1)											
RG-59 Type											
549945	20(cx)	solid BC	95% BC	.145	3.68	.232 x .460	5.89 x 11.68	500	152	30.0	13.6
	18(pr)	7/w BC	unshielded	.066	1.68			1000	305	60.0	27.3
RG-6 Type											
539945 new	18(cx)	solid BC	95% BC	.180	4.57	.266 x .500	6.76 x 12.70	500	152	34.0	15.5
	18(pr)	7/w BC	unshielded	.066	1.68			1000	305	70.0	31.8
Plenum-Rated Composite (NEC CMP and CEC CMP FT6)											
RG-59 Type											
649948	20(cx)	solid BC	95% BC	.134	3.40	.199 x .383	5.05 x 9.72	1000	305	52.0	23.6
	18(pr)	7/w BC	unshielded	.059	1.50						
RG-6 Type											
639948 new	18(cx)	solid BC	95% BC	.170	4.32	.232 x .416	5.89 x 10.57	1000	305	61.0	27.7
	18(pr)	7/w BC	unshielded	.059	1.50						

BC = Bare Copper • cx = Coax • pr = Pair

Halar is a trademark of the Ausimont Corporation.

Security Coaxial Cable

CCTV Applications
Plenum-Rated

NEW GENERATION®

Plenum-Rated Coax

CMP FT6 Rated

Product Description

Bare copper or copper-covered steel conductor, foam FEP insulation, bare copper braid shield. Natural Flamarrest® jacket (except 613948 which is White fluorocopolymer). Sequential footage marking every two feet.

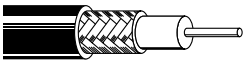
Specifications

Conductor	Solid BC or BCCS
Insulation	Foam FEP
Shield	Bare Copper Braid
Jacket	Flamarrest*
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Nominal Impedance	75Ω
Temperature Rating	75°C

*613948 jacket is White fluorocopolymer.

Applications

- CCTV



Part No.	AWG	Stranding and Conductor	Shield/ Braid Coverage	Insulation Nominal OD		Nominal OD		Standard Lengths		Standard Unit Weight	
				Inch	mm	Inch	mm	Ft.	m	Lbs.	kg
Plenum-Rated Coax (NEC CMP and CEC CMP FT6)											
Mini RG-59 Type											
673948 new	25	solid BC	95% BC	.078	1.98	.146	3.71	U-500	U-152	9.5	4.3
								U-1000	U-305	18.0	8.2
								1000	305	18.0	8.2
RG-62 Type											
6539Y8	22	solid BCCS	95% BC	.146	3.71	.204	5.18	U-1000	U-305	32.0	14.5
								1000	305	33.0	15.0
RG-59 Type											
643948	20	solid BC	95% BC	.135	3.43	.193	4.90	U-500	U-152	16.0	7.3
								500	152	17.5	8.0
								U-1000	U-305	31.0	14.1
								1000	305	32.0	14.5
RG-6 Type											
633948	18	solid BC	95% BC	.170	4.32	.228	5.79	U-500	U-152	21.0	9.5
								500	152	22.0	10.0
								U-1000	U-305	41.0	18.6
								1000	305	42.0	19.1
RG-11 Type											
613948	14	solid BC	95% BC	.274	6.96	.348	8.84	500	152	46.0	20.9
								1000	305	90.0	40.9

BC = Bare Copper • BCCS = Bare Copper-covered Steel

Security Coaxial Cable

Commercial CATV or MATV Applications
Plenum-Rated

NEW GENERATION®

Plenum-Rated Coax

CMP FT6 Rated

Product Description

Solid bare copper (except 6339Q8 which has solid bare copper-covered steel) conductor. Foam FEP insulation. Foil plus aluminum braid shield(s) as indicated. Natural Flamarrest® jacket (except 6139B8 which is White fluorocopolymer). Sequential footage marking every two feet.

Specifications

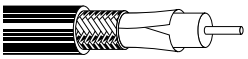
Conductor	Solid BC or BCCS
Insulation	Foam FEP
Shield	Duofoil® + Aluminum Braid(s)
Jacket	Flamarrest*
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	820
Nominal Impedance	75Ω
Temperature Rating	75°C

*6139B8 jacket is White fluorocopolymer.

Applications

- CATV
- MATV

Duofoil + Braid Shield



Quad Shield

Part No.	AWG	Stranding and Conductor	Shield/ Braid Coverage	Insulation Nominal OD		Nominal OD		Standard Lengths		Standard Unit Weight	
				Inch	mm	Inch	mm	Ft.	m	Lbs.	kg
Plenum-Rated Coax (NEC CMP and CEC CMP FT6)											
Series 59 • RG-59 Type											
6439C8	20	solid BC	Duofoil + 80% AL braid	.135	3.43	.199	5.05	1000	305	21.0	9.5
6439Q8	20	solid BC	Quad†	.135	3.43	.223	5.66	U-1000	U-305	34.0	15.5
Series 6 • RG-6 Type											
633938	18	solid BC	Duofoil + 80% AL braid	.170	4.32	.233	5.92	U-500 500 U-1000 1000	U-152 152 U-305 305	15.0 16.5 30.0 31.0	6.8 7.5 13.6 14.1
6339Q8	18	solid BCCS	Quad†	.170	4.32	.248	6.30	500 U-1000 1000	152 U-305 305	23.5 42.0 43.0	10.7 19.1 19.5
Series 11 • RG-11 Type											
6139B8	14	solid BC	Duofoil + 60% AL braid	.274	6.96	.348	8.84	1000	305	66.0	30.0

AL = Aluminum • BC = Bare Copper • BCCS = Bare Copper-covered Steel

†Quad Shield: Duofoil tape + 60% copper braid + Duofoil tape + 40% copper braid.

Fire Alarm Cable

Commercial Applications
Power-Limited

NEW GENERATION®

Unshielded Multi-conductor

FPLR/CMG FT4 Rated

Product Description

Bare copper conductors, PVC insulation, conductors cabled together, Red PVC jacket with rip cord. Sequential footage marking every two feet.

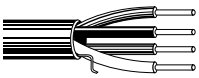
Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	PVC
Jacket	PVC
Jacket Thickness	.015″ (.381mm)
Approvals	
NEC	FPLR
CEC (22–16 AWG only)	CMG FT4
California State Fire Marshall	
NEC Articles	760
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Fire Protection
- Alarm
- Signal
- Monitor/Detection
- Audio Circuits
- Control Circuits
- Initiating Circuits
- Notification Circuits



Color Code Chart

Cond. No.	Color
1	Black
2	Red
3	Brown
4	Blue
5	Orange
6	Yellow
7	Purple
8	Green
9	Red/Black
10	Red/White
11	Red/Green
12	Red/Blue

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC FPLR and CEC CMG FT4)										
22 AWG										
5522UL	4	solid	U-1000	U-305	16.0	7.3	.010	.25	.125	3.18
			1000	305	16.0	7.3				
5524UL new	6	solid	U-1000	U-305	22.0	10.0	.010	.25	.168	4.27
			1000	305	22.0	10.0				
5526UL new	8	solid	U-1000	U-305	28.0	12.7	.010	.25	.182	4.62
			1000	305	28.0	12.7				
18 AWG										
5320UL	2	solid	U-500	U-152	8.5	3.9	.010	.25	.151	3.84
			500	152	8.5	3.9				
			U-1000	U-305	17.0	7.7				
			1000	305	17.0	7.7				
5322UL	4	solid	U-500	U-152	15.5	7.0	.010	.25	.176	4.47
			500	152	15.0	6.8				
			U-1000	U-305	30.0	13.6				
			1000	305	30.0	13.6				
5324UL	6	solid	500	152	23.5	10.7	.010	.25	.212	5.38
			U-1000	U-305	43.0	19.5				
			1000	305	45.0	20.5				
5326UL	8	solid	500	152	31.0	14.1	.010	.25	.230	5.84
			1000	305	61.0	27.7				
5328UL new	10	solid	1000	305	71.0	32.3	.010	.25	.272	6.91
5329UL new	12	solid	1000	305	83.0	37.7	.010	.25	.281	7.14
16 AWG										
5220UL	2	solid	U-500	U-152	13.0	5.9	.010	.25	.174	4.42
			500	152	13.0	5.9				
			U-1000	U-305	24.0	10.9				
			1000	305	25.0	11.4				
5222UL	4	solid	1000	305	45.0	20.5	.010	.25	.201	5.11
14 AWG										
5120UL	2	solid	500	152	19.0	8.6	.013	.33	.213	5.41
			1000	305	38.0	17.3				
5122UL	4	solid	500	152	35.0	15.9	.013	.33	.251	6.38
			1000	305	70.0	31.8				
12 AWG										
5020UL	2	solid	1000	305	59.0	26.8	.013	.33	.244	6.20

Fire Alarm Cable

Commercial Applications
Shielded, Power-Limited

NEW GENERATION®

Shielded Multi-conductor

FPLR/CMG FT4 Rated

Product Description

Bare copper conductors, PVC insulation, conductors cabled together, Beldfoil® shield and drain wire, Red PVC jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	PVC
Shield	Beldfoil
Jacket	PVC
Jacket Thickness	.015″ (.381mm)
Approvals	
NEC	FPLR
CEC (22–16 AWG only)	CMG FT4
California State Fire Marshall	
NEC Articles	760
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Fire Protection
- Alarm
- Signal
- Monitor/Detection
- Audio Circuits
- Control Circuits
- Initiating Circuits
- Notification Circuits

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Shielded Multi-conductor (NEC FPLR and CEC CMG FT4)										
22 AWG										
5522FL	4	solid	U-1000	U-305	19.0	8.6	.010	.25	.143	3.63
			1000	305	19.0	8.6				
18 AWG										
5320FL	2	solid	U-500	U-152	11.5	5.2	.010	.25	.155	3.94
			500	152	11.0	5.0				
			U-1000	U-305	21.0	9.5				
			1000	305	21.0	9.5				
5322FL	4	solid	500	152	16.5	7.5	.010	.25	.180	4.57
			U-1000	U-305	33.0	15.0				
			1000	305	36.0	16.4				
16 AWG										
5220FL	2	solid	500	152	16.5	7.5	.010	.25	.178	4.52
			1000	305	29.0	13.2				
5222FL	4	solid	1000	305	52.0	23.6	.010	.25	.205	5.21
14 AWG										
5120FL	2	solid	500	152	22.0	10.0	.013	.33	.217	5.51
			1000	305	43.0	19.5				
5122FL	4	solid	1000	305	79.0	35.9	.013	.33	.255	6.48
12 AWG										
5020FL	2	solid	1000	305	64.0	29.1	.013	.33	.251	6.38

Color Code Chart

Cond. No.	Color
1	Black
2	Red
3	Brown
4	Blue

Fire Alarm Cable

Commercial Applications, Addressable Systems
Unshielded and Shielded, Power-Limited, Mid-Capacitance

NEW GENERATION®

Unshielded Multi-conductor

FPL Rated

Product Description

Bare copper conductors, foam polyethylene insulation, cabled together, Red PVC jacket with rip cord. Sequential footage marking every two feet.

Color Code: Black, Red.

Shielded Multi-conductor

FPL Rated

Product Description

Bare copper conductors, foam polyethylene insulation, cabled together, Beldfoil® shield tape (aluminum side out), Red PVC jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	FPE
Shield (where applicable)	Beldfoil
Jacket	PVC
Jacket Thickness	.033″ (.838mm)
Approvals	
NEC	FPL
California State Fire Marshall	
NEC Articles	760
Voltage Rating	300V
Temperature Rating	75°C
Nominal Capacitance*	
Unshielded†	13 pF/ft.
Shielded††	20–36 pF/ft.

*Capacitance between conductors.
†60% lower capacitance than cables on page 13.35
††60% lower capacitance than cables on page 13.36

Applications

- Addressable Fire Systems
- Data Circuits
- Audio Circuits
- Control Circuits
- Initiating Circuits
- Notification Circuits

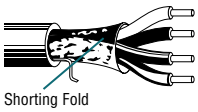
Color Code Chart

Cond. No.	Color
1	Black
2	Red
3	Brown
4	Blue

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC FPL)										
18 AWG										
5320UJ	2	solid	U-500 U-1000	U-152 U-305	11.5 23.0	5.2 10.5	.015	.38	.206	5.23
16 AWG										
5220UJ	2	solid	500 1000	152 305	16.0 31.0	7.3 14.1	.015	.38	.230	5.84
Shielded Multi-conductor (NEC FPL)										
18 AWG										
5320FJ	2	solid	U-1000 1000	U-305 305	27.0 27.0	12.3 12.3	.015	.38	.211	5.36
5322FJ	4	solid	1000	305	43.0	19.5	.015	.38	.240	6.10
16 AWG										
5220FJ	2	solid	500 U-1000 1000	152 U-305 305	18.5 36.0 36.0	8.4 16.4 16.4	.015	.38	.235	5.97
5222FJ	4	solid	1000	305	59.0	26.8	.015	.38	.269	6.83
14 AWG										
5120FJ	2	solid	1000	305	49.0	22.3	.020	.51	.279	7.09
12 AWG										
5020FJ	2	solid	1000	305	69.0	31.4	.020	.51	.317	8.05

Unshielded

Shielded



Fire Alarm Cable

NPLF Systems

Unshielded and Shielded, Non-Power-Limited Signaling Cable

NEW GENERATION®

Unshielded Multi-conductor

NPLF Rated
150V Max. Per NEC Article 760
Indoor (Non-conduit per NEC)

Product Description

Bare copper conductors, PVC/Nylon insulation, cabled together, Red PVC jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

Shielded Multi-conductor

NPLF Rated
150V Max. Per NEC Article 760
Indoor (Non-conduit per NEC)

Product Description

Bare copper conductors, PVC/Nylon insulation, cabled together, Beldfoil® shield tape (aluminum side out) plus drain wire, Red PVC jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	PVC/Nylon
Insulation Thickness	.021″ (.533mm)
Shield (where applicable)	Beldfoil
Jacket	PVC
Approvals	
NEC	NPLF
NEC Articles	760
Voltage Rating	150V
Temperature Rating	75°C

Applications

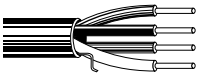
- Fire Alarm
- Audio Circuits
- Control Circuits
- Initiating Circuits
- Notification Circuits

Color Code Chart

Cond. No.	Color
1	Black
2	Red
3	Brown
4	Blue

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC NPLF)										
18 AWG										
5320UN new	2	solid	500 1000	152 305	17.0 31.0	7.7 14.1	.037	.94	.239	6.07
5322UN new	4	solid	500 1000	152 305	28.0 51.0	12.7 23.2	.042	1.07	.283	7.19
16 AWG										
5220UN new	2	solid	500 1000	152 305	22.0 39.0	10.0 17.7	.037	.94	.262	6.65
5222UN new	4	solid	500 1000	152 305	38.0 71.0	17.3 32.3	.042	1.07	.311	7.90
14 AWG										
5120UN new	2	solid	500 1000	152 305	28.5 53.0	13.0 24.1	.042	1.07	.299	7.59
Shielded Multi-conductor (NEC NPLF)										
18 AWG										
5320FN new	2	solid	500 1000	152 305	18.5 35.0	8.4 15.9	.037	.94	.243	6.17
5322FN new	4	solid	500 1000	152 305	31.0 57.0	14.1 25.9	.042	1.07	.287	7.29
16 AWG										
5220FN new	2	solid	500 1000	152 305	24.5 45.0	11.1 20.5	.037	.94	.266	6.76
5222FN new	4	solid	500 1000	152 305	40.5 76.0	18.4 34.5	.042	1.07	.315	8.00
14 AWG										
5120FN new	2	solid	500 1000	152 305	32.0 61.0	14.5 27.7	.042	1.07	.303	7.70
5122FN new	4	solid	500 1000	152 305	52.5 102.0	23.9 46.4	.042	1.07	.348	8.84
12 AWG										
5020FN new	2	solid	500 1000	152 305	43.0 83.0	19.5 37.7	.042	1.07	.337	8.56

Unshielded



Shielded

Fire Alarm Cable

Commercial Applications
Unshielded and Shielded, Plenum-Rated, Power-Limited

NEW GENERATION®

Unshielded or Shielded Multi-conductor

FPLP Rated

Product Description

Bare copper conductors, Flamarrest® insulation, cabled together, Red Flamarrest jacket with rip cord. Shielded version has overall Beldfoil® shield tape (aluminum side out) and drain wire. Sequential footage marking every two feet.

Color Code: See chart below.

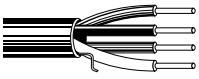
Specifications

Conductor	Bare Copper
Insulation	Flamarrest
Shield (where applicable)	Beldfoil
Jacket	Flamarrest
Jacket Thickness	.015″ (.381mm)
Approvals NEC California State Fire Marshall	 FPLP
NEC Articles	760
Voltage Rating	300V
Temperature Rating	75°C

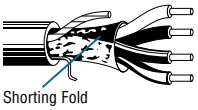
Applications

- Fire Protection
- Alarm
- Signal
- Monitor/Detection
- Audio Circuits
- Control Circuits
- Initiating Circuits
- Notification Circuits

Unshielded



Shielded



Color Code Chart

Cond. No.	Color	Cond. No.	Color
1	Black	6	Yellow
2	Red	7	Purple
3	Brown	8	Green
4	Blue	9	Red/Black
5	Orange	10	Red/White

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC FPLP)										
22 AWG										
6522UL	4	solid	U-1000	U-305	16.0	7.3	.009	.23	.136	3.45
			1000	305	16.0	7.3				
6524UL new	6	solid	U-1000	U-305	22.0	10.0	.009	.23	.160	4.06
			1000	305	22.0	10.0				
18 AWG										
6320UL	2	solid	U-500	U-152	9.0	4.1	.010	.25	.151	3.84
			500	152	9.0	4.1				
			U-1000	U-305	17.0	7.7				
			1000	305	18.0	8.2				
6321UL new	3	solid	1000	305	28.0	12.7	.010	.25	.160	4.06
6322UL	4	solid	U-1000	U-305	32.0	14.5	.010	.25	.176	4.47
			1000	305	31.0	14.1				
6324UL	6	solid	U-1000	U-305	45.0	20.5	.010	.25	.212	5.38
			1000	305	46.0	20.9				
6326UL	8	solid	1000	305	63.0	28.6	.010	.25	.230	5.84
6328UL new	10	solid	U-500	U-152	37.0	16.8	.010	.25	.272	6.91
			1000	305	73.0	33.2				
16 AWG										
6220UL	2	solid	500	152	12.5	5.7	.010	.25	.172	4.37
			U-1000	U-305	25.0	11.4				
			1000	305	26.0	11.8				
6222UL	4	solid	500	152	24.5	11.1	.010	.25	.201	5.11
			1000	305	47.0	21.4				
14 AWG										
6120UL	2	solid	500	152	21.0	9.5	.011	.28	.205	5.21
			1000	305	38.0	17.3				
6122UL	4	solid	500	152	35.5	16.1	.011	.28	.247	6.27
			1000	305	74.0	33.6				
12 AWG										
6020UL	2	solid	500	152	27.5	12.5	.011	.28	.239	6.07
			1000	305	59.0	26.8				
Shielded Multi-conductor (NEC FPLP)										
18 AWG										
6320FL	2	solid	500	152	11.0	5.0	.010	.25	.158	4.01
			U-1000	U-305	22.0	10.0				
			1000	305	22.0	10.0				
6322FL	4	solid	1000	305	36.0	16.4	.010	.25	.120	3.05
16 AWG										
6220FL	2	solid	500	152	15.5	7.0	.010	.25	.176	4.47
			1000	305	31.0	14.1				
6222FL	4	solid	1000	305	58.0	26.4	.010	.25	.205	5.21
14 AWG										
6120FL	2	solid	500	152	23.5	10.7	.011	.28	.212	5.38
			1000	305	45.0	20.5				
6122FL	4	solid	500	152	42.0	19.1	.011	.28	.248	6.30
			1000	305	81.0	36.8				
12 AWG										
6020FL	2	solid	500	152	30.5	13.9	.011	.28	.246	6.25
			1000	305	65.0	29.5				

Fire Alarm Cable

Commercial Applications, Addressable Systems
Unshielded and Shielded, Plenum-Rated, Power-Limited, Mid-Capacitance

NEW GENERATION®

Unshielded Multi-conductor
FPLP Rated

Product Description

Bare copper conductors, Halar® insulation, cabled together, Red Flamarrest® jacket with rip cord. Sequential footage marking every two feet.

Color Code: Black, Red.

Shielded Multi-conductor
FPLP Rated

Product Description

Bare copper conductors, Halar insulation, cabled together, Beldfoil® shield tape (aluminum side out) with tinned copper drain wire, Red Flamarrest jacket with rip cord. Sequential footage marking every two feet.

Color Code: Black, Red.

Specifications

Conductor	Bare Copper
Insulation	Halar
Shield (where applicable)	Beldfoil
Jacket	Flamarrest
Jacket Thickness	.015″ (.381mm)
Approvals	
NEC	FPLP
California State Fire Marshall	
NEC Articles	760
Voltage Rating	300V
Temperature Rating	75°C
Nominal Capacitance*	
Unshielded†	26 pF/ft.
Shielded††	26–31 pF/ft.

*Capacitance between conductors.
†20% lower capacitance than cables on page 13.39
††60% lower capacitance than cables on page 13.39

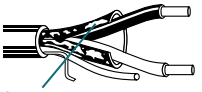
Applications

- Addressable Fire Systems
- Data Circuits
- Monitor/Detection
- Control Circuits
- Initiating Circuits
- Notification Circuits

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC FPLP)										
18 AWG										
6320UJ	2	solid	1000	305	17.0	7.7	.007	.18	.138	3.51
16 AWG										
6220UJ	2	solid	1000	305	26.0	11.8	.007	.18	.162	4.11
14 AWG										
6120UJ	2	solid	1000	305	36.0	16.4	.010	.25	.198	5.03
Shielded Multi-conductor (NEC FPLP)										
18 AWG										
6320FK new	2	solid	500 U-1000 1000	152 U-305 305	15.0 29.0 29.0	6.8 13.2 13.2	.024	.61	.210	5.33
16 AWG										
6220FK new	2	solid	500 1000	152 305	19.5 39.0	8.9 17.7	.024	.61	.234	5.94

Unshielded

Shielded



Halar is a trademark of the Ausimont Corporation.

Audio Cable

Commercial Audio Systems

NEW GENERATION®

Unshielded Multi-conductor

CMR/CMG FT4 Rated or CL3R Rated

Product Description

Bare copper conductors, PVC insulation, Gray PVC jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	PVC
Insulation Thickness	
22 to 16 AWG	.010″ (.254mm)
14 to 12 AWG	.014″ (.356mm)
NEC Articles	725
Jacket	PVC
Approvals	
NEC (22 to 16 AWG)	CMR
CEC (22 to 16 AWG)	CMG FT4
NEC (14 to 12 AWG)	CL3R
NEC Articles	
22 to 16 AWG	800
14 to 12 AWG	725
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Intercom/PA Systems
- Sound/Audio Systems

Solid Conductor

Stranded Conductor

Color Code Chart

(22 to 16 AWG)

Cond. No.	Color
1	Black
2	Red
3	White

(14 to 12 AWG)

Cond. No.	Color
1	Black
2	White
3	Red

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC CMR and CEC CMG FT4)										
22 AWG										
5520UE	2	solid	U-500	U-152	5.0	2.3	.015	.38	.122	3.10
			U-1000	U-305	9.0	4.1				
			1000	305	9.0	4.1				
5500UE	2	7	U-500	U-152	5.5	2.5	.015	.38	.128	3.25
			500	152	5.5	2.5				
			U-1000	U-305	10.0	4.5				
			1000	305	9.0	4.1				
5501UE	3	7	500	152	6.5	3.0	.015	.38	.135	3.43
			U-1000	U-305	13.0	5.9				
			1000	305	13.0	5.9				
20 AWG										
5400UE	2	7	U-1000	U-305	13.0	5.9	.015	.38	.142	3.61
			1000	305	13.0	5.9				
5401UE	3	7	500	152	9.0	4.1	.015	.38	.150	3.81
			U-1000	U-305	18.0	8.2				
			1000	305	18.0	8.2				
18 AWG										
5320UE	2	solid	U-1000	U-305	17.0	7.7	.015	.38	.151	3.84
5300UE*	2	7	U-500	U-152	9.0	4.1	.015	.38	.161	4.09
			500	152	9.5	4.3				
			U-1000	U-305	18.0	8.2				
			1000	305	18.0	8.2				
5321UE	3	solid	500	152	11.5	5.2	.015	.38	.160	4.06
			U-1000	U-305	23.0	10.5				
			1000	305	23.0	10.5				
5301UE	3	7	U-500	U-152	13.0	5.9	.015	.38	.171	4.34
			500	152	12.5	5.7				
			U-1000	U-305	24.0	10.9				
			1000	305	25.0	11.4				
16 AWG										
5200UE	2	19	U-500	U-152	13.0	5.9	.015	.38	.184	4.67
			500	152	12.5	5.7				
			U-1000	U-305	25.0	11.4				
			1000	305	25.0	11.4				
5201UE	3	19	U-500	U-152	18.0	8.2	.015	.38	.196	4.98
			500	152	18.5	8.4				
			U-1000	U-305	35.0	15.9				
			1000	305	38.0	17.3				
Unshielded Multi-conductor (NEC CL3R)										
14 AWG										
5100UE	2	19	500	152	19.5	8.9	.015	.38	.234	5.94
			U-1000	U-305	38.0	17.3				
			1000	305	39.0	17.7				
5101UE	3	19	1000	305	56.0	25.5	.015	.38	.249	6.32
12 AWG										
5000UE	2	19	500	152	28.5	13.0	.015	.38	.268	6.81
			1000	305	57.0	25.9				
5001UE	3	19	1000	305	82.0	37.3	.015	.38	.286	7.26

*5300UE also available in White or Black.

High Strand Audio Cable

Commercial Audio Systems
High-Flex and High-Purity

NEW GENERATION®

High Strand Unshielded Multi-conductor

CM, CL3 or CL2 Rated

Product Description

Bare high-conductivity ETP copper conductors, highly stranded for ultra flexibility, high-grade PVC insulation, PVC jacket with rip cord. Available jacket colors: Blue, Green, White, Black and Gray. Sequential footage marking every two feet.

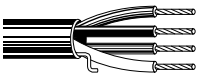
Color Code: See chart below.

Specifications

Conductor	Bare High-conductivity ETP Copper
Insulation	High-grade PVC
Insulation Thickness	
18 AWG to 16 AWG	.015″ (.381mm)
14 AWG to 10 AWG	.020″ (.508mm)
Jacket	PVC
Approvals	
NEC (18 AWG & 16 AWG)	CM
NEC (14 AWG & 12 AWG)	CL3
NEC (10 AWG)	CL2, Audio Use Only
Temperature Rating	75°C

Applications

- Speaker Systems
- Sound/Audio Systems
- Intercom/PA Systems
- Home Theater and Entertainment Systems
- Stadium and Arena Speaker Systems



Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
High Strand Unshielded Multi-conductor (NEC CM, CL3 or CL2)										
18 AWG (NEC CM)										
5300UP new	2	42	U-500	U-152	10.5	4.8	.015	.38	.184	4.67
			500	152	12.0	5.5				
			U-1000	U-305	20.0	9.1				
			1000	305	21.0	9.5				
5302UP new	4	42	U-500	U-152	18.0	8.2	.015	.38	.216	5.49
			500	152	20.0	9.1				
			U-1000	U-305	36.0	16.4				
			1000	305	37.0	16.8				
16 AWG (NEC CM)										
5200UP new	2	65	U-500	U-152	14.0	6.4	.015	.38	.208	5.28
			500	152	15.5	7.0				
			U-1000	U-305	27.0	12.3				
			1000	305	28.0	12.7				
5202UP new	4	65	U-500	U-152	25.5	11.6	.015	.38	.244	6.20
			500	152	27.0	12.3				
			U-1000	U-305	51.0	23.2				
			1000	305	51.0	23.2				
14 AWG (NEC CL3)										
5100UP new	2	42	U-500	U-152	21.5	9.8	.015	.38	.260	6.60
			500	152	23.5	10.7				
			U-1000	U-305	42.0	19.1				
			1000	305	43.0	19.5				
5102UP new	4	42	500	152	42.0	19.1	.018	.46	.313	7.95
			1000	305	81.0	36.8				
12 AWG (NEC CL3)										
5000UP new	2	65	U-500	U-152	31.5	14.3	.018	.46	.302	7.67
			500	152	33.5	15.2				
			1000	305	64.0	29.1				
5002UP new	4	65	500	152	61.5	28.0	.018	.46	.357	9.07
			1000	305	121.0	55.0				
10 AWG (NEC CL2 • Audio Use Only)										
5T00UP new	2	65	500	152	44.0	20.0	.026	.66	.356	9.04
			1000	305	87.0	39.5	For Plenum version of 5T00UP, see 6T00UP on page 13.44.			

Color Code Chart

Cond. No.	Color
1	Black
2	White
3	Red
4	Green

Audio Cable

Commercial Audio Systems
Shielded

NEW GENERATION®

Shielded Multi-conductor

CMR/CMG FT4 Rated or CL3R Rated

Product Description

Bare copper conductors, PVC insulation, conductors cabled, Beldfoil® shield tape (aluminum side out) with drain wire, Gray PVC jacket. Sequential footage marking every two feet.

Color Code: See chart below.

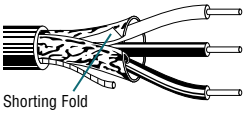
Specifications

Conductor	Bare Copper
Insulation	PVC
Insulation Thickness	
24 to 16 AWG	.010″ (.254mm)
14 to 12 AWG	.014″ (.356mm)
Shield	Beldfoil
Jacket	PVC
Approvals	
NEC (24 to 16 AWG)	CMR
CEC (24 to 16 AWG)	CMG FT4
NEC (14 to 12 AWG)	CL3R
NEC Articles	
24 to 16 AWG	800
14 to 12 AWG	725
Voltage Rating	300V
Temperature Rating	75°C

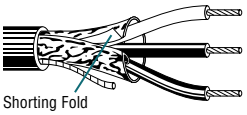
Applications

- Intercom/PA Systems
- Sound/Audio Systems

Solid Conductor



Stranded Conductor



Color Code Chart

(24 to 16 AWG)

Cond. No.	Color
1	Black
2	Red
3	White

(14 to 12 AWG)

Cond. No.	Color
1	Black
2	White
3	Red

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Shielded Multi-conductor (NEC CMR and CEC CMG FT4)										
24 AWG										
5600FE new	2	7	U-1000 1000	U-305 305	11.0 10.0	5.0 4.5	.015	.38	.120	3.05
22 AWG										
5520FE	2	solid	U-1000 1000	U-305 305	14.0 14.0	6.4 6.4	.015	.38	.125	3.18
5500FE	2	7	U-500 500 U-1000 1000	U-152 152 U-305 305	6.5 6.0 12.0 11.0	3.0 2.7 5.5 5.0	.015	.38	.130	3.30
5521FE	3	solid	U-1000 1000	U-305 305	12.0 12.0	5.5 5.5	.015	.38	.132	3.35
5501FE	3	7	U-500 500 U-1000 1000	U-152 152 U-305 305	8.0 7.5 15.0 15.0	3.6 3.4 6.8 6.8	.015	.38	.138	3.51
20 AWG										
5400FE	2	7	U-500 500 U-1000 1000	U-152 152 U-305 305	8.5 8.0 16.0 16.0	3.9 3.6 7.3 7.3	.015	.38	.145	3.68
5421FE	3	solid	U-1000	U-305	20.0	9.1	.015	.38	.146	3.71
5401FE	3	7	U-500 500 U-1000 1000	U-152 152 U-305 305	11.0 10.5 21.0 21.0	5.0 4.8 9.5 9.5	.015	.38	.153	3.89
18 AWG										
5320FE	2	solid	U-1000 1000	U-305 305	21.0 21.0	9.5 9.5	.015	.38	.155	3.94
5300FE	2	7	U-500 500 U-1000 1000	U-152 152 U-305 305	11.5 11.0 22.0 22.0	5.2 5.0 10.0 10.0	.015	.38	.165	4.19
5301FE	3	7	U-500 500 U-1000 1000	U-152 152 U-305 305	15.0 15.0 29.0 30.0	6.8 6.8 13.2 13.6	.015	.38	.175	4.45
16 AWG										
5200FE	2	19	U-500 500 U-1000 1000	U-152 152 U-305 305	16.5 18.0 32.0 32.0	7.5 8.2 14.5 14.5	.015	.38	.188	4.78
5201FE	3	19	500 U-1000 1000	152 U-305 305	22.0 43.0 42.0	10.0 19.5 19.1	.015	.38	.200	5.08
Shielded Multi-conductor (NEC CL3R)										
14 AWG										
5100FE	2	19	500 U-1000 1000	152 U-305 305	28.0 48.0 53.0	12.7 21.8 24.1	.015	.38	.238	6.05
5101FE	3	19	1000	305	66.0	30.0	.015	.38	.253	6.43
12 AWG										
5000FE	2	19	500 1000	152 305	36.5 67.0	16.6 30.5	.015	.38	.272	6.91

Audio Cable

Commercial Audio Systems
Plenum-Rated

NEW GENERATION®

Unshielded Multi-conductor

CMP FT6 Rated or CL2P Rated

Product Description

Bare copper conductors, Flamarrest® insulation, conductors cabled, Natural Flamarrest jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	Flamarrest
Insulation Thickness	
22 to 16 AWG	.009″ (.229mm)
14 to 10 AWG	.011″ (.279mm)
Jacket	Flamarrest
Approvals	
NEC (22 to 16 AWG)	CMP
CEC (22 to 16 AWG)	CMP FT6
NEC (14 to 10 AWG)	CL2P
NEC Articles	
22 to 16 AWG	800
14 to 10 AWG	725
Voltage Rating	
22 to 16 AWG	300V
14 to 10 AWG	150V
Temperature Rating	75°C

Applications

- Intercom/PA Systems
- Sound/Audio Systems

Solid Conductor

Stranded Conductor

Color Code Chart

(22 to 16 AWG)

Cond. No.	Color
1	Black
2	Red
3	White

(14 to 10 AWG)

Cond. No.	Color
1	Black
2	White
3	Red

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Unshielded Multi-conductor (NEC CMP and CEC CMP FT6)										
22 AWG										
6520UE	2	solid	U-1000	U-305	10.0	4.5	.015	.38	.118	3.00
			1000	305	9.0	4.1				
6500UE	2	7	U-500	U-152	5.5	2.5	.015	.38	.124	3.15
			U-1000	U-305	10.0	4.5				
			1000	305	10.0	4.5				
6521UE	3	solid	1000	305	13.0	5.9	.015	.38	.125	3.18
6501UE	3	7	U-1000	U-305	14.0	6.4	.015	.38	.131	3.33
			1000	305	13.0	5.9				
20 AWG										
6400UE	2	7	500	152	7.0	3.2	.015	.38	.138	3.51
			U-1000	U-305	13.0	5.9				
			1000	305	14.0	6.4				
6401UE	3	7	U-1000	U-305	18.0	8.2	.015	.38	.146	3.71
			1000	305	18.0	8.2				
18 AWG										
6320UE	2	solid	U-1000	U-305	17.0	7.7	.015	.38	.147	3.73
6300UE	2	7	U-500	U-152	9.5	4.3	.015	.38	.157	3.99
			500	152	9.0	4.1				
			U-1000	U-305	18.0	8.2				
			1000	305	18.0	8.2				
6321UE	3	solid	500	152	12.0	5.5	.015	.38	.156	3.96
			U-1000	U-305	24.0	10.9				
			1000	305	24.0	10.9				
6301UE	3	7	U-500	U-152	13.0	5.9	.015	.38	.168	4.27
			500	152	12.5	5.7				
			U-1000	U-305	25.0	11.4				
			1000	305	25.0	11.4				
16 AWG										
6200UE	2	19	500	152	13.0	5.9	.015	.38	.180	4.57
			U-1000	U-305	26.0	11.8				
			1000	305	26.0	11.8				
6201UE	3	19	500	152	18.0	8.2	.015	.38	.191	4.85
			U-1000	U-305	36.0	16.4				
			1000	305	38.0	17.3				
Unshielded Multi-conductor (NEC CL2P)										
14 AWG										
6100UE	2	19	500	152	20.0	9.1	.015	.38	.222	5.64
			U-1000	U-305	39.0	17.7				
			1000	305	40.0	18.2				
6101UE	3	19	1000	305	60.0	27.3	.015	.38	.236	5.99
12 AWG										
6000UE	2	19	500	152	32.0	14.5	.015	.38	.256	6.50
			1000	305	58.0	26.4				
6001UE	3	19	1000	305	83.0	37.7	.015	.38	.273	6.93
10 AWG (For Audio Use Only)										
6T00UP	2	65	1000	305	83.0	37.8	.015	.38	.308	7.82

Audio Cable

Commercial Audio Systems
Shielded, Plenum-Rated

NEW GENERATION®

Shielded Multi-conductor

CMP FT6 Rated or CL2P Rated

Product Description

Bare copper conductors, Flamarrest® insulation, conductors cabled, overall Beldfoil® tape shield (aluminum side out) and drain wire, Natural Flamarrest jacket with rip cord. Sequential footage marking every two feet.

Color Code: See chart below.

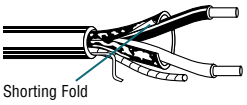
Specifications

Conductor	Bare Copper
Insulation	Flamarrest
Insulation Thickness	
22 to 16 AWG	.009″ (.229mm)
14 to 12 AWG	.011″ (.279mm)
Shield	Beldfoil
Jacket	Flamarrest
Approvals	
NEC (22 to 16 AWG)	CMP
CEC (22 to 16 AWG)	CMP FT6
NEC (14 to 12 AWG)	CL2P
NEC Articles	
22 to 16 AWG	800
14 to 12 AWG	725
Voltage Rating	
22 to 16 AWG	300V
14 to 12 AWG	150V
Temperature Rating	75°C

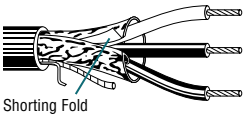
Applications

- Intercom/PA Systems
- Sound/Audio Systems

Solid Conductor



Stranded Conductor



Color Code Chart

(22 to 16 AWG)

Cond. No.	Color
1	Black
2	Red
3	White

(14 to 12 AWG)

Cond. No.	Color
1	Black
2	White
3	Red

Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Shielded Multi-conductor (NEC CMP and CEC CMP FT6)										
22 AWG										
6520FE	2	solid	U-1000	U-305	13.0	5.9	.015	.38	.125	3.18
			1000	305	13.0	5.9				
6500FE	2	7	U-500	U-152	7.0	3.2	.015	.38	.132	3.35
			500	152	7.0	3.2				
			U-1000	U-305	13.0	5.9				
			1000	305	13.0	5.9				
6521FE	3	solid	1000	305	17.0	7.7	.015	.38	.132	3.35
6501FE	3	7	500	152	8.0	3.6	.015	.38	.140	3.56
			U-1000	U-305	16.0	7.3				
			1000	305	16.0	7.3				
20 AWG										
6420FE	2	solid	U-1000	U-305	16.0	7.3	.015	.38	.137	3.48
			1000	305	15.0	6.8				
6400FE	2	7	U-1000	U-305	17.0	7.7	.015	.38	.145	3.68
			1000	305	17.0	7.7				
6401FE	3	7	U-1000	U-305	22.0	10.0	.015	.38	.153	3.89
			1000	305	22.0	10.0				
18 AWG										
6320FE	2	solid	1000	305	22.0	10.0	.015	.38	.153	3.89
6300FE	2	7	U-500	U-152	12.0	5.5	.015	.38	.162	4.11
			500	152	12.0	5.5				
			U-1000	U-305	23.0	10.5				
			1000	305	23.0	10.5				
6301FE	3	7	U-500	U-152	15.5	7.0	.015	.38	.175	4.45
			U-1000	U-305	30.0	13.6				
			1000	305	30.0	13.6				
16 AWG										
6200FE	2	19	500	152	16.5	7.5	.015	.38	.187	4.75
			1000	305	33.0	15.0				
6201FE	3	19	500	152	22.5	10.2	.015	.38	.198	5.03
			U-1000	U-305	44.0	20.0				
			1000	305	45.0	20.5				
Shielded Multi-conductor (NEC CL2P)										
14 AWG										
6100FE	2	19	500	152	26.0	11.8	.015	.38	.229	5.82
			U-1000	U-305	49.0	22.3				
			1000	305	54.0	24.5				
6101FE	3	19	1000	305	70.0	31.8	.015	.38	.243	6.17
12 AWG										
6000FE	2	19	500	152	36.0	16.4	.015	.38	.263	6.68
			1000	305	68.0	30.9				

Audio Cable

Pro Audio and Intercom Systems
Shielded, Plenum-Rated

NEW GENERATION®

Shielded Multi-conductor

CMP FT6 Rated

Product Description

Bare copper conductors, Halar® insulation, cabled with a Beldfoil® shield tape and drain wire. Natural Flamarrest® jacket.

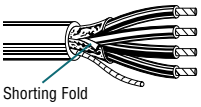
Color Code: See chart below.

Specifications

Conductor	Bare Copper
Insulation	Halar
Insulation Thickness	
22 AWG	.0055″ (.140mm)
20 AWG	.0060″ (.152mm)
18 AWG	.0065″ (.165mm)
Shield	Beldfoil
Jacket	Flamarrest
Approvals	
NEC	CMP
CEC	CMP FT6
NEC Articles	800
Voltage Rating	300V
Temperature Rating	75°C

Applications

- Pro Audio
- Intercom/PA Systems
- Security Systems



Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Outer Jacket Thickness		Nominal OD	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Shielded Multi-conductor (NEC CMP and CEC CMP FT6)										
22 AWG										
6500FC	2	7	U-1000 1000	U-305 305	11.0 11.0	5.0 5.0	.015	.38	.116	2.95
6502FC new	4	7	U-1000	U-305	17.0	7.7	.015	.38	.133	3.38
20 AWG										
6400FC new	2	7	U-1000	U-305	15.0	6.8	.015	.38	.130	3.30
18 AWG										
6300FC	2	7	U-1000 1000	U-305 305	21.0 21.0	9.5 9.5	.015	.38	.152	3.86
6302FC	4	7	U-1000 1000	U-305 305	34.0 35.0	15.5 15.9	.015	.38	.176	4.47

Color Code Chart

Cond. No.	Color
1	Black
2	Red
3	White
4	Green

Halar is a trademark of the Ausimont Corporation.

Belden

14 Residential Cables

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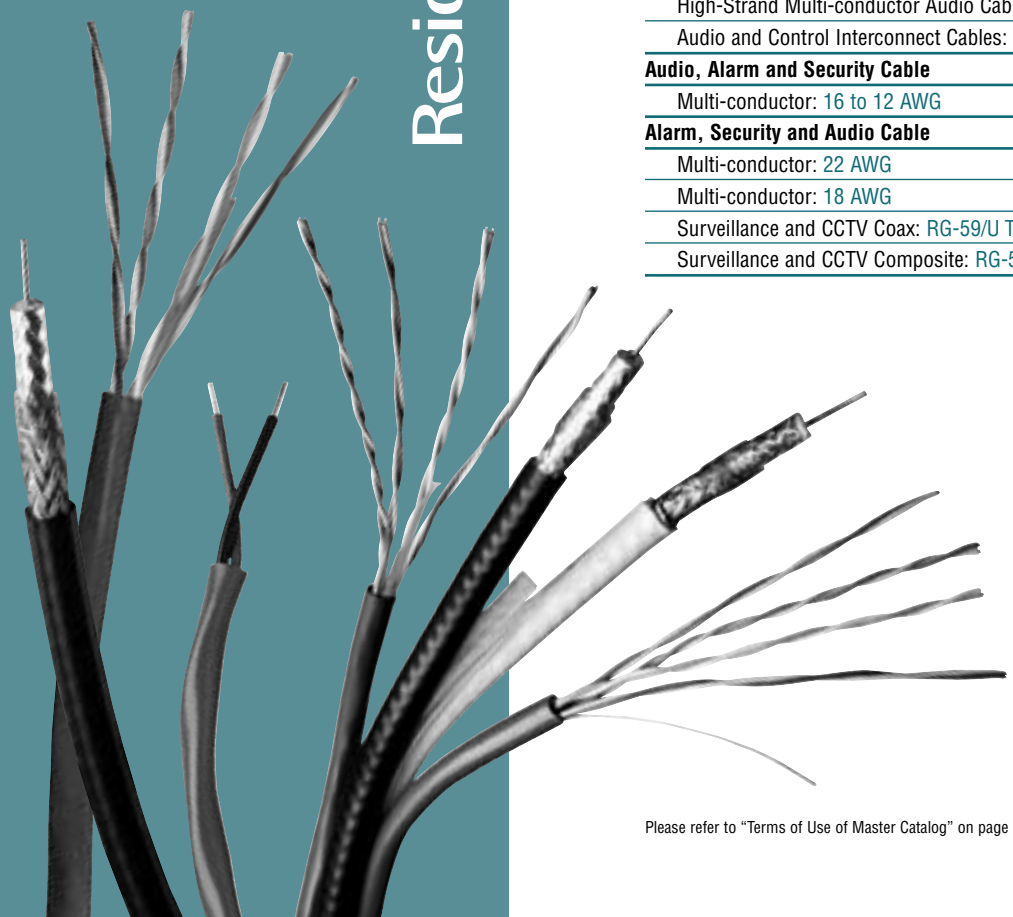
DBS & Broadband CATV Coax: Series 6, RG-6/U Type, 18 AWG	14.12
Precision Video Coax: RG-6/U Type, 18 AWG	14.14
Precision Video Coax: RG-59/U Type, 20 AWG	14.14
Precision Video Coax: Subminiature RG-59/U Type, 23 AWG	14.15
Standard Analog Coax: RG-59/U Type, 23 AWG	14.15
High-Flex SVHS Coax: 30 AWG	14.16
Bundled RGB Coax: Miniature, 30 AWG	14.16
Bundled RGB Coax: High-Flex, 26 AWG	14.16
Audio Cable	**14.17–14.18**
High-Conductivity ETP Copper Speaker Cables: 16 to 12 AWG	14.17
AES/EBU Digital Audio Cables: 24 AWG	14.17
High-Strand Multi-conductor Audio Cables: 16 to 10 AWG	14.18
Audio and Control Interconnect Cables: 22 AWG	14.18
Audio, Alarm and Security Cable	**14.19**
Multi-conductor: 16 to 12 AWG	14.19
Alarm, Security and Audio Cable	**14.20**
Multi-conductor: 22 AWG	14.20
Multi-conductor: 18 AWG	14.20
Surveillance and CCTV Coax: RG-59/U Type, 20 AWG	14.20
Surveillance and CCTV Composite: RG-59/U Type, 20 AWG	14.20



Please refer to “Terms of Use of Master Catalog” on page 16.30.

Introduction

Innovative Home Cabling Solutions From the World's Most Trusted Name in Cable

Because we understand that each home installation has its own set of needs and expectations, Belden offers its structured cabling line of individual, dual component and composite cables — in all, over 50 different cables for your home automation, networking, security and entertainment system installations.

Belden Quality and Reliability

Belden manufactures all of the cables in its residential cable line so you can be assured that each cable product is the result of the most rigorous quality process in the industry.

Belden's commitment to quality and reliability is unequaled in its marketplace. And since we have such a wide range of products to meet your varied needs, Belden can easily provide you with one-stop home shopping.

High-Performance, Easy-to-Install Cables

Individual or single application cables are available for any data, video, audio or security need, including:

- Category 5e, Category 6 UTP and fiber data cables for multimedia, voice, video and data use
- Series 6 and Series 59 video coax cables for HDTV, DBS, CATV, SVHS, CCTV and cable modem applications
- Speaker cables for your audio distribution needs
- Paired, unshielded cables for security and alarm applications

Belden also offers over 20 different composite cables. Composite cables simplify a multiple use installation by combining Belden data cables, coaxial cables, paired and multi-conductor cables, and fiber optic cables in a single-pull product.

Time-tested and Preferred in Other Industries

Many of the Belden® Residential Cables in this catalog have been long-standing leaders in other industries such as:

- **Computer networks** — where Belden offers the most innovative cables and the leading data cable technology worldwide.
- **Broadcast** — where network studios prefer Belden over any other cable for picture-perfect quality and professional audio technicians demand Belden for crystal-clear audio quality.
- **Broadband CATV** — where Belden Duobond Plus® (Tri-shield) Cables have consistently outperformed the more elaborate quad-shielded cables.
- **Alarm/Security** — where Belden has been a favorite among installers for many years.

Now, these industry-leading and time-tested cables are available, along with many new innovations, for wiring the home of the 21st Century…only from Belden.

Better Designs, Better Performance

Some unique high performance technologies are used in the manufacture of these various cables, including:

Belden's Patented Data Cable Technology: Bonded-Pairs

To ensure top performance, Belden uses a unique manufacturing process that affixes the individual insulated conductors of the pairs along their longitudinal axis. This cable construction feature prevents gaps from occurring between the conductor pairs: a critical factor in the electrical performance of the cable.

Only Belden Bonded-Pair Data Cables Offer the Assurance of *Installable Performance™*

Due to the patented Bonded-Pair design, these cables are able to withstand the rigors of a typical installation without any degradation in performance. This means that the Cat 5e cable that you purchase from Belden to meet Cat 5e specifications will not only meet these specifications before installation, but more importantly, it will meet them after installation.

Coax Cables with Belden's Exclusive Duobond Plus® Shielding

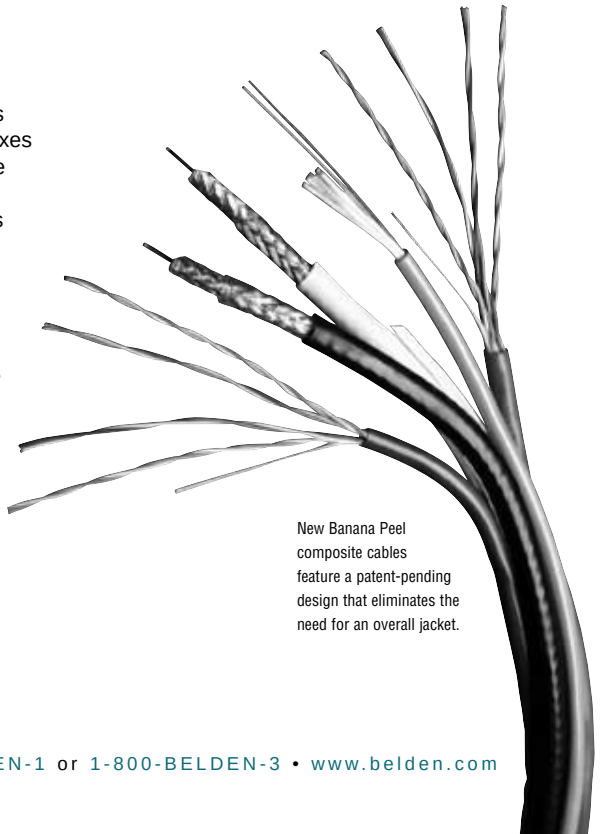
Duobond Plus consists of a Duofoil® II (foil tape) surrounded by an 80 percent braid and an outer layer of foil with a unique shorting fold. This unique construction provides optimum shielding effectiveness.

Composite Cables — Without a Jacket!

Belden Banana Peel™ composite cables feature a patent-pending design that eliminates the need for an overall jacket, making these cables easy to handle, easy to identify, easy to pull and easy to terminate. Just peel the cables off the center spline, and you're in business.

Everything You Need For The Intelligent Home

These structured cabling products for the Intelligent Home are all brought to you by Belden — the most innovative and trusted manufacturer in the cable industry. Belden offers the most comprehensive, time-tested and proven products for cabling the home.

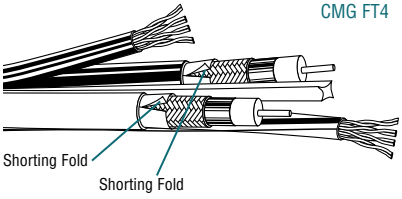


New Banana Peel composite cables feature a patent-pending design that eliminates the need for an overall jacket.

Composite Data, Audio, Video, Security and Control Cable

Banana Peel™ Jacketless Cables
Category 5e Bonded-Pairs

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Overall Nom. OD Inch	Overall Nom. OD mm	Component Descriptions	Shielding Materials & Nom. DCR	Insulation Material & Color Code	Component Jacket Material & Colors	Component Nom. OD Inch	Component Nom. OD mm
Composite • (2) Cat 5e 4-Bonded-Pair UTP 24 AWG **• (2) Series 6 Coax** w/ Duobond Plus® (Bonded Tri-Shield)														
Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• F-R PVC Jackets • No Overall Jacket**														
	7876S new	NEC: CMR CEC: CMG FT4	500 1000	152.4 304.8	66.0 128.0	29.9 58.1	.550	13.97	(2) 4-Pair UTP Data Cables: Bonded-Pairs 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue (1) Green	.200	5.08
									(2) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond Plus (Bonded Tri-Shield): Duobond® + 80% AL Braid + AL Foil w/ Shorting Fold 4.6Ω/M′ 15.1Ω/km	Gas-injected Foam Polyethylene	F-R PVC (1) Black (1) White	.275	6.99

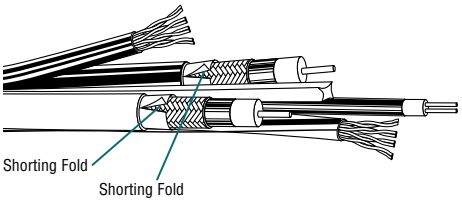


Coax sweep tested to 2.25 GHz and jacket sequentially marked.
Third party verified to TIA/EIA-568-B.2, Category 5e

Composite • (2) Cat 5e 4-Bonded-Pair UTP 24 AWG **• (2) Series 6 Coax** w/ Duobond Plus **• (1) 2-Fiber LANLite®**

Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• F-R PVC Jackets • No Overall Jacket**

7878S new	NEC: CMR OF CEC: CMG OF FT4	500 1000	152.4 304.8	71.0 142.0	32.2 64.4	.595	15.11	(2) 4-Pair UTP Data Cables: Bonded-Pairs 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue (1) Green	.200	5.08
								(2) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond Plus (Bonded Tri-Shield): Duobond + 80% AL Braid + AL Foil w/ Shorting Fold 4.6Ω/M′ 15.1Ω/km	Gas-injected Foam Polyethylene	F-R PVC (1) Black (1) White	.275	6.99
								(1) 2-Fiber LANLite: Gigabit Ethernet 62.5µ/125µ/900µ (core/clad/coating) Tight Buffered	—	PVC (1) Blue (1) Orange	F-R PVC (1) Orange	.175	4.45



Coax sweep tested to 2.25 GHz and jacket sequentially marked.
Third party verified to TIA/EIA-568-B.2, Category 5e

AL = Aluminum • DCR = DC Resistance • FPE = Foam Polyethylene • F-R = Flame-retardant • UTP = Unshielded Twisted Pair

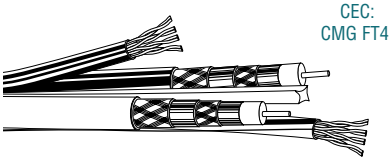
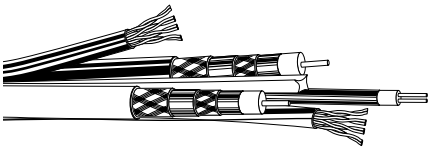
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: **1-800-BELDEN-1**.
Request quotations of cables not listed.

Color Codes: Cat 5e UTP

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Composite Data, Audio, Video, Security and Control Cable

Banana Peel™ Jacketless Cables
Category 5e

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Overall Nom. OD		Component Descriptions	Shielding Materials & Nom. DCR	Insulation Material & Color Code	Component Jacket Material & Colors	Component Nom. OD	
			Ft.	m	Lbs.	kg	Inch	mm					Inch	mm
Composite • (2) Cat 5e 4-Pair UTP 24 AWG **• (2) Series 6 Coax** w/ Duobond® IV* Quad Shield														
Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• F-R PVC Jackets • No Overall Jacket**														
	**7913S** new	NEC: CMR CEC: CMG FT4	500 1000	152.4 304.8	67.0 134.0	30.4 60.8	.600	15.24	(2) 4-Pair UTP Data Cables: 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue (1) Green	.200	5.08
									(2) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond IV Quad Shield: 60% & 40% AL Braids 4.8Ω/M′ 15.7Ω/km	Gas-injected Foam Polyethylene	F-R PVC (1) Black (1) White	.298	7.57
Coax sweep tested to 2.25 GHz and jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5e														
Composite • (2) Cat 5e 4-Pair UTP 24 AWG **• (2) Series 6 Coax** w/ Duobond IV* Quad Shield **• (1) 2-Fiber LANLite®**														
Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• F-R PVC Jackets • No Overall Jacket**														
	**7914S** new	NEC: CMR OF CEC: CMG OF FT4	500 1000	152.4 304.8	76.0 151.0	34.2 68.5	.620	15.75	(2) 4-Pair UTP Data Cables: 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue (1) Green	.200	5.08
									(2) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond IV Quad Shield: 60% & 40% AL Braids 4.8Ω/M′ 15.7Ω/km	Gas-injected Foam Polyethylene	F-R PVC (1) Black (1) White	.298	7.57
									(1) 2-Fiber LANLite: Gigabit Ethernet 62.5µ/125µ/900µ (core/clad/coating) Tight Buffered	—	PVC (1) Blue (1) Orange	F-R PVC (1) Orange	.175	4.45
Coax sweep tested to 2.25 GHz and jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5e														

AL = Aluminum • DCR = DC Resistance • FPE = Foam Polyethylene • F-R = Flame-retardant • UTP = Unshielded Twisted Pair

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: **1-800-BELDEN-1**.
Request quotations of cables not listed.

* Duobond IV = Duobond II + 60% aluminum braid + Duofoil® + 40% aluminum braid.

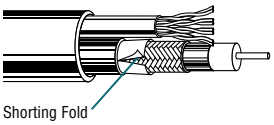
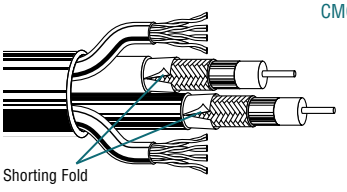
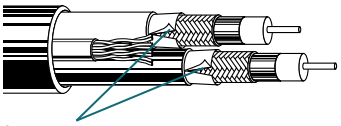
Color Codes: Cat 5e UTP

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Composite Data, Audio, Video, Security and Control Cable

Jacketed Cables

Category 5e Bonded-Pairs

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Overall Nom. OD Inch	Overall Nom. OD mm	Component Descriptions	Shielding Materials & Nom. DCR	Insulation Material & Color Code	Component Jacket Material & Colors	Component Nom. OD Inch	Component Nom. OD mm
Composite • (1) Cat 5e 4-Bonded-Pair UTP 24 AWG **• (1) Series 6 Coax** w/ Duobond Plus® Bonded Tri-Shield														
Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• F-R PVC Jackets • Overall Green F-R PVC Jacket**														
 Shorting Fold	**7910A** new	NEC: CMR CEC: CMG FT4	500 1000	152.4 304.8	46.0 86.0	20.9 39.1	.335 x .535	8.51 x 13.59	(1) 4-Pair UTP Data Cable: Bonded-Pairs 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue	.200	5.08
									(1) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond Plus Bonded Tri-Shield: Duobond® + 80% AL Braid + AL Foil w/ Shorting Fold 4.6Ω/M′ 15.1Ω/km	Gas-injected Foam Polyethylene	F-R PVC (1) Black	.275	6.99
Coax sweep tested to 2.25 GHz and overall jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5e														
Composite • (2) Cat 5e 4-Bonded-Pair UTP • (2) Series 6 Coax w/ Duobond Plus Bonded Tri-Shield														
Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• F-R PVC Jackets • Overall Green F-R PVC Jacket**														
 Shorting Fold	**7876A** new	NEC: CMR CEC: CMG FT4	500 1000	152.4 304.8	77.0 147.0	35.0 66.8	.610	15.49	(2) 4-Pair UTP Data Cables: Bonded-Pairs 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue (1) Green	.200	5.08
									(2) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond Plus Bonded Tri-Shield: Duobond + 80% AL Braid + AL Foil w/ Shorting Fold 4.6Ω/M′ 15.1Ω/km	Gas-injected Foam Polyethylene	F-R PVC (1) Black (1) White	.275	6.99
Coax sweep tested to 2.25 GHz and overall jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5e														
Composite • (1) Cat 5e 4-Bonded-Pair UTP • (2) Series 6 Coax w/ Duobond Plus Bonded Tri-Shield														
Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• F-R PVC Jackets • Overall Green F-R PVC Jacket**														
 Shorting Fold	**7877A** new	NEC: CMR CEC: CMG FT4	500 1000	152.4 304.8	67.0 128.0	30.5 58.2	.610	15.49	(1) 4-Pair UTP Data Cable: Bonded-Pairs 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue	.200	5.08
									(2) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond Plus Bonded Tri-Shield: Duobond + 80% AL Braid + AL Foil w/ Shorting Fold 4.6Ω/M′ 15.1Ω/km	Gas-injected Foam Polyethylene	F-R PVC (1) Black (1) White	.275	6.99
Coax sweep tested to 2.25 GHz and overall jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5e														

AL = Aluminum • DCR = DC Resistance • FPE = Foam Polyethylene • F-R = Flame-retardant • UTP = Unshielded Twisted Pair

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: **1-800-BELDEN-1**.
Request quotations of cables not listed.

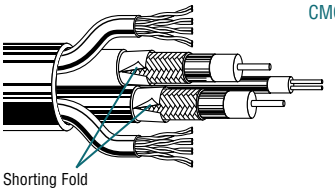
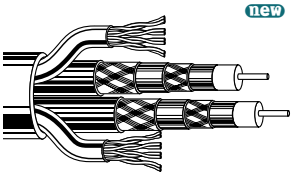
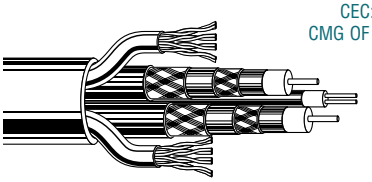
Color Codes: Cat 5e UTP

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Composite Data, Audio, Video, Security and Control Cable

Jacketed Cables

Category 5e Bonded-Pairs and Category 5

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Overall Nom. OD Inch	Overall Nom. OD mm	Component Descriptions	Shielding Materials & Nom. DCR	Insulation Material & Color Code	Component Jacket Material & Colors	Component Nom. OD Inch	Component Nom. OD mm
Composite • (2) Cat 5e 4-Bonded-Pair UTP 24 AWG **• (2) Series 6 Coax** w/ Duobond Plus® Tri-Shield **• (1) 2-Fiber LANLite®**														
Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• F-R PVC Jackets • Overall Green F-R PVC Jacket**														
 Shorting Fold	**7878A** new	NEC: CMR OF CEC: CMG OF FT4	500 1000	152.4 304.8	84.0 161.0	34.2 73.2	.635	16.13	(2) 4-Pair UTP Data Cables: Bonded-Pairs 24 AWG (solid) BC Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue (1) Green	.200	5.08
									(2) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond Plus Bonded Tri-Shield: Duobond® + 80% AL Braid + AL Foil w/ Shorting Fold 4.6Ω/M′ 15.1Ω/km	Gas-injected Foam Polyethylene	F-R PVC (1) Black (1) White	.275	6.99
Coax sweep tested to 2.25 GHz and overall jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5e									(1) 2-Fiber LANLite: Gigabit Ethernet 62.5µ/125µ/900µ (core/clad/coating) Tight Buffered	—	PVC (1) Blue (1) Orange	F-R PVC (1) Orange	.175	4.45
Composite • (2) Cat 5 4-Pair UTP 24 AWG **• (2) Series 6 Coax** w/ Duobond IV* Quad Shield														
Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• F-R PVC Jackets • Overall Light Green F-R PVC Jacket**														
	**7913A** new	NEC: CMR CEC: CMG FT4	500 1000	152.4 304.8	81.5 157.0	37.0 71.4	.660	16.76	(2) 4-Pair UTP Data Cables: 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue (1) Green	.200	5.08
									(2) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond IV Quad Shield: 60% & 40% AL Braids 4.8Ω/M′ 15.7Ω/km	Gas-injected Foam Polyethylene	F-R PVC (1) Black (1) White	.298	7.57
Coax sweep tested to 2.25 GHz and overall jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5														
Composite • (2) Cat 5 4-Pair UTP 24 AWG **• (2) Series 6 Coax** w/ Duobond IV* Quad Shield **• (1) 2-Fiber LANLite**														
Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• F-R PVC Jackets • Overall Light Green F-R PVC Jacket**														
	**7914A** new	NEC: CMR OF CEC: CMG OF FT4	500 1000	152.4 304.8	87.5 169.0	39.8 76.8	.660	16.76	(2) 4-Pair UTP Data Cables: 24 AWG (solid) BC Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue (1) Green	.200	5.08
									(2) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond IV Quad Shield: 60% & 40% AL Braids 4.8Ω/M′ 15.7Ω/km	Gas-injected Foam Polyethylene	F-R PVC (1) Black (1) White	.298	7.57
Coax sweep tested to 2.25 GHz and overall jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5									(1) 2-Fiber LANLite: Gigabit Ethernet 62.5µ/125µ/900µ (core/clad/coating) Tight Buffered	—	PVC (1) Blue (1) Orange	F-R PVC (1) Orange	.175	4.45

AL = Aluminum • BC = Bare Copper • DCR = DC Resistance • FPE = Foam Polyethylene • F-R = Flame-retardant • UTP = Unshielded Twisted Pair

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: **1-800-BELDEN-1**.
Request quotations of cables not listed.

*Duobond IV = Duobond II + 60% aluminum braid + Duofoil® + 40% aluminum braid.

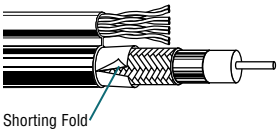
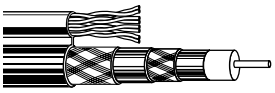
Color Code: Cat 5e UTP

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Composite Data, Audio, Video, Security and Control Cable

Siamese Cables

Category 5e Bonded-Pairs and Category 5

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Overall Nom. OD		Component Descriptions	Shielding Materials & Nom. DCR	Insulation Material & Color Code	Component Jacket Material & Colors	Component Nom. OD	
			Ft.	m	Lbs.	kg	Inch	mm					Inch	mm
Composite • (1) Cat 5e 4-Bonded-Pair UTP 24 AWG **• (1) Series 6 Coax** w/ Duobond Plus® Bonded Tri-Shield														
Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• Overall Green F-R PVC Jacket**														
Siamese Construction  Shorting Fold	**7911A** new	NEC: CMR CEC: CMG FT4	500 1000	152.4 304.8	35.0 60.0	15.9 27.2	.275 x .529	6.99 x 13.44	(1) 4-Pair UTP Data Cables: Bonded-Pairs 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	—	—	—
									(1) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond Plus Bonded Tri-Shield: Duobond® + 80% AL Braid + AL Foil w/ Shorting Fold 4.6Ω/M′ 15.1Ω/km	Gas-injected Foam Polyethylene	—	—	—
Coax sweep tested to 2.25 GHz and jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5e														
Composite • (1) Cat 5 4-Pair UTP 24 AWG **• (1) Series 6 Coax** w/ Duobond IV* Quad Shield														
Polyolefin Insulation (Pairs) **• Gas-injected FPE Insulation** (Coax) **• Overall Light Green F-R PVC Jacket**														
Siamese Construction 	**7912A** new	NEC: CMR CEC: CMG FT4	500 1000	152.4 304.8	35.5 61.0	16.1 27.7	.297 x .548	7.54 x 13.92	(1) 4-Pair UTP Data Cables: 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	—	—	—
									(1) Coax: Series 6 18 AWG (solid) Bare Copper Cond.	Duobond IV Quad Shield: 60% & 40% AL Braids 4.8Ω/M′ 15.7Ω/km	Gas-injected Foam Polyethylene	—	—	—
Coax sweep tested to 2.25 GHz and jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5														

AL = Aluminum • DCR = DC Resistance • FPE = Foam Polyethylene • F-R = Flame-retardant • UTP = Unshielded Twisted Pair

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: **1-800-BELDEN-1**.
Request quotations of cables not listed.

*Duobond IV = Duobond II + 60% aluminum braid + Duofoil® + 40% aluminum braid.

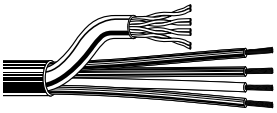
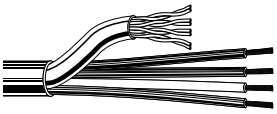
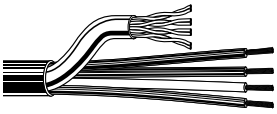
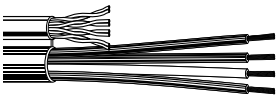
Color Code: Cat 5e UTP

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Composite Data, Audio, Video, Security and Control Cable

Keypad Cables

Category 5e Bonded-Pairs and Category 5

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Overall Nom. OD Inch	Overall Nom. OD mm	Component Descriptions	Shielding Materials & Nom. DCR	Insulation Material & Color Code	Component Jacket Material & Colors	Component Nom. OD Inch	Component Nom. OD mm
Composite • (1) Cat 5e 4-Bonded-Pair UTP 24 AWG • **(4) 16 AWG Bare Copper Conductors** Stranded (19x .012)														
Polyolefin Insulation (Pairs) • **PVC Insulation** (Conductors) • **Overall Green F-R PVC Jacket**														
	**7949A** new	NEC: CMR CEC: CMG FT4	500 1000	152.4 304.8	54.5 99.0	24.7 44.9	.438	11.13	(1) 4-Pair UTP Data Cable: Bonded-Pairs 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue	.200	5.08
Jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5e									(4) Conductors: 16 AWG (19x.012) Bare Copper Cond.	None	PVC Red, White, Green, Black	—	.079	2.01
Composite • (1) Cat 5 4-Pair UTP 24 AWG • **(4) 16 AWG Bare Copper Conductors** Stranded (19x .012)														
Polyolefin Insulation (Pairs) • **PVC Insulation** (Conductors) • **Overall Light Green F-R PVC Jacket**														
	**7950A** new	NEC: CMR CEC: CMG FT4	500 1000	152.4 304.8	55.0 99.0	24.9 44.9	.434	11.02	(1) 4-Pair UTP Data Cable: 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue	.200	5.08
Jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5									(4) Conductors: 16 AWG (19x.012) Bare Copper Cond.	None	PVC Red, White, Green, Black	—	.079	2.01
Composite • (1) Cat 5 4-Pair UTP 24 AWG • **(4) 18 AWG Bare Copper Conductors** Stranded (19x .010)														
Polyolefin Insulation (Pairs) • **PVC Insulation** (Conductors) • **Overall Light Green F-R PVC Jacket**														
	**7951A** new	NEC: CMR CEC: CMG FT4	500 1000	152.4 304.8	49.0 88.0	22.2 39.9	.412	10.47	(1) 4-Pair UTP Data Cable: 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue	.200	5.08
Jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5									(4) Conductors: 18 AWG (19x.010) Bare Copper Cond.	None	PVC Red, White, Green, Black	—	.066	1.68
Composite • (1) Cat 5 4-Pair UTP 24 AWG • **(4) 14 AWG Bare Copper Conductors** Stranded (19x .015)														
Polyolefin Insulation (Pairs) • **PVC Insulation** (Conductors) • **Overall Light Green F-R PVC Jacket**														
Siamese Construction 	**7952A** new	NEC: CMR CEC: CMG FT4	500	152.4	61.0	27.7	.301 x .552	7.65 x 14.02	(1) 4-Pair UTP Data Cable: 24 AWG (solid) Bare Copper Cond.	None	Polyolefin (see chart below)	F-R PVC (1) Blue	.200	5.08
Jacket sequentially marked. Third party verified to TIA/EIA-568-B.2, Category 5									(4) Conductors: 14 AWG (19x.015) Bare Copper Cond.	None	PVC Red, White, Green, Black	—	.104	2.64

DCR = DC Resistance • F-R = Flame-retardant • UTP = Unshielded Twisted Pair

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: **1-800-BELDEN-1**.
Request quotations of cables not listed.

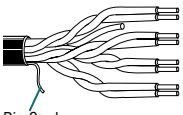
Color Code: Cat 5e UTP

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Data and Voice Cable

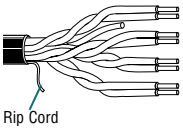
Category 6 UTP Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/ 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
23 AWG Solid Bare Copper • Twisted Pairs • Central Rod Filler • Rip Cord • See Color Code Chart (below)																					
Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Gray, White or Black)																					
	7881A new	NEC:	4	1000	304.8	32.0	14.5	.009	.23	.235	5.97	9.38	5.0	330	1	2.0	72.3	70.3	64.8	100±15	20.0
		CMR		A-1000	A-304.8	34.0	15.4								10	6.0	57.3	51.3	44.8	100±15	25.0
		CEC:													20	8.5	52.8	44.3	38.7	100±15	25.0
		CMR FT4													31.25	10.7	49.9	39.2	34.9	100±15	23.6
															62.5	15.4	45.4	30.0	28.8	100±15	21.5
															100	19.8	42.3	22.5	24.8	100±15	20.1
															200	29.0	37.8	8.8	18.7	100±22	18.0
															250	32.8	36.3	3.5	16.8	100±32	17.3



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2-1, Category 6

Plenum • FEP Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Blue, Gray, Natural or Black)																					
	7882A new	NEC:	4	1000	304.8	33.0	15.0	.008	.20	.224	5.69	9.38	5.0	330	1	2.0	72.3	70.3	64.8	100±15	20.0
		CMP		A-1000	A-304.8	35.0	15.9								10	6.0	57.3	51.3	44.8	100±15	25.0
		CEC:													20	8.5	52.8	44.3	38.7	100±15	25.0
		CMP FT6													31.25	10.7	49.9	39.2	34.9	100±15	23.6
															62.5	15.4	45.4	30.0	28.8	100±15	21.5
															100	19.8	42.3	22.5	24.8	100±15	20.1
															200	29.0	37.8	8.8	18.7	100±22	18.0
															250	32.8	36.3	3.5	16.8	100±32	17.3



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2-1, Category 6

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

For a complete selection of Belden® Data Cables, refer to the Networking Cables section of this catalog.

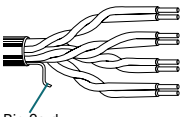
Color Codes

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Data and Voice Cable

Enhanced Category 5e UTP Cables

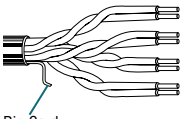
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
24 AWG Bonded-Pairs Solid Bare Copper • Rip Cord • See Color Code Chart (below)																					
Non-Plenum • Polyolefin Insulation • PVC Jacket (Red, Orange, White, Black, Yellow, Green, Blue, Purple, Light Gray or Gray)																					
75°C	**1700R** new	NEC:	4	U-1000 ▲	U-304.8	22.0	10.0	.009	.23	.204	5.18	9.0	3.0	66.0	1	2.0	65.3	63.3	60.8	100±12	20.0
		CMR		1000 ▲	304.8	22.0	10.0								4	4.0	56.3	52.3	48.7	100±12	23.0
		CEC:		3000 ●	914.4	63.0	28.6								8	5.7	51.8	46.1	42.7	100±12	24.5
		CMR FT4													10	6.4	50.3	43.9	40.8	100±12	25.0
															16	8.1	47.3	39.1	36.7	100±12	25.0
															25	10.3	44.3	34.1	32.8	100±15	24.3
															31.25	11.6	42.9	31.3	30.9	100±15	23.6
										Tested to 350 MHz.					62.5	16.8	38.4	21.6	24.8	100±15	21.5
															100	21.7	35.3	17.1	20.8	100±15	20.1
															155	27.7	32.5	4.7	16.9	100±18	19.0
															200	32.0	30.8	3.0	14.7	100±20	19.0
															250	36.4	29.3	—	12.8	100±20	18.0
															350	44.3	27.2	—	9.9	100±22	17.0



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e • U.S. Patents 5,606,151 and 5,734,126
▲U-1000 ft. and 1000 ft. put-ups not available in Black or Gray.
●3000 ft. put-up available in Red, Blue, Purple, White or Light Gray only.

Plenum • FEP Insulation • Flamarrest® Jacket (Available in Red, Orange, Gray, Yellow, Green, Blue, Purple, Natural or Black)

75°C	**1701A**	NEC:	4	U-1000	U-304.8	23.0	10.5	.008	.20	.200	5.08	9.0	3.0	66.0	1	2.0	65.3	63.3	60.8	100±12	20.0
		CMP		1000	304.8	23.0	10.5								4	4.0	56.3	52.3	48.7	100±12	23.0
		CEC:		3000 ◆	914.4	66.0	30.0								8	5.7	51.8	46.1	42.7	100±12	24.5
		CMP FT6													10	6.4	50.3	43.9	40.8	100±12	25.0
															16	8.1	47.3	39.1	36.7	100±12	25.0
															25	10.3	44.3	34.1	32.8	100±15	24.3
															31.25	11.6	42.9	31.3	30.9	100±15	23.6
										Tested to 350 MHz.					62.5	16.8	38.4	21.6	24.8	100±15	21.5
															100	21.7	35.3	17.1	20.8	100±15	20.1
															155	27.7	32.5	4.7	16.9	100±18	19.0
															200	32.0	30.8	3.0	14.7	100±20	19.0
															250	36.4	29.3	—	12.8	100±20	18.0
															350	44.3	27.2	—	9.9	100±22	17.0

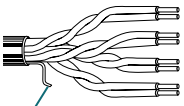


Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e • U.S. Patents 5,606,151 and 5,734,126
◆3000 ft. put-up available in Red, Blue, Green, Yellow or Natural only.

24 AWG Solid Bare Copper • Twisted Pairs • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, White, Blue or Dark Gray)

80°C	**1500R** new	NEC:	4	1000	304.8	25.0	11.4	.008	.20	.204	5.18	9.0	3.0	66.0	1	2.0	65.3	63.3	60.8	100±12	20.0
		CMR		A-1000	A-304.8	28.0	12.7								4	4.0	56.3	52.3	48.7	100±12	23.0
		CEC:													8	5.7	51.8	46.1	42.7	100±12	24.5
		CMR FT4													10	6.4	50.3	43.9	40.8	100±12	25.0
															16	8.1	47.3	39.1	36.7	100±12	25.0
															25	10.3	44.3	34.1	32.8	100±15	24.3
															31.25	11.6	42.9	31.3	30.9	100±15	23.6
										Tested to 350 MHz.					62.5	16.8	38.4	21.6	24.8	100±15	21.5
															100	21.7	35.3	17.1	20.8	100±15	20.1
															155	27.7	32.5	4.7	16.9	100±18	19.0
															200	32.0	30.8	3.0	14.7	100±20	19.0
															250	36.4	29.3	—	12.8	100±20	18.0
															350	44.3	27.2	—	9.9	100±22	17.0



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

For a complete selection of Belden® Data Cables, refer to the Networking Cables section of this catalog.

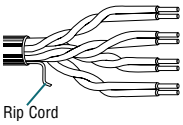
Color Codes

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Data and Voice Cable

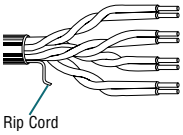
Category 5e UTP Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inch	Nominal OD mm	Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
24 AWG Solid Bare Copper • Twisted Pairs • Rip Cord • See Color Code Chart (below)																					
Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in White, Black, Dark Gray, Blue, Red, Orange, Yellow, Green or Pink)																					
75°C	**1583R**	NEC:	4	U-1000 ▲	U-304.8	22.0	10.0	.008	.20	.214	5.44	9.38	5.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0
		CMR		1000 ▲	304.8	22.0	10.0								4	4.1	53.3	49.0	48.7	100±15	23.0
		CEC:		3000 ▲	914.4	66.0	30.0								10	6.5	47.3	41.0	40.8	100±15	25.0
		CMR FT4													16	8.2	44.3	36.0	36.7	100±15	25.0
															31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5
															100	22.0	32.3	11.0	20.8	100±15	20.1
															200	32.0	27.8	1.0	14.7	100±25	15.0



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e
▲U-1000 ft. and 1000 ft. put-ups not available in Black.
▲3000 ft. put-ups available in Dark Gray, White or Blue only.

Plenum • FEP Insulation • Flamarrest® Jacket (Available in Natural, Blue, Red, Orange, Yellow, Green, Gray, Black or Pink)																					
75°C	**1585A**	NEC:	4	U-1000	U-304.8	23.0	10.5	.007	.18	.200	5.08	9.38	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0
		CMP		1000	304.8	23.0	10.5								4	4.1	53.3	49.0	48.7	100±15	23.0
		CEC:		3000 ◆	914.6	69.0	31.4								10	6.5	47.3	41.0	40.8	100±15	25.0
		CMP FT6													16	8.2	44.3	36.0	36.7	100±15	25.0
															31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5
															100	22.0	32.3	11.0	20.8	100±15	20.1
															200	32.0	27.8	1.0	14.7	100±25	15.0



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e
◆3000 ft. put-up available in Natural or Blue only.

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

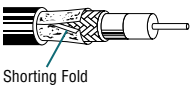
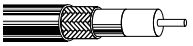
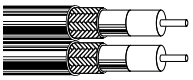
For a complete selection of Belden® Data Cables, refer to the Networking Cables section of this catalog.

Color Codes

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Video Cable

DBS and Broadband CATV Coaxial Cables
Series 6 (RG-6/U Type)

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Series 6 • 18 AWG Solid .040″ Bare Copper Conductor • Duobond® + Aluminum Braid(s) Shield																			
Gas-injected Foam Polyethylene Insulation • PVC Jacket (Black or White)																			
80°C  Shorting Fold	**7915A** new	NEC: CATV CM CEC: CM	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	16.0 18.0 34.0 34.0	7.3 8.2 15.5 15.5	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duobond Plus®+ 80% Aluminum Braid 4.6Ω/M′ 15.1Ω/km	.275	6.99	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1
											Sweep tested 5 MHz to 2.25 GHz.								
80°C	**7916A** new	NEC: CATV CM CEC: CM	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	18.0 20.0 37.0 37.0	8.2 9.1 16.8 16.8	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duobond IV* 60% & 40% Aluminum Braids 4.8Ω/M′ 15.7Ω/km	.298	7.57	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1
											Sweep tested 5 MHz to 2.25 GHz.								
Gas-injected Foam Polyethylene Insulation • PVC Jacket (Black, Gray or White)																			
80°C 	**1829AC**	NEC: CATV CM CEC: CM	U-1000 1000	U-304.8 304.8	31.0 31.0	14.1 14.1	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250 3000	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1 11.0	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1 36.1
											Sweep tested 950 MHz to 2.25 GHz.								
80°C 	**1841AC** new	NEC: CATV CM CEC: CM	500	152.4	33.0	15.0	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duobond II + 60% Aluminum Braid 9.0Ω/M′ 29.5Ω/km	.273 x .595	6.93 x 15.11	75	83%	16.2	53.1	5 55 211 500 750 862 1000 1450 1800 2250 3000	.5 1.4 2.6 4.1 5.1 5.5 6.0 7.9 8.4 10.1 11.0	1.6 4.6 8.5 13.5 16.7 18.0 19.7 25.9 27.6 33.1 36.1
											Sweep tested 950 MHz to 2.25 GHz.								

BC = Bare Copper • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.
For additional selection of Belden® Video Cables, refer to the Coaxial and Broadcast Cables sections of this catalog.

*Duobond IV = Duobond II + 60% aluminum braid + Duofoil® tape + 40% aluminum braid.

Video Cable

DBS and Broadband CATV Coaxial Cables
Series 6 (RG-6/U Type)

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
Series 6 • 18 AWG Solid .040″ Bare Copper-covered Steel • Duobond® IV* Quad Shield																			
Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	**1189A**	NEC: CATV CM CEC: CM	U-500▼ U-1000▲ 1000◆	U-152.4 U-304.8 304.8	16.0 37.0 37.0	7.3 16.8 16.8	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.180	4.57	Duobond IV 60% & 40% Aluminum Braids 4.8Ω/M′ 15.7Ω/km	.298	7.57	75	83%	16.2	53.1	See Chart on page 6.88		
												Sweep tested 5 MHz to 1 GHz.							
Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	**1189AP** new	NEC: CATVP CMP CEC: CMP FT6	U-1000† 1000†	U-304.8 304.8	41.0 42.0	18.6 19.1	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.9Ω/km	.170	4.32	Duobond IV 60% & 40% Aluminum Braids 4.8Ω/M′ 15.7Ω/km	.248	6.30	75	83%	16.3	53.5	1	.3	1.0
																	10	.7	2.2
																	50	1.6	5.2
																	100	2.2	7.2
																	200	3.0	9.8
												Sweep tested 5 MHz to 1 GHz.					400	4.6	15.1
																	700	6.6	21.7
																	900	7.7	25.3
																	1000	8.2	26.9

▼U-500 ft. put-up also available in White.
▲U-1000 ft. put-up available in White and Neutral only.
◆1000 ft. put-up also available in White, Beige or Neutral.

BCCS = Bare Copper-covered Steel • DCR = DC Resistance

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.
For additional selection of Belden® Video Cables, refer to the Coaxial and Broadcast Cables sections of this catalog.

* Duobond IV = Duobond II + 60% aluminum braid + Duofoil® tape + 40% aluminum braid.
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.

Video Cable

Precision Video Cables for Analog and Digital Applications
RG-6/U and RG-59/U Types

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-6/U Type • 18 AWG Solid .040″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*																			
SDI/HDTV Digital Video 75°C	**1694A** new	NEC: CMR CEC: CMG FT4	500▲ 1000 4500	152.4 304.8 1371.6	23.0 45.0 200.5	10.5 20.5 91.1	18 AWG (solid) .040″ BC 6.4Ω/M′ 21.0Ω/km	.180	4.57	Duofoil + 95% TC Braid 2.8Ω/M′ 9.2Ω/km	.275	6.99	75	82%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .5 .7 1.6 2.1 3.0 3.4 4.3 4.9 5.0 5.9 7.3 9.1 10.7	.8 1.5 2.4 5.2 6.9 9.7 11.3 13.9 16.1 16.4 19.3 24.0 30.0 35.0
											For Plenum version of 1694A, see 1695A. Also available in bundled versions. See 7710A through 7713A. 100% Sweep tested. 5 MHz to 3 GHz.								
▲500 ft. put-up available in Black only. *Available in Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or White.																			
Plenum • Foam FEP Insulation • Flamarrest® Jacket (Available in 10 colors)**																			
SDI/HDTV Digital Video 75°C	**1695A** new	NEC: CMP CEC: CMP FT6	500†◆ 1000†	152.4 304.8	22.5 45.0	10.2 20.5	18 AWG (solid) . 040″ BC 6.4Ω/M′ 21.0Ω/km	.170	4.32	Duofoil + 95% TC Braid 2.8Ω/M′ 9.2Ω/km	.234	5.94	75	82%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .5 .8 1.8 2.4 3.4 4.0 5.2 6.1 7.3 7.5 9.2 11.6 13.7	.8 1.5 2.5 5.8 7.9 11.2 13.1 17.1 20.0 23.9 24.6 30.2 38.0 44.9
											100% Sweep tested. 5 MHz to 3 GHz.								
◆500 ft. put-up available in Black, Red, Yellow, Violet or Natural only. *Available in Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or Natural.																			
RG-59/U Type • 20 AWG Solid .032″ Bare Copper • Duofoil + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*																			
SDI/HDTV Digital Video 75°C	**1505A**	NEC: CMR CEC: CMG FT4	500▼ 1000✱ 5000✱	152.4 304.8 1524.0	17.5 36.0 165.4	8.0 16.4 75.2	20 AWG (solid) .032″ BC 10.0Ω/M′ 32.8Ω/km	.145	3.68	Duofoil + 95% TC Braid 3.8Ω/M′ 12.5Ω/km	.234	5.94	75	83%	16.3	53.5	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.3 .6 .9 2.1 2.7 3.8 4.4 5.5 6.4 6.5 7.6 9.3 11.6 13.4	1.0 1.8 2.9 6.9 8.9 12.5 14.4 18.0 21.0 21.3 24.9 30.5 38.0 44.0
											For Plenum version of 1505A, see 1506A. Also available in bundled versions. See 7794A through 7798A. 100% Sweep tested. 5 MHz to 3 GHz.								
▼500 ft. put-up available in Black, Red or Blue only. ✱1000 ft. and 5000 ft. put-ups available in all ten colors: Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray or White.																			

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.
For additional selection of Belden® Video Cables, refer to the Coaxial and Broadcast Cables sections of this catalog.

†Spools are one piece, but length may vary ±10% from length shown.

Video Cable

Precision Video Cables for Analog and Digital Applications
Subminiature and Standard Analog RG-59/U Types

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
Subminiature RG-59/U Type • 23 AWG Solid .023″ Bare Copper • Duofoil® + 95% Tinned Copper Braid Shield																			
Gas-injected Foam HDPE Insulation • PVC Jacket (Available in 10 colors)*																			
SDI/HDTV Digital Video 75°C	**1855A**	NEC: CMR CEC: CMG FT4	500▲ 1000 U-1000◆	152.4 304.8 U-304.8	9.0 18.0 18.0	4.1 8.2 8.2	23 AWG (solid) .023″ BC 20.1Ω/M′ 65.9Ω/km	.102	2.59	Duofoil + 95% TC Braid 7.6Ω/M′ 24.9Ω/km	.159	4.03	75	83%	16.3	53.5	1	.4	1.3
																	3.6	.8	2.6
																	10	1.2	3.9
																	71.5	3.1	10.0
																	135	3.8	12.5
																	270	5.4	17.7
											Also available in multiples, bundled. See 7787A through 7792A.						360	6.2	20.3
																	540	7.7	25.3
											100% Sweep tested. 5 MHz to 3 GHz.						720	9.5	31.1
																	750	9.6	31.5
																	1000	10.5	34.4
																	1500	13.0	42.6
																	2250	16.0	52.5
																	3000	18.5	60.7

▲500 ft. put-up available in Black only.
◆U-1000 ft. put-up available in Gray only.

Standard Analog • RG-59/U Type • 23 AWG Solid .023″ Bare Copper • 95% Bare Copper Braid Shield																			
Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 80°C)	**8241B**	NEC: CM CEC: CM	U-1000 1000	U-304.8 304.8	38.0 37.0	17.3 16.8	23 AWG (solid) .023″ BC 20.4Ω/M′ 66.9Ω/km	.146	3.71	BC Braid 95% Shield Coverage 2.9Ω/M′ 9.5Ω/km	.242	6.15	75	66%	20.5	67.3	1	.4	1.3
																	10	1.1	3.6
																	50	2.4	7.9
																	100	3.4	11.2
																	200	4.9	16.1
																	400	7.0	23.0
																	700	9.7	31.8
																	900	11.1	36.4
																	1000	12.0	39.4

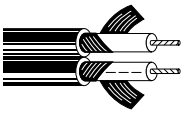
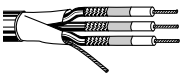
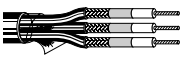
BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of RG/U cables not listed.
For additional selection of Belden® Video Cables, refer to the Coaxial and Broadcast Cables sections of this catalog.

*Available in Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White or Black.

Video Cable

High-Flex SVHS Cables and Bundled RGB Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
High-Flex SVHS • 30 AWG Stranded (7x38) .012″ Tinned Copper • Tinned Copper Serve (90% Shield Coverage)																				
Foam HDPE Insulation • Matte Black PVC Jacket (One Coax Printed and Striped for Identification)																				
Parallel Zip Construction 	**1807A**		2	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	8.0 8.5 15.0 19.0	3.6 3.9 6.8 8.6	30 AWG (7x38) .012″ TC 100.0Ω/M′ 328.0Ω/km	.058	1.47	TC Serve 90% Shield Coverage 7.5Ω/M′ 24.6Ω/km	.110 x .230	2.79 x 5.84	75	78%	17.3	56.7	1 5 10 30 50 100 200 400 700 900 1000	.6 1.4 2.1 3.8 5.1 7.6 11.3 16.9 23.3 26.9 28.6	2.0 4.6 6.9 12.5 16.7 24.9 37.1 55.4 76.4 88.2 93.8
													For Plenum version of 1807A, see 7700A.							
Bundled RGB • Miniature • 30 AWG Stranded (7x38) .012″ TC • Duofoil® + 90% TC Braid (Coaxes) • 100% Overall Beldfoil® Shield																				
Foam HDPE Insulation • Overall Black PVC Jacket (Color Code: Red, Green, Blue, White, Yellow)																				
UL AWM Style 1354 (30V 60°C) 	**1520A**	NEC: CL2	3	500 1000	152.4 304.8	25.0 50.0	11.4 22.7	30 AWG (7x38) .012″ TC 100.0Ω/M′ 328.0Ω/km	.056 Coax OD: .102	1.42 2.59	Coaxes: Duofoil + 90% TC Braid Overall: Beldfoil 9.5Ω/M′ 31.2Ω/km	.283	7.19	75	78%	17.3	56.7	1 5 10 30 50 100 200 400 700 900 1000	.8 1.5 2.2 4.0 5.4 8.2 12.5 18.9 26.5 30.8 32.8	2.6 4.9 7.2 13.1 17.7 26.9 41.0 62.0 86.9 101.0 107.6
	1521A	NEC: CL2	4	500 1000	152.4 304.8	30.0 60.0	13.6 27.3	same as above	.056 Coax OD: .102	1.42 2.59	same as above	.310	7.87							
	1522A	NEC: CL2	5	500 1000	152.4 304.8	34.0 68.0	15.5 30.9	same as above	.056 Coax OD: .102	1.42 2.59	same as above	.338	8.59	100% Sweep tested. 10 MHz to 40 MHz.						
Bundled RGB • High-Flex • 26 AWG Stranded (7x34) .019″ Bare Copper • Duofoil + 93% Tinned Copper Braid Shield																				
Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: Red, Green, Blue, White, Yellow)																				
60°C 	**1406B**		3	1000†	304.8	75.0	34.1	26 AWG (7x34) .019″ BC 41.5Ω/M′ 136.0Ω/km	.090 Coax OD: .146	2.29 3.71	Duofoil + 93% TC Braid 8.6Ω/M′ 28.2Ω/km	.388	9.86	75	78%	17.3	56.7	1 5 10 30 50 100 200 400 700 900 1000	.6 1.3 1.8 3.1 3.9 5.4 7.5 10.4 13.5 15.2 15.9	2.0 4.3 5.9 10.2 12.8 17.7 24.6 34.1 44.3 49.9 52.2
	1407B		4	1000†	304.8	100.0	45.5	same as above	.090 Coax OD: .146	2.29 3.71	same as above	.455	11.56							
	1417B		5	1000†	304.8	120.0	54.5	same as above	.090 Coax OD: .146	2.29 3.71	same as above	.477	12.12	100% Sweep tested. 10 MHz to 40 MHz.						

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.
For additional selection of Belden® Video Cables, refer to the Coaxial and Broadcast Cables sections of this catalog.

†Spools are one piece, but length may vary ±10% from length shown.

Audio Cable

High-Conductivity Electrolytic Tough Pitch (ETP) Copper Speaker Cables and AES/EBU Digital Audio Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
Speaker Cables • 16 AWG Stranded (26x30) • ETP High-conductivity Copper • Parallel: (1) Tinned, (1) Bare											
PVC Insulation • Clear PVC Jacket											
Parallel Zip Construction 300V 60°C	**9716**		2	U-1000 1000	U-304.8 304.8	8.0 7.0	3.6 3.2	.027	.69	.115 x .230	2.92 x 5.84
Speaker Cables • 14 AWG Stranded (19x27) • ETP High-conductivity Copper • Parallel: (1) Tinned, (1) Bare											
PVC Insulation • Clear PVC Jacket											
Parallel Zip Construction 60°C	**9717**		2	U-1000 1000	U-304.8 304.8	43.0 42.0	19.5 19.1	.035	.89	.146 x .292	3.71 x 7.42
Speaker Cables • 12 AWG Stranded (65x30) • ETP High-conductivity Copper • Parallel: (1) Tinned, (1) Bare											
PVC Insulation • Clear PVC Jacket											
Parallel Zip Construction 60°C	**9718**		2	500 1000	152.4 304.8	33.0 66.0	15.0 30.0	.045	1.14	.185 x .370	4.70 x 9.40

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
AES/EBU Digital Audio • 24 AWG Stranded (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil® Shield • 24 AWG Drain Wire																		
Datalene® Insulation • Slate Gray or Violet PVC Jacket																		
60°C	**1800B**	NEC: CMG CEC: CMG FT4	1	Black, Red	500◆ U-1000 1000 5000◆	152.4 U-304.8 304.8 1524.0	12.0 18.0 18.0 88.8	5.5 8.2 8.2 40.4	23.7Ω/M′ 77.7Ω/km	18.9Ω/M′ 62.0Ω/km	.177	4.57	110	76%	13	43	26	85

For cross-connect use with 1803F (et al.) Digital Audio Snake Cables, see page 12.29.

For Plenum version of 1800B, see 1801B.

◆500 ft. put-up available in Gray only. 5000 ft. put-up available in Violet only.
The jacket and shield are bonded so both can be removed with automatic stripping equipment.

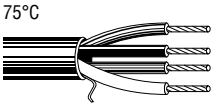
BC = Bare Copper • DCR = DC Resistance • TC = Tinned Copper

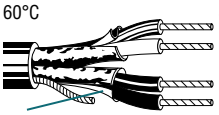
For additional selection of Belden® Audio Cables, refer to the Broadcast Cables section of this catalog.

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

Audio Cable

High-Strand Multi-conductor Audio Cables and Audio and Control Interconnect Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Outer Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
High-Strand Audio • 16 AWG Stranded (65x34) Bare High-conductivity ETP Copper • Highly Stranded for Ultra Flexibility • Rip Cord														
High-Grade PVC Insulation • PVC Jacket (Available in Blue, Green, White, Black or Gray)														
75°C Jacket sequentially marked at 2 ft. intervals.	**5200UP** new	NEC: CM	2	Black, White	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	14.0 15.5 27.0 28.0	6.4 7.0 12.3 12.7	.010	.25	.015	.38	.208	5.28
75°C  Jacket sequentially marked at 2 ft. intervals.	**5202UP** new	NEC: CM	4	Black, White, Red, Green	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	25.5 27.0 51.0 51.0	11.6 12.3 23.2 23.2	.010	.25	.015	.38	.244	6.20
High-Strand Audio • 14 AWG Stranded (42x30) Bare High-conductivity ETP Copper • Highly Stranded for Ultra Flexibility • Rip Cord														
High-Grade PVC Insulation • PVC Jacket (Available in Blue, Green, White, Black or Gray)														
75°C Jacket sequentially marked at 2 ft. intervals.	**5100UP** new	NEC: CL3	2	Black, White	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	21.5 23.5 42.0 43.0	9.8 10.7 19.1 19.5	.010	.25	.015	.38	.260	6.60
High-Strand Audio • 12 AWG Stranded (65x30) Bare High-conductivity ETP Copper • Highly Stranded for Ultra Flexibility • Rip Cord														
High-Grade PVC Insulation • PVC Jacket (Available in Blue, Green, White, Black or Gray)														
75°C Jacket sequentially marked at 2 ft. intervals.	**5000UP** new	NEC: CL3	2	Black, White	U-500 500 1000	U-152.4 152.4 304.8	31.5 33.5 64.0	14.3 15.2 29.1	.010	.25	.018	.46	.302	7.67
High-Strand Audio • 10 AWG Stranded (65x28) Bare High-conductivity ETP Copper • Highly Stranded for Ultra Flexibility														
High-Grade PVC Insulation • PVC Jacket (Available in Blue, Green, White, Black or Gray)														
75°C Jacket sequentially marked at 2 ft. intervals.	**5T00UP** new	NEC: CL2 Audio Use Only	2	Black, White	500 1000	152.4 304.8	44.0 87.0	20.0 39.5	.015	.38	.026	.66	.356	9.04

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
Audio and Control Interconnect • 22 AWG Stranded (7x30) • Tinned Copper • Twisted Pairs • 24 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
60°C  Z-Fold®	**8723**	NEC: CM CEC: CM	2	Red/Black, Green/White	100 U-500 500 U-1000 1000 1640 U-2000 2000 3280 5000 10000	30.5 U-152.4 152.4 U-304.8 304.8 499.9 U-609.6 609.6 999.7 1524.0 3048.0	2.3 10.5 10.0 20.0 20.0 32.8 40.0 40.0 65.6 95.0 200.0	1.0 4.8 4.5 9.1 9.1 14.9 18.2 18.2 29.8 43.2 90.9	15.0Ω/M′ 49.2Ω/km	16.6Ω/M′ 54.5Ω/km	.168	4.27	45	66%	35	115	62	203

Pairs Individually Shielded with 100% Beldfoil®

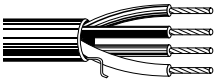
For Plenum versions of 8723, see 88723, 87723 or 82723.

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors. **Capacitance between one conductor and other conductors connected to shield.

Audio, Alarm and Security Cable

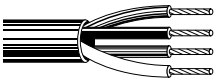
Multi-conductor Cables for Residential, Light Commercial and Institutional Applications

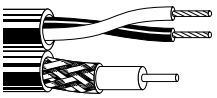
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Outer Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
Multi-conductor • 16 AWG Stranded (19x29) Bare Copper • Rip Cord														
Non-Plenum • PVC Insulation • Gray PVC Jacket														
300V 75°C	**5200UE**	NEC: CMR CEC: CMG FT4	2	Black, Red	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	13.0 12.5 25.0 25.0	5.9 5.7 11.4 11.4	.010	.25	.015	.38	.184	4.67
Jacket sequentially marked at 2 ft. intervals.														
300V 75°C 	**5202UE**	NEC: CMR CEC: CMG FT4	4	Black, Red, White, Green	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	23.0 23.5 46.0 51.0	10.5 10.7 20.9 23.2	.010	.25	.015	.38	.216	5.49
Jacket sequentially marked at 2 ft. intervals.														
Plenum • Flamarrest® Insulation • Natural Flamarrest Jacket														
300V 75°C	**6200UE**	NEC: CMP CEC: CMP FT6	2	Black, Red	500 U-1000 1000	152.4 U-304.8 304.8	13.0 26.0 26.0	5.9 11.8 11.8	.009	.23	.015	.38	.180	4.57
Jacket sequentially marked at 2 ft. intervals.														
Multi-conductor • 14 AWG Stranded (19x27) Bare Copper • Rip Cord														
Non-Plenum • PVC Insulation • Gray PVC Jacket														
300V 75°C	**5100UE**	NEC: CL3R	2	Black, White	500 U-1000 1000	152.4 U-304.8 304.8	19.5 38.0 39.0	8.9 17.3 17.7	.014	.36	.015	.38	.234	5.94
Jacket sequentially marked at 2 ft. intervals.														
Plenum • Flamarrest Insulation • Natural Flamarrest Jacket														
150V 75°C	**6100UE**	NEC: CL2P	2	Black, White	500 U-1000 1000	152.4 U-304.8 304.8	20.0 39.0 40.0	9.1 17.7 18.2	.011	.28	.015	.38	.222	5.64
Jacket sequentially marked at 2 ft. intervals.														
Multi-conductor • 12 AWG Stranded (19x25) Bare Copper • Rip Cord														
Non-Plenum • PVC Insulation • Gray PVC Jacket														
300V 75°C	**5000UE**	NEC: CL3R	2	Black, White	500 1000	152.4 304.8	28.5 57.0	13.0 25.9	.014	.36	.015	.38	.268	6.81
Jacket sequentially marked at 2 ft. intervals.														

For additional selection of Belden® Security, Alarm and Communications Cables, refer to the New Generation® Cables section of this catalog.

Alarm, Security and Audio Cable

Multi-conductor Cables for Residential, Light Commercial and Institutional Applications
Coaxial and Composite Cables for Surveillance and CCTV Applications

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Outer Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
Multi-conductor • 22 AWG Stranded (7x30) Bare Copper														
Polypropylene Insulation • PVC Jacket (Available in Beige, Brown, Orange, Yellow, Green, Blue, Violet, Gray or Natural)														
300V 75°C	**5500UG** new	NEC: CM CEC: CM FT1	2	Black, Red	U-500 U-1000	U-152.4 U-304.8	5.0 9.0	2.3 4.1	.006	.15	.015	.38	.114	2.90
Jacket sequentially marked at 2 ft. intervals.														
300V 75°C 	**5502UG*** new	NEC: CM CEC: CM FT1	4	Black, Red, White, Green	U-500 * U-1000 *	U-152.4 U-304.8	7.5 14.0	3.4 6.4	.006	.15	.015	.38	.131	3.33
*5502UG not available in Orange. Jacket sequentially marked at 2 ft. intervals.														
Multi-conductor • 18 AWG Stranded (7x26) Bare Copper														
Polypropylene Insulation • PVC Jacket (Available in Black, Gray or Natural)														
300V 75°C	**5300UG** new	NEC: CM CEC: CM FT1	2	Black, Red	U-500 U-1000	U-152.4 U-304.8	8.5 16.0	3.9 7.3	.006	.15	.015	.38	.148	3.76
Jacket sequentially marked at 2 ft. intervals.														

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Nominal DCR		Nominal Core OD		Nominal OD		Nom. Imp. (Ω)
			Ft.	m	Lbs.	kg	Conductor	Shielding	Inch	mm	Inch	mm	
Coaxial • RG-59/U Type • 20 AWG Solid Bare Copper • Bare Copper Braid Shield (95% Coverage)													
Foam Polyolefin Insulation • Black PVC Jacket													
75°C	**543945**	NEC: CM CEC: CM FT1	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	16.0 16.0 32.0 32.0	7.3 7.3 14.5 14.5	10.0Ω/M′ 32.8Ω/km	3.5Ω/M′ 11.5Ω/km	.145	3.68	.232	5.89	75
Jacket sequentially marked at 2 ft. intervals.													
Composite • RG-59/U Type, 20 AWG Coax Solid Bare Copper w/ 95% BC Braid Shield • **18 AWG** UTP Stranded (7x26) Bare Copper													
Foam Polyolefin Insulation (Coax) • **PVC Insulation** (Pair—Color Code: Red, Black) • **Black PVC Jacket**													
Siamese Configuration 75°C 	**549945**	NEC: CM CEC: CM FT1	500 1000	152.4 304.8	30.0 60.0	13.6 27.3	Coax: 10.0Ω/M′ 32.8Ω/km Each Pair: 6.5Ω/M′ 21.3Ω/km	3.5Ω/M′ 11.5Ω/km	Coax OD: .145 Pair OD: .066	3.68 1.68	.232 x .460	5.89 x 11.68	75
Jacket sequentially marked at 2 ft. intervals.													

BC = Bare Copper • DCR = DC Resistance • UTP = Unshielded Twisted Pair

For additional selection of Belden® Security and CCTV Cables, refer to the New Generation® and Coaxial Cables sections of this catalog.

Belden

15 Industrial Automation and Control Cables

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ControlNet is a ControlNet International trademark.
DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.
Interbus is a Phoenix Contact trademarks.
Seriplex is a Square D/Schneider AEG registered trademark.

Please refer to “Terms of Use of Master Catalog” on page 16.30.

Introduction

When it's time to specify cabling to meet the needs of your current or future control, power, video or data applications, Belden's wide range of industrial automation, industrial equipment and instrumentation/process control cable products offer the consistent quality, versatility and proven performance to meet your long-term requirements. They're expressly designed with multiple armoring and jacketing options to meet the harsh conditions found in the petrochemical, pharmaceutical, mining, power generation, wastewater treatment, pulp and paper, food processing and transportation industries.

To satisfy the demanding applications found in these industries, Belden employs industry-standard quality control procedures and the very latest manufacturing processes to ensure absolute cable consistency during every production run.

In addition, to further ensure you get the right cable for your needs, our staff of highly knowledgeable application and technical specialists stand ready to guide you through the cable selection process.

Innovative Technology

When shielding is required, our innovative technology delivers maximum effectiveness. Belden's exclusive patented Beldfoil® design, with its aluminum/polyester foil, was the first shield to offer 100 percent cable protection against radiated emission and ingress at audio and radio frequencies.

Intrinsically Safe Wiring

In accordance with NEC Article 504, intrinsically safe cables are colored blue for easy identification. Belden offers several industrial cables in intrinsically safe blue to meet your requirements for intrinsically safe wiring. Contact the NEC and/or your local inspector for specific guidelines.

Custom Capabilities

UL PLTC and TC Listed constructions can be produced with XLPE (cross-linked polyethylene) insulation and/or a CPE Jacket. Other alternative insulating and jacketing materials are available for various hazardous environments with UL Listing.

Plus, most of our Industrial cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find an Industrial cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Armoring Capabilities

Belden also has the capability to protect electronic, instrumentation and control cables with interlocking armor and smooth or corrugated protective metal tapes.

To Specify Part Number:

1	2	3456
Overall Jacket Type	Armor Type	Core Trade Number

Overall Jacket Type

Code	Material
1	PVC
3	CPE
4	TPE
5	HDPE
6	Oil Res II
7	Haloarrest® I

Armor Type

Code	Material
2	Aluminum Interlock
3	Steel Interlock

PLC/DCS Cable Cross Reference Guide

Part No.	Description
ABB/Bailey Controls	
Infinet	
9880	Network Trunk Cable
9463	Blue Hose® (Standard)
Masterpiece 200	
9880	Network Trunk Cable
9907	Thin Network Trunk Cable
MICRO-DCI	
3105A	1 Pair, RS-485
MICROLINK	
9860	Twinax, 16 AWG, 124 Ohm
Modcell	
3105A	1 Pair, RS-485
Allen-Bradley/Rockwell Automation	
ControlNet™	
See Protocol listings on page 15.4.	
DeviceNet™	
See Protocol listings on page 15.4.	
DH	
9463	Blue Hose (Standard)
9463F	Flexible Version (9463)
129463	Aluminum Armor (9463)
139463	Steel Armor (9463)
189463	Cast Aluminum (9463)
YR28826	Dual Version (9463)
9463DB	Direct Burial (9463)
YR29565	Various Color Jackets (9463)
3072F	600V TC Rated (9463)
YR41101	Low Smoke, Halogen Free
YR28764	Super Thick (PLTC)
89463	FEP* 200°C, Plenum
DH-485	
3074F	600V Tray Cable
3106A	1.5 Pair, RS-485 (PLTC)
9842	2 Pair, RS-485
YM39500	Flexible Version (3106A)
Longline Communications	
8723	Interface Cable
88723	Plenum Version
Cutler-Hammer/Westinghouse	
IMPACC System	
YR29090	Proprietary Trunk Cable
I/Q System	
9463	Blue Hose (Standard)

*Fluorinated Ethylene-propylene

ControlNet is a ControlNet International trademark.
DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.

PLC/DCS Cable Cross Reference Guide *(continued)*

Part No.	Description
Emerson Process Management (Fisher/Rosemount Controls)	
Fieldbus (Type SP50 ISA/IEC)	
See Protocol listings on page 15.4.	
Hart	
See Protocol listings on page 15.4.	
Provox Plus	
3094A	RG-11 Quad Shield PVC
3131A	RG-6 Quad Shield PVC
GE Fanuc	
Genius I/O System	
YR29841	PLTC Version
9182	Communications Bus
89182	Plenum Version
Honeywell	
Access 4000 System	
9248	RG-6 PVC
Fieldbus (Type SP50 ISA/IEC)	
See Protocol listings on page 15.4.	
IPC 620 System I/O	
9271	Twinax, 25 AWG, 124 Ohm
IPC 620 System Serial Interface	
9729	Up to 4,000 ft.
9182	Up to 10,000 ft.
89182	Plenum
3000 UCN & LCN	
3131A	RG-6 Quad Shield PVC
3094A	RG-11 Quad Shield PVC
Honeywell Microswitch Division	
Smart Distributed System	
3086A	Mini
3087A	Micro
Invensys/Foxboro	
Fieldbus (Type SP50 ISA/IEC)	
See Protocol listings on page 15.4.	
I/A Series Carrier Band	
8233	Small Trunk
3095A	Plenum
9290	Drop Cable
I/A Series Fieldbus	
9207	Twinax
89207	200°C, Plenum
3073F	600V Tray Cable
I/A Series Node Bus	
9880	Trunk Cable
89880	Plenum Version

Part No.	Description
Limitorque	
DCC100	
3105A	Actuator Bus Cable, 1 Pair, RS-485
Matsushita	
FP Series C-NET	
9207	Twinax, 20 AWG, Stranded, 100 Ohm
9860	Twinax, 16 AWG, Solid, 124 Ohm
FP Series MEWNET-F	
9207	Twinax, 20 AWG, Stranded, 100 Ohm
9860	Twinax, 16 AWG, Solid, 124 Ohm
FP Series MEWNET-H	
9248	RG-6, 75 Ohm, 18 AWG
FP Series MEWNET-TR	
9207	Twinax, 20 AWG, Stranded, 100 Ohm
9860	Twinax, 16 AWG, Solid, 124 Ohm
FP Series MEWNET-W	
9207	Twinax, 20 AWG, Stranded, 100 Ohm
9806	4 Pair, RS-232, RS-422
FP Series MEWNET-W2	
9207	Twinax, 20 AWG, Stranded, 100 Ohm
9860	Twinax, 16 AWG, Solid, 124 Ohm
FP Series TRNET	
9207	Twinax, 20 AWG, Stranded, 100 Ohm
9860	Twinax, 16 AWG, Solid, 124 Ohm
Modicon/Schneider AEG	
Modbus	
8777	Modem Drop Cable, 22 AWG, 3 Pair
128777	Aluminum Armor (8777)
138777	Steel Armor (8777)
88777	FEP* 200°C, Plenum
Modbus II	
3092A	RG-6 Quad Shield PVC
3132A	RG-6 Quad Shield, 150°C, Plenum
3092F	RG-6 Quad Shield PVC, Flexible Version
123092A	Aluminum Armor (3092A)
133092A	Steel Armor (3092A)
Modbus Plus	
YM29560	24 AWG, 1 Pair, RS-485
YC39000	Aluminum Armor (YM29560)
YC39222	Steel Armor (YM29560)
YQ29258	24 AWG, 1 Pair, 150°C, Plenum

Part No.	Description
Modicon/Schneider AEG *(continued)*	
Remote I/O	
3092A	RG-6 Quad Shield PVC
3092F	RG-6 Quad Shield PVC, Flexible Version
123092A	Aluminum Armor (3092A)
133092A	Steel Armor (3092A)
123092F	Aluminum Armor, RG-6 Quad Shield PVC
3132A	RG-6 Quad Shield, 150°C, Plenum
3094A	RG-11 Quad Shield PVC
123094A	Aluminum Armor (3094A)
133094A	Steel Armor (3094A)
3095A	RG-11 Quad Shield, 150°C, Plenum
Omron	
SYSBUS-2	
3073F	600V Tray Cable Twinax
SYSMAC LINK	
9231	Coax
Phoenix Contact	
DeviceNet™	
See Protocol listings on page 15.4.	
Interbus®-S	
See Protocol listings on page 15.4.	
Profibus DP FMS & PA	
See Protocol listings on page 15.4.	
Reliance/A-B	
Auto Max Distributed Power	
MTB6002	2 Fiber Breakout
I100255	2 Fiber Loose Tube PVC
I100266	2 Fiber Loose Tube CPE
R-Net	
9259	RG-59 PVC
89259	RG-59, 200°C, Plenum
Rotork	
Pakscan II E RS-485	
3105A	22 AWG, 1 Pair, RS-485
Siemens/Moore	
FMC (Field Mountable Controller)	
3105A	1 Pair, RS-485
3106A	1.5 Pair, RS-485
3107A	2 Pair, RS-485
3108A	3 Pair, RS-485
3109A	4 Pair, RS-485

*Fluorinated Ethylene-propylene

DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.
Interbus is a Phoenix Contact trademark.

PLC/DCS Cable Cross Reference Guide *(continued)*

Part No.	Description
Siemens/Moore *(continued)*	
Hiway	
9860	Network Trunk Cable
MODULNET	
3094A	RG-11 Quad Shield PVC
3131A	RG-6 Quad Shield PVC
Profibus DP & FMS (Purple)	
See Protocol listings on this page.	
Profibus PA (Blue)	
See Protocol listings on this page.	
SINEC Series H1	
9907	Thin Network Trunk Cable
9880	Network Trunk Cable
SINEC Series H2B	
3131A	RG-6 Quad Shield
3094A	RG-11 Quad Shield
SINEC Series L1	
3107A	2 Pair, RS-485
SINEC Series L2	
3079A	300V Twinax
Thicknet Ethernet Trunk	
9880	Network Trunk Cable
129880	Aluminum Interlocked Armor Trunk
139880	Steel Interlocked Armor Trunk
Thinnet Ethernet Trunk	
9907	Thin Network Trunk Cable
Smar	
Fieldbus (Type SP50 ISA/IEC)	
See Protocol listings on this page.	
Profibus DP, FMS & PA	
See Protocol listings on this page.	
RS-485	
See Protocol listings on this page.	
Square D/Schneider AEG	
FIP/Fieldbus	
3079A	22 AWG, 1 Pair, Shielded
123079A	Aluminum Armor (3079A)
Model 50, RS-422 Cable	
8760	18 AWG, 1 Pair, Shielded
128760	Aluminum Armor (8760)
Passport I/O — I/O Net	
3105A	22 AWG, 1 Pair, RS-485
123105A	Aluminum Armor (3105A)
3106A	22 AWG, 1.5 Pair, RS-485
123106A	Aluminum Armor (3106A)

Part No.	Description
Square D/Schneider AEG *(continued)*	
Seriplex®	
3124A	CBL-1822-P20
3125A	CBL-1622-P16
3126A	CBL-162212-P16
123124A	Aluminum Armor (3124A)
123125A	Aluminum Armor (3125A)
123126A	Aluminum Armor (3126A)
SY/Net Network Trunk Cable	
9463	Blue Hose® (Standard)
9463F	Flexible Version (9463)
129463	Aluminum Armor (9463)
139463	Steel Armor (9463)
189463	Cast Aluminum (9463)
YR28826	Dual Version (9463)
9463DB	Direct Burial (9463)
YR29565	Various Color Jackets (9463)

Part No.	Description
Square D/Schneider AEG *(continued)*	
SY/Net Network Trunk Cable	
3072F	600V TC Rated (9463)
YR41194	Low Smoke, Halogen Free
YR28764	Super Thick (PLTC)
89463	FEP* 200°C, Plenum
SY/Net TNIM Cable	
9272	20 AWG, 1 Pair, Shielded
89272	FEP* 200°C, Plenum
Yokogawa	
Fieldbus (Type SP50 ISA/IEC)	
See Protocol listings on this page.	
Westinghouse	
WDPF	
9292	RG-11 PVC

Industrial Communications Protocol

ControlNet™	
3092A	RG-6 PVC Quad Shield
3092F	RG-6 PVC Quad Shield, Flex Version, Aluminum Braid
YR28890	RG-6 PVC Flex Version, Copper Braid
3093A	RG-6 FEP* Quad Shield, Plenum
123092A	Aluminum Armor (3092A)
133092A	Steel Armor (3092A)
DeviceNet™	
3082A	PVC (Thick)
3082F	High-Flex (Thick)
3082K	CL2 (Flat)
3082KP	Auxiliary Power (Flat)
3083A	CPE (Thick)
3084A	PVC (Thin)
3084F	High-Flex (Thin)
3085A	CPE (Thin)
7895A	CL2 PVC (Cable III Mid)
7896A	CL1 PVC (Type V Trunk Cable)
7897A	CL1 PVC (Thick)
7900A	CL1 Unshielded (Drop Cable IV)
Fieldbus (Type SP50 ISA/IEC)	
3076F	Type A, H1 1900m (31.25K)
3077F	Type B, H1 1200m (31.25K)
HSE	Copper & Fiber (See *Cables for Industrial Ethernet* on page 15.5)

Hart	
3105A	1 Pair, RS-485
3106A	1.5 Pair, RS-485
3107A	2 Pair, RS-485
Interbus®-S	
3119A	18/3C, 24/3 Pair, Composite
3120A	24/3 Pair
Profibus DP & FMS (Purple)	
3079A	300V Twinax
Profibus PA (Blue)	
3076F	18 AWG, 2 Conductors, Type A
RS-485	
9841	1 Pair
82841	1 Pair, Plenum
89841	1 Pair, Plenum, High-Temperature
9842	2 Pair
82842	2 Pair, Plenum
9843	3 Pair
9844	4 Pair
3105A	1 Pair (PLTC)
3106A	1.5 Pair (PLTC)
3107A	2 Pair (PLTC)
3108A	3 Pair (PLTC)
3109A	4 Pair (PLTC)

*Fluorinated Ethylene-propylene

ControlNet is a ControlNet International trademark.
DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.
Interbus is a Phoenix Contact trademarks.
Seriplex is a Square D/Schneider AEG registered trademark.

Industrial Data Solutions® — Industrial Ethernet

DataTuff® and MediaTuff® Twisted Pair and TrayOptic® Fiber Optic Cables — Overview

The reliability of your industrial Ethernet network depends on the cable infrastructure. Data transmission errors can lead to interruptions in critical control functions resulting in lost production time and even safety issues. Belden's family of industrial Ethernet cables is designed to withstand the rigors of industrial environments. Whether it's exposure to oil and sunlight, temperature variation, abrasion and crushing, or the presence of electromagnetic interference (EMI) or radio frequency interference (RFI), turn to Belden for the solution

Belden offers an extensive line of high performance cables in both copper constructions with DataTuff cables as well as fiber optic designs with TrayOptic cables.

Performance Assurance from Blue Hose® to Industrial Ethernet

To assist you in achieving optimum network performance, Belden has built quality and reliability into each cable it manufactures. Decades of leadership and experience in supplying reliable high-end cable solutions, such as Blue Hose, to industrial networks and control systems are combined to give you industrial Ethernet cables that perform to maximum network capability.

Our dedication to quality manufacturing practices and processes assures consistent products of uncompromising quality.

Installable Performance™ with Patented Bonded-Pair Technology

Belden's Bonded-Pair versions of DataTuff cables are unique in the industry to give you an Installable Performance advantage. This patented design yields superior electrical performance even after the effects and stresses of pulling, twisting and bending during typical installations. This performance advantage is achieved by bonding the individual insulated conductors along their longitudinal axes, resulting in uniform conductor-to-conductor spacing and the elimination of gaps between conductors that can occur during installation. This is a critical construction feature because non-uniform conductor spacing and gaps change the physical characteristics of the cable such that the electrical performance of the cable suffers. Only Bonded-Pair cables deliver the electrical integrity you demand.

TrayOptic Cables

Belden® TrayOptic cables are a line of indoor/outdoor fiber optic cables designed to meet the demanding requirements of industrial applications. When the installation demands the combination of sophisticated fiber optic technology and rugged durability, turn to Belden.

Cables for Industrial Ethernet (IEEE 802.3 and TIA/EIA-568-B)

Fiber (62.5/125/245 Micron) Multimode • PVC or CPE Jackets

Part No.	Jacket Material	No. of Fibers
Riser (NEC/CEC OFNR FT4)		
I100255	PVC	2
I100266	CPE	2
I100455	PVC	4
I100466	CPE	4
I100655	PVC	6
I100666	CPE	6
I400855	PVC	8
I400866	CPE	8
I601055	PVC	10
I601255	PVC	12
I601266	CPE	12
Tray (NEC/CEC OFN FT1)		
I601855	PVC	18
I601866	CPE	18
I602455	PVC	24
I602466	CPE	24

50 Micron and Single-mode fiber available upon request.

Copper • Twisted Pairs • Heavy-duty Sunlight and Oil-resistant Jackets

Part No.	Description	Shielding	Jacket
Category 5e			
7923A	Bonded-Pairs	Unshielded	
7929A	Bonded-Pairs	Foil	
7921A	Bonded-Pairs	Foil + Braid	
11700A	Bonded-Pairs	Unshielded	Upjacketed
121700A	Bonded-Pairs	Unshielded	Armored
7924A	Bonded-Pairs	Unshielded	Flexible
7928A	Bonded-Pairs	Unshielded	Hi & Low Temp, Oil Res II, Gas Res
7918A	Unbonded	Unshielded	
7919A	Unbonded	Foil	
Category 6			
11872A	Bonded-Pairs	Unshielded	Upjacketed
121872A	Bonded-Pairs	Unshielded	Armored

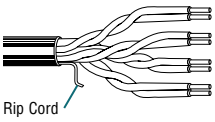
Industrial Data Solutions® — Industrial Ethernet

Category 5e DataTuff® Twisted Pair Cables
Heavy-Duty Sunlight and Oil-Resistant Jackets

24 AWG Bonded-Pairs Solid Bare Copper • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Black PVC Jacket

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Nom. Insulated Conductor OD Inch	Nom. Insulated Conductor OD mm	Nominal OD Inch	Nominal OD mm	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
	7923A new	NEC:	4	1000	304.8	28.0	12.7	.038	.97	.230	5.94	1	2.0	65.3	63.3	60.8	100±12	20.0
		CMR		2000	609.6	54.0	24.5	x	x			4	4.0	56.3	52.3	48.7	100±12	23.0
		CEC:						.075	1.91			8	5.7	51.8	46.1	42.7	100±12	24.5
		CMR FT4										10	6.4	50.3	43.9	40.8	100±12	25.0
												16	8.1	47.3	39.1	36.7	100±12	25.0
												25	10.3	44.3	34.1	32.8	100±15	24.3
												31.25	11.6	42.9	31.3	30.9	100±15	23.6
												62.5	16.8	38.4	21.6	24.8	100±15	21.5
												100	21.7	35.3	17.1	20.8	100±15	20.1
												155	27.7	32.5	4.7	16.9	100±18	19.0
												200	32.0	30.8	3.0	14.7	100±18	19.0
												250	36.4	29.3	—	12.8	100±20	18.0
												350	44.3	27.2	—	9.9	100±22	17.0

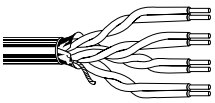


RJ-45 Compatible • -25°C Cold Bend
U.S. Patents 5,606,151 and 5,734,126
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

24 AWG Bonded-Pairs Solid Bare Copper • Overall Beldfoil® Shield • Drain Wire* • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Black PVC Jacket

Shielded	7929A new	NEC:	4	1000	304.8	36.0	16.3	.045	1.14	.265	6.73	1	2.0	62.3	60.3	60.8	100±15	20.0
		CMR		2000	609.6	70.0	31.8	x	x			4	4.1	53.3	49.2	48.7	100±15	23.0
		CEC:						.088	2.24			10	6.5	47.3	41.8	40.8	100±15	25.0
		CMR FT4										16	8.2	44.3	36.0	36.7	100±15	25.0
												31.25	11.7	39.9	28.2	30.9	100±15	23.6
												62.5	17.0	35.4	18.4	24.8	100±15	21.5
												100	22.0	32.3	10.3	20.8	100±15	20.1
												200	32.4	27.8	1.0	14.7	100±25	15.0

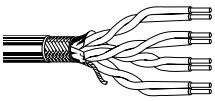


RJ-45 Compatible • -25°C Cold Bend
U.S. Patents 5,606,151 and 5,734,126
Shield is bonded to jacket inner wall for electrical stability.
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

24 AWG Bonded-Pairs Solid Bare Copper • Overall Beldfoil + 70% TC Braid • Solid Spiral Drain Wire • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Black PVC Jacket

Shielded Festoon Cable	7921A new	NEC:	4	1000	304.8	55.0	24.9	.047	1.19	.330	8.38	1	2.0	62.3	60.3	60.8	100±15	20.0
		CMR		2000	609.6	108.0	49.0	x	x			4	4.1	53.3	49.2	48.7	100±15	23.0
		CEC:						.091	2.31			10	6.5	47.3	41.8	40.8	100±15	25.0
		CMR FT4										16	8.2	44.3	36.0	36.7	100±15	25.0
												31.25	11.7	39.9	28.2	30.9	100±15	23.6
												62.5	17.0	35.4	18.4	24.8	100±15	21.5
												100	22.0	32.3	10.3	20.8	100±15	20.1



-25°C Cold Bend
U.S. Patents 5,606,151 and 5,734,126
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • TC = Tinned Copper

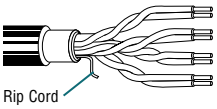
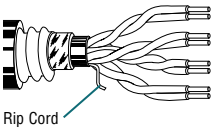
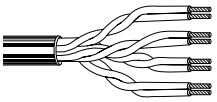
*Drain wire is 24 AWG stranded tinned copper.

Color Codes: DataTuff

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Industrial Data Solutions® — Industrial Ethernet

Category 5e DataTuff® Twisted Pair Cables
Heavy-Duty Sunlight and Oil-Resistant Jackets

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Nom. Insulated Conductor OD Inch	Nom. Insulated Conductor OD mm	Nominal OD Inch	Nominal OD mm	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
24 AWG Bonded-Pairs Solid Bare Copper • Rip Cord • See Color Code Chart (below)																		
Upjacketed • Polyolefin Insulation • PVC Inner Jacket • .035″ Industrial Grade Black or Gray PVC Outer Jacket																		
 Rip Cord	**11700A**	NEC: CMR CEC: CMR FT4	4	1000	304.8	39.0	17.7	.038 x .075	.97 x 1.91	.285 Nominal Core OD: .200	7.24 5.08	1	2.0	65.3	63.3	60.8	100±12	20.0
				3000	914.4	117.0	53.2					4	4.0	56.3	52.3	48.7	100±12	23.0
												8	5.7	51.8	46.1	42.7	100±12	24.5
												10	6.4	50.3	43.9	40.8	100±12	25.0
												16	8.1	47.3	39.1	36.7	100±12	25.0
												25	10.3	44.3	34.1	32.8	100±15	24.3
												31.25	11.6	42.9	31.3	30.9	100±15	23.6
												62.5	16.8	38.4	21.6	24.8	100±15	21.5
												100	21.7	35.3	17.1	20.8	100±15	20.1
												155	27.7	32.5	4.7	16.9	100±18	19.0
												200	32.0	30.8	3.0	14.7	100±18	19.0
												250	36.4	29.3	—	12.8	100±20	18.0
												350	44.3	27.2	—	9.9	100±22	17.0
RJ-45 Compatible • -25°C Cold Bend U.S. Patents 5,606,151 and 5,734,126 Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e																		
24 AWG Bonded-Pairs Solid Bare Copper • Mylar® Wrap • Rip Cord • See Color Code Chart (below)																		
Interlocked AL Armor • Polyolefin Insulation • PVC Inner Jacket • .045″ Industrial Grade Black or Gray PVC Outer Jacket																		
 Rip Cord	**121700A**	NEC: CMG CEC: HL CMG FT4	4	1000	304.8	155.0	70.5	.038 x .075	.97 x 1.91	.530 Nominal Core OD: .200	13.46 5.08	1	2.0	65.3	63.3	60.8	100±12	20.0
				3000	914.4	465.0	211.4					4	4.0	56.3	52.3	48.7	100±12	23.0
												8	5.7	51.8	46.1	42.7	100±12	24.5
												10	6.4	50.3	43.9	40.8	100±12	25.0
												16	8.1	47.3	39.1	36.7	100±12	25.0
												25	10.3	44.3	34.1	32.8	100±15	24.3
												31.25	11.6	42.9	31.3	30.9	100±15	23.6
												62.5	16.8	38.4	21.6	24.8	100±15	21.5
												100	21.7	35.3	17.1	20.8	100±15	20.1
												155	27.7	32.5	4.7	16.9	100±18	19.0
												200	32.0	30.8	3.0	14.7	100±18	19.0
												250	36.4	29.3	—	12.8	100±20	18.0
												350	44.3	27.2	—	9.9	100±22	17.0
RJ-45 Compatible • -25°C Cold Bend U.S. Patents 5,606,151 and 5,734,126 Jacket sequentially marked at 1 meter intervals. • Verified to TIA/EIA-568-B.2, Category 5e																		
24 AWG Bonded-Pairs Stranded (7x32) Tinned Copper • See Color Code Chart (below)																		
Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Black PVC Jacket																		
Flexible 	**7924A** new	NEC: CMR CEC: CMR FT4	4	1000	304.8	30.0	13.6	.039 x .077	.99 x 1.96	.242	6.15	1	2.4	65.3	62.9	60.8	100±12	20.0
				2000	609.6	58.0	26.3					4	4.8	56.3	51.5	48.7	100±12	23.0
												8	6.8	51.8	45.0	42.7	100±12	24.5
												10	7.7	50.3	42.6	40.8	100±12	25.0
												16	9.7	47.3	37.5	36.7	100±12	25.0
												25	12.4	44.3	31.9	32.8	100±15	24.3
												31.25	13.9	42.9	29.0	30.9	100±15	23.6
												62.5	20.2	38.4	18.3	24.8	100±15	21.5
												100	26.0	35.3	9.2	20.8	100±15	20.1
												155	33.2	32.5	—	16.9	100±18	19.0
												200	38.4	30.8	—	14.7	100±18	19.0
												250	43.7	29.3	—	12.8	100±20	18.0
												350	53.2	27.2	—	9.9	100±22	17.0
RJ-45 Compatible • -25°C Cold Bend U.S. Patents 5,606,151; 5,734,126 and 5,763,823 Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e																		

ACR = Attenuation Crosstalk Ratio • AL = Aluminum • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss

Color Codes: DataTuff

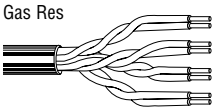
Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Mylar is a DuPont trademark.

Industrial Data Solutions® — Industrial Ethernet

Category 5e DataTuff® Twisted Pair Cables
Heavy-Duty Sunlight and Oil-Resistant Jackets

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths Ft.	Standard Lengths m	Standard Unit Wt. Lbs.	Standard Unit Wt. kg	Nom. Insulated Conductor OD Inch	Nom. Insulated Conductor OD mm	Nominal OD Inch	Nominal OD mm	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
24 AWG Bonded-Pairs Solid Bare Copper • See Color Code Chart (below)																		
FEP Insulation • Black FEP Jacket																		
High & Low Temp Oil Res I & II Gas Res	**7928A** new	NEC: Limited Combustible FHC 25/50 CMP CEC: CMP FT6	4	1000	304.8	24.0	10.9	.036 x .071	.91 x 1.80	.187	4.75	1	2.0	65.3	63.3	60.8	100±12	20.0
												4	4.0	56.3	52.3	48.7	100±12	23.0
												8	5.7	51.8	46.1	42.7	100±12	24.5
												10	6.4	50.3	43.9	40.8	100±12	25.0
												16	8.1	47.3	39.1	36.7	100±12	25.0
												25	10.3	44.3	34.1	32.8	100±15	24.3
												31.25	11.6	42.9	31.3	30.9	100±15	23.6
												62.5	16.8	38.4	21.6	24.8	100±15	21.5
												100	21.7	35.3	17.1	20.8	100±15	20.1
												155	27.7	32.5	4.7	16.9	100±18	19.0
												200	32.0	30.8	3.0	14.7	100±18	19.0
												250	36.4	29.3	—	12.8	100±20	18.0
												350	44.3	27.2	—	9.9	100±22	17.0

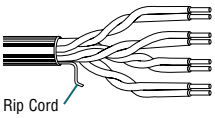


RJ-45 Compatible • -70°C
U.S. Patents 5,606,151 and 5,734,126
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

24 AWG Solid Bare Copper • Twisted Pairs • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Black PVC Jacket

7918A new	NEC: CMR CEC: CMR FT4	4	1000	304.8	28.0	12.7	.037	.94	.230	5.84	1	2.0	62.3	60.3	60.8	100±15	20.0
			2000	609.6	54.0	24.5					4	4.1	53.3	49.2	48.7	100±15	23.0
											10	6.5	47.3	41.8	40.8	100±15	25.0
											16	8.2	44.3	36.0	36.7	100±15	25.0
											31.25	11.7	39.9	28.2	30.9	100±15	23.6
											62.5	17.0	35.4	18.4	24.8	100±15	21.5
											100	22.0	32.3	10.3	20.8	100±15	20.1
											200	32.4	27.8	1.0	14.7	100±25	15.0

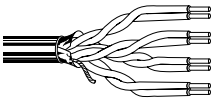


RJ-45 Compatible • -25°C Cold Bend
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

24 AWG Solid Bare Copper • Twisted Pairs • Overall Beldfoil® Shield • Drain Wire* • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • .030″ Industrial Grade Black PVC Jacket

Shielded **7919A** new	NEC: CMR CEC: CMR FT4	4	1000	304.8	36.0	16.3	.042	1.07	.265	6.73	1	2.0	62.3	60.3	60.8	100±15	20.0
			2000	609.6	70.0	31.8					4	4.1	53.3	49.2	48.7	100±15	23.0
											10	6.5	47.3	41.8	40.8	100±15	25.0
											16	8.2	44.3	36.0	36.7	100±15	25.0
											31.25	11.7	39.9	28.2	30.9	100±15	23.6
											62.5	17.0	35.4	18.4	24.8	100±15	21.5
											100	22.0	32.3	10.3	20.8	100±15	20.1
											200	32.4	27.8	1.0	14.7	100±25	15.0



RJ-45 Compatible • -25°C Cold Bend
Shield is bonded to jacket inner wall for electrical stability.
*Drain wire is 24 AWG stranded tinned copper.
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss

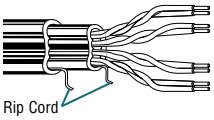
Color Codes: DataTuff

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Industrial Data Solutions® — Industrial Ethernet

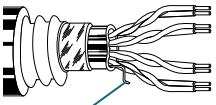
Category 6 MediaTuff® Twisted Pair Cables
Heavy-Duty Jackets

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Nom. Insulated Cond. OD		Nominal Core OD		Nominal OD		Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm							
23 AWG Bonded-Pairs Solid Bare Copper • Rip Cord • See Color Code Chart (below)																				
Upjacketed • Polyolefin Insulation • PVC Inner Jacket • .035″ Industrial Grade Black or Gray PVC Jacket																				
	11872A	NEC: CMR CEC: CMR FT4	4	1000	304.8	66.0	30.0	.041 x .080	1.04 x 2.03	.365 x .165	9.27 x 4.19	.475 x .265	12.07 x 6.73	1	1.9	72.3	70	64.8	100±12	20.0
														4	3.7	63.3	59	52.7	100±12	23.0
														10	5.9	57.3	51	44.8	100±12	25.0
														16	7.5	54.3	46	40.7	100±12	25.0
														31.25	10.6	49.9	39	34.9	100±15	23.6
														62.5	15.4	45.4	30	28.8	100±15	21.5
														100	19.8	42.3	25	24.8	100±15	21.0
														155	25.1	39.5	14	20.9	100±15	21.0
														200	29.0	37.9	10	18.7	100±15	21.0
														310	31.7	34.9	—	14.9	100±20	18.0
														350	39.8	34.2	—	13.9	100±22	17.0
														400*	43.0	33.3	—	12.7	100±25	14.0
														500*	49.0	31.8	—	10.8	100±25	14.0



RJ-45 Compatible • -25°C Cold Bend
U.S. Patents 5,606,151, 5,734,126 and 5,821,467
Jacket sequentially marked at 2 ft. intervals. • Verified to TIA/EIA-568-B.2-1, Category 6

23 AWG Bonded-Pairs Solid Bare Copper • Mylar® Wrap • Rip Cord • See Color Code Chart (below)																				
Interlocked AL Armor • Polyolefin Insulation • PVC Inner Jacket • .055″ Industrial Grade Black or Gray PVC Outer Jacket																				
	121872A	NEC: CMG CEC: HL CMG FT4	4	1000	304.8	293.0	133..2	.041 x .080	1.04 x 2.03	.365 x .165	9.27 x 4.19	.684	17.37	1	1.9	72.3	70	64.8	100±12	20.0
														4	3.7	63.3	59	52.7	100±12	23.0
														10	5.9	57.3	51	44.8	100±12	25.0
														16	7.5	54.3	46	40.7	100±12	25.0
														31.25	10.6	49.9	39	34.9	100±15	23.6
														62.5	15.4	45.4	30	28.8	100±15	21.5
														100	19.8	42.3	25	24.8	100±15	21.0
														155	25.1	39.5	14	20.9	100±15	21.0
														200	29.0	37.9	10	18.7	100±15	21.0
														310	31.7	34.9	—	14.9	100±20	18.0
														350	39.8	34.2	—	13.9	100±22	17.0
														400*	43.0	33.3	—	12.7	100±25	14.0
														500*	49.0	31.8	—	10.8	100±25	14.0



RJ-45 Compatible • -40°C
U.S. Patents 5,606,151, 5,734,126 and 5,821,467
Jacket sequentially marked at 1 meter intervals. • Verified to TIA/EIA-568-B.2-1, Category 6

ACR = Attenuation Crosstalk Ratio • AL = Aluminum • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss

*Values provided for information only.

Color Codes: MediaTuff

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Mylar is a DuPont trademark.

Industrial Data Solutions® — Industrial Ethernet

TrayOptic® Fiber Optic Cables
Loose Tube — Indoor/Outdoor Riser & Tray

Product Description

The TrayOptic series cables are designed for indoor/outdoor industrial applications. All TrayOptic cables have been upgraded with a water-blocking agent. The TrayOptic series carry the IEEE 383 flame approval. All TrayOptic series products utilize the LCF™ (Laser Certified Fiber) to handle tomorrow's Gigabit Ethernet light sources and expanded bandwidth requirements. TrayOptic cables are also available with 50 micron or single-mode fiber upon request. For a complete listing of fiber optic cables, refer to Fiber Optical Cables in section 10.

Product Specifications

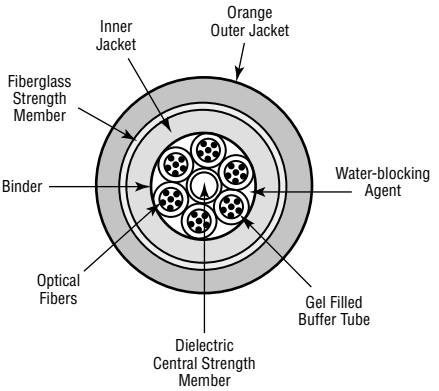
Fiber Counts*	2 through 24
Fiber Size	62.5µm
Buffer Sizes	
≤ 6 Fibers	2.0mm
> 6 Fibers	2.5mm
Jacket Materials	PVC or CPE
Flame Test	Passes IEEE 383 and UL 1581 Vertical Tray Flame Tests
UL Listing NEC/CEC	
2 to 12 Fibers	OFNR FT4
18 to 24 Fibers	OFN FT1
Strength Members	Dielectric Central Member/ Fiberglass Yarn
Temperature Range	-40 to +75°C
Crush Resistance	1500 lbs./in. min.
Impact Resistance	3.3 ft.-lbs./25 impacts min.
Flexing	25 cycles, 12 lbs., 20 x OD radius min.
Twist/Bend	25 cycles, 12 lbs., 20 x OD radius min.
Minimum Bend Radius	
Installation	20 x OD
Long Term	10 x OD
Maximum Recommended Load (Lbs.)	
Installation	600
Long Term	180

*1- through 6-fiber cables are single fiber per tube.

Fiber Specifications

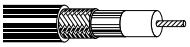
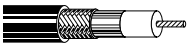
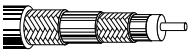
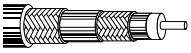
	62.5µm
Max. Attenuation (dB/km @850/1300nm)	3.5/1.0
Min. Bandwidth (MHz-km @850/1300nm)	220/600
Numerical Aperture	0.275

Part No.	Jacket Material	No. of Fibers	Outer Diameter		Weight	
			Inch	mm	Lbs./1000′	kg/km
Riser (NEC/CEC OFNR FT4)						
62.5/125/250 Micron (Core/Clad/Coating)						
I100255	PVC	2	.469	11.91	93	138
I100266	CPE	2	.469	11.91	89	132
I100455	PVC	4	.469	11.91	91	135
I100466	CPE	4	.469	11.91	80	119
I100655	PVC	6	.469	11.91	89	120
I100666	CPE	6	.469	11.91	85	126
I400855	PVC	8	.572	14.53	140	190
I400866	CPE	8	.572	14.53	132	196
I601055 new	PVC	10	.572	14.53	135	183
I601255	PVC	12	.572	14.53	135	183
I601266	CPE	12	.572	14.53	139	207
Tray (NEC/CEC OFN FT1)						
62.5/125/250 Micron (Core/Clad/Coating)						
I601855	PVC	18	.572	14.53	133	180
I601866	CPE	18	.572	14.53	136	202
I602455	PVC	24	.572	14.53	133	180
I602466	CPE	24	.572	14.53	137	204



Industrial Data Solutions® — Industrial Ethernet

Coaxial Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
Thinnet 10Base2 Ethernet • 20 AWG Stranded (19x32) .037″ Tinned Copper • Duobond® II + 93% Tinned Copper Braid Shield																			
Foam Polyethylene Insulation • Gray PVC Jacket																			
UL AWM	**9907**	NEC:	500	152.4	12.5	5.7	20 AWG	.102	2.59	Duobond II	.185	4.70	50	80%	25.4	83.3	1	.43	1.4
Style 1354		CL2	U-1000	U-304.8	25.0	11.4	(19x32)			+ 93%							10	1.30	4.3
(30V 60°C)		CM	1000	304.8	25.0	11.4	.037″			TC Braid							50	2.90	9.5
		CEC:	1640	500.0	39.4	17.9	TC			5.8Ω/M′		For Plenum versions of 9907, see 89907 or 82907.					100	4.20	13.8
		CM	U-2500	U-762.0	60.0	27.3	8.8Ω/M′			19.0Ω/km							200	6.10	20.0
			2500	762.0	62.5	28.4	28.9Ω/km										400	8.90	29.2
			3280	1000.0	82.0	37.3											700	12.10	39.7
																	900	13.90	45.6
DEC Part No. 17-01248-00																	1000	14.80	48.6
Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
150°C	**89907**	NEC:	500†	152.4	13.0	5.9	20 AWG	.095	2.41	Duobond II	.160	4.06	50	80%	25.4	83.3	1	.43	1.4
		CL2P	1000	304.8	24.0	10.9	(19x32)			+ 93%							10	1.30	4.3
		CMP	2500†	762.0	60.0	27.3	.037″			TC Braid							50	2.90	9.5
		CEC:					TC			5.8Ω/M′							100	4.20	13.8
		CMP FT6					8.8Ω/M′			19.0Ω/km							200	6.10	20.0
							28.9Ω/km										400	9.20	30.2
RG-58/U Type																	700	12.90	42.3
DEC Part No. 17-01246-00																	900	15.00	49.2
Suitable for Outdoor and Direct Burial applications.																	1000	16.00	52.5
Thicknet 10Base5 Ethernet • 12 AWG Solid .086″ Bare Copper • Duobond IV* Quad Shield																			
Foam Polyethylene Insulation • Yellow PVC Jacket																			
UL AWM	**9880**	NEC:	500	152.4	66.0	30.0	12 AWG	.243	6.17	Duobond IV	.405	10.29	50	78%	26.0	85.0	1	.19	.62
Style 1478		CL2	1000	304.8	131.0	59.5	(solid)			(Duobond II							5	.37	1.21
(30V 60°C)		CM	1640	500.0	219.0	99.9	.086″			+ 94% TC Braid							10	.52	1.71
		CEC:					BC			+ Duofoil®							50	1.20	3.94
		CM					1.4Ω/M′			+ 90% TC		For Plenum version of 9880, see 89880.					100	1.70	5.58
							4.7Ω/km			Braid)							200	2.55	8.37
										1.5Ω/M′							400	3.90	12.80
										5.0Ω/km							700	5.50	18.10
DEC Part No. 17-00451-00																	900	6.50	21.30
Ring-band stripes marked every 2.5 meters to aid users in tap placement.																	1000	6.90	22.60
Plenum • Foam FEP Insulation • Orange Fluorocopolymer Jacket																			
150°C	**89880**	NEC:	500†	152.4	67.0	30.5	12 AWG	.245	6.22	Duobond IV	.375	9.53	50	78%	26.0	85.0	1	.18	.59
		CL2P	1000†	304.8	134.0	60.9	(solid)			(Duobond II							5	.37	1.21
		CMP	1640†	500.0	224.7	102.1	.086″			+ 90% TC Braid							10	.52	1.71
		CEC:					BC			+ Duofoil							50	1.15	3.77
		CMP FT6					1.4Ω/M′			+ 90% TC							100	1.65	5.41
							4.7Ω/km			Braid)							200	2.45	8.04
										1.5Ω/M′							400	3.80	12.50
DEC Part No. 17-00324-00										5.0Ω/km							700	5.60	18.40
Ring-band stripes marked every 2.5 meters to aid users in tap placement.																	900	6.80	22.30
Suitable for Outdoor and Direct Burial applications.																	1000	7.20	23.60

BC = Bare Copper • DCR = DC Resistance • TC = Tinned Copper

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**.
For cable manufactured to latest government revision or other MIL-SPEC requirements, please contact your nearest Belden Regional Sales Office.

* Duobond IV = Duobond II + 94% tinned copper braid + Duofoil® + 90% tinned copper braid.
(Plenum version is Duobond II + 90% tinned copper braid + Duofoil + 90% tinned copper braid.)

† Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Industrial Data Solutions® — Industrial Twinax

Belden® Blue Hose® Selection Guide for PLC and DCS Applications

Blue Hose cable provides factory floor interface to PLCs and other control network devices. The product line comes in a variety of constructions to meet the demands of various industrial environments.

Part No.	Description	Specifications
9463	**Blue Hose Standard Data Highway Cable** A Standard Data Highway Cable that is sometimes referred to as Blue Hose. Designed to be used in light industrial environments. Available in Blue, Brown, Orange or Violet up to 10,000 ft. special lengths.	1-pair, 20 AWG stranded (7x28) tinned copper, polyethylene insulation (color coded Blue, Clear), Beldfoil® + 55% tinned copper braid and drain wire, Blue sunlight-resistant PVC jacket. Nominal diameter: .238″.
3072F	**600V Data Highway Cable — UL Type TC** A DataTray® cable designed for cable tray use in industrial applications. Cable can occupy same tray or conduit as 600V power cables. See Allen-Bradley guide for spacing/ampacity limitations.	1-pair, 18 AWG stranded (7x26) tinned copper, flame-retardant polyolefin insulation (color coded Blue, White), Beldfoil + 55% tinned copper braid and drain wire, Dark Blue sunlight-resistant PVC jacket. Nominal diameter: .324″. UL-1277 600V TC.
9463F	**High-Flexibility Festooning Cable** A highly flexible cable that is ideal for use in high-flex applications such as festoon, C-track and robotics. The cable also has heavier braid coverage for better noise immunity.	1-pair, 20 AWG stranded (42x36) tinned copper, polyethylene insulation (color coded Blue, Clear), Beldfoil + 85% tinned copper braid, Blue sunlight-resistant PVC jacket. Nominal diameter: .243″.
YR28826*	**Dual Data Highway Cable** Dual Data Highway/Remote I/O cable has two Twinax pairs individually shielded with an overall braid. Designed for use in daisy chain applications or applications requiring one Data Highway and one Remote I/O line.	2-pair, 20 AWG stranded (7x28) tinned copper, polyethylene insulation (color coded Blue, Clear), each pair Beldfoil shielded (1 pair Blue tape and 1 pair Green tape), 85% tinned copper braid and drain wire, Blue PVC jacket. Nominal diameter: .382″.
YC39151*	**Dual Armored Data Highway Cable** Features two twinax pairs individually shielded with an overall braid, an inner PVC jacket, aluminum interlocked armor, with an outer PVC jacket. Designed for use in daisy chain applications or applications requiring one Data Highway and one Remote I/O line, with the extra mechanical protection and electrical shielding provided by the armor.	2-pair, 20 AWG stranded (7x28) tinned copper, polyethylene insulation (color coded Blue, Clear), each pair Beldfoil shielded, 55% tinned copper braid and drain wire, Blue PVC inner jacket, aluminum interlocked armor, Blue sunlight-resistant PVC outer jacket. Nominal diameter: .820″.
9463DB	**Gel-Filled Direct Burial Cable** A gel-filled Data Highway cable featuring a low-density polyethylene (LDPE) jacket. Especially suited for high-moisture environments and burial applications. (Allen-Bradley recommends using fiber optics for outdoor applications.)	1-pair, 20 AWG stranded (7x28) tinned copper, polyethylene insulation (color coded Blue, Clear), Beldfoil + 55% tinned copper braid and drain wire, CoreGuard® flooding compound, Blue sunlight-resistant low density polyethylene jacket. Nominal diameter: .240″.
89463	**Plenum Cable** A plenum, 200°C grade cable that is suitable for installations where high and low temperatures, as well as corrosive environments, are encountered.	1-pair, 20 AWG stranded (7x28) tinned copper, FEP insulation (color coded Blue, Clear), Beldfoil + 56% tinned copper braid and drain wire, Blue FEP jacket. Nominal diameter: .203″.
YR28764*	**Thick-Wall, Heavy-Duty Cable — UL Type PLTC FT4** A rugged, heavy-duty cable specially designed for abusive environments. A .069″ thick jacket provides extra protection against cuts and abrasion.	1-pair, 20 AWG stranded (7x28) tinned copper, polyethylene insulation (color coded Blue, Clear), Beldfoil + 55% tinned copper braid and drain wire, Blue sunlight-resistant PVC jacket. Nominal diameter: .380″.
YR41104*	**Low Smoke, Zero Halogen Cable** For applications concerned with smoke emissions, toxicity and electronic component corrosion.	1-pair, 20 AWG stranded (7x28) tinned copper, polyethylene insulation (color coded Blue, Clear), Beldfoil + 55% tinned copper braid and drain wire, Blue Haloarrest® jacket. Nominal diameter: .259″.
129463	**Aluminum Interlocked Armor Blue Hose Cable** Features interlocked aluminum armor combined with a PVC jacket and is an ideal alternative to conduit installation. Provides both mechanical protection and electrical shielding. Up to 25 Data Highway cables can be bundled under one sheath.	1-pair, 20 AWG stranded (7x28) tinned copper, polyethylene insulation (color coded Blue, Clear), Beldfoil + 55% tinned copper braid and drain wire, Blue PVC inner jacket, aluminum interlocked armor, Blue PVC sunlight-resistant outer jacket. Nominal armor diameter: .563″.
139463	**Steel Interlocked Armor Blue Hose Cable** Features interlocked galvanized steel armor combined with a PVC jacket. Provides mechanical protection and electrical shielding, as well as prevention against the low-frequency 60 Hz magnetic noise from power lines. Up to 25 cables can be bundled under one sheath.	1-pair, 20 AWG stranded (7x28) tinned copper, polyethylene insulation (color coded Blue, Clear), Beldfoil + 55% tinned copper braid and drain wire, Blue PVC inner jacket, steel interlocked armor, Blue sunlight-resistant outer PVC jacket. Nominal armor diameter: .563″.
189463	**Continuously Corrugated Aluminum Armor Blue Hose Cable** Features continuously corrugated aluminum armor combined with a PVC jacket. Provides mechanical protection, electrical shielding and is impervious to moisture.	1-pair, 20 AWG stranded (7x28) tinned copper, polyethylene insulation (color coded Blue, Clear), Beldfoil + 55% tinned copper braid and drain wire, Blue PVC inner jacket, continuously corrugated aluminum armor, Blue sunlight-resistant PVC outer jacket. Nominal armor diameter: .500″.
YR29565*	**Colored Blue Hose** When your application calls for multiple Data Highway cables you can rest assured that Belden has the solution. This special construction is available in Red, Yellow, Green, White or Pink.	1-pair, 20 AWG stranded (7x28) tinned copper, polyethylene insulation (color coded Blue, Clear), Beldfoil + 55% tinned copper braid and drain wire, sunlight-resistant PVC jacket. Nominal diameter: .243″.

*Custom made product. Minimum order quantity may apply.

Industrial Data Solutions® — Industrial Twinax

Blue Hose® Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
78 Ohm • 20 AWG Stranded (7x28) .038″ Tinned Copper • Beldfoil® + 55% Tinned Copper Braid Shield (100% Shield Coverage)																			
Polyethylene Insulation • Blue Sunlight-resistant PVC Jacket (Color Code: Clear, Blue)																			
Blue Hose UL AWM Style 2464 (300V 80°C) Z- Fold®	**9463**	NEC: CM CL2 CEC: CM	100	30.5	4.6	2.1	20 AWG (7x28) .038″ Tinned Copper 9.5Ω/M′ 31.0Ω/km	.154	3.91	Beldfoil +55% TC Braid 4.1Ω/M′ 13.4Ω/km	.238	6.05	78	66%	19.7	64.6	1	.6	2.0
			U-500	U-152.4	18.5	8.4											10	2.1	6.9
			500	152.4	18.5	8.4											50	3.6	11.8
			U-1000	U-304.8	37.0	16.8											100	7.5	24.6
			1000▲	304.8	37.0	16.8											200	11.0	36.1
			6000▲	1828.7	222.0	100.9											400	16.0	52.5
			10000◆	3048.0	370.0	168.2													
												CPE jacket optional.							
Allen-Bradley P/N 1770-CD P-7K-SC-182141-MSHA* ▲1000 ft. and 6000 ft. put-ups also available in Brown, Orange or Violet. ◆10000 ft. put-up available in Brown, Orange or Violet only.																			
Polyethylene Insulation • Blue Sunlight-resistant LDPE Jacket (Color Code: Clear, Blue)																			
Flooded Direct Burial Blue Hose 300V 80°C Z- Fold®	**9463DB** new		1000	304.8	33.0	15.0	20 AWG (7x28) .038″ Tinned Copper 9.5Ω/M′ 31.0Ω/km	.154	3.91	Beldfoil +55% TC Braid 4.1Ω/M′ 13.4Ω/km	.240	6.10	78	66%	19.7	64.6	1	.6	2.0
			5000	1524.0	155.0	70.5											10	2.1	6.9
																	50	3.6	11.8
																	100	7.5	24.6
																	200	11.0	36.1
																	400	16.0	52.5
Allen-Bradley P/N 1770-CD																			
78 Ohm • 20 AWG Stranded (42x36) .038″ Tinned Copper • Overall Beldfoil + 85% Tinned Copper Braid Shield (100% Coverage)																			
Polyethylene Insulation • Blue Sunlight-resistant PVC Jacket (Color Code: Clear, Blue)																			
High-Flex Blue Hose UL AWM Style 2464 (300V 60°C)	**9463F** new	NEC: CM CL2 CEC: CM	1000	304.8	42.0	19.1	20 AWG (42x36) .038″ Tinned Copper 9.5Ω/M′ 31.0Ω/km	.154	3.91	Beldfoil +85% TC Braid 5.0Ω/M′ 6.4Ω/km	.243	6.17	78	66%	19.7	64.6	1	.6	2.0
			5000	1524.0	205.0	93.2											10	2.1	6.9
																	50	3.6	11.8
																	100	7.5	24.6
																	200	11.0	36.1
																	400	16.0	52.5
Allen-Bradley P/N 1770-CD P-7K-SC-182141-MSHA*																			
78 Ohm • 20 AWG Stranded (7x28) .038″ Tinned Copper • Overall Beldfoil + 56% Tinned Copper Braid Shield (100% Coverage)																			
Plenum • FEP Insulation • Blue FEP Jacket (Color Code: Clear, Blue)																			
High Temperature Blue Hose 300V 200°C Z- Fold®	**89463** new	NEC: CMP CL2P CEC: CMP FT6	1000	304.8	36.0	16.4	20 AWG (7x28) .038″ Tinned Copper 9.5Ω/M′ 31.0Ω/km	.151	3.83	Beldfoil +56% TC Braid 4.1Ω/M′ 13.4Ω/km	.203	5.16	78	69%	19.7	64.6	1	.6	2.0
			2500	762.0	90.0	40.9											10	2.1	6.9
																	50	3.6	11.8
																	100	7.5	24.6
																	200	11.0	36.1
																	400	16.0	52.5
Allen-Bradley P/N 1770-CD																			

DCR = DC Resistance • FEP = Fluorinated Ethylene-propylene • LDPE = Low-density Polyethylene • TC = Tinned Copper

*Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration Certification.

Industrial Data Solutions® — Industrial Twinax

Blue Hose® and Other Twinaxial Cables

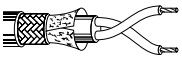
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
78 Ohm • 20 AWG Stranded (7x28) Tinned Copper • Overall Beldfoil® + 55% Tinned Copper Braid Shield (100% Coverage)																			
Aluminum Interlocked Armor • PE Insulation • Blue Sunlight-resistant PVC Outer Jacket* (Color Code: Clear, Blue)																			
Aluminum Armored Blue Hose 300V 60°C	**129463** new	NEC: CMG CL2 CEC: CM, CMG FT4, HLBCD (Haz Loc)	1000 6000	304.8 1828.8	122.0 924.0	55.5 420.0	20 AWG (7x28) .038″ Tinned Copper 9.5Ω/M′ 31.0Ω/km	.154	3.91	Beldfoil +55% TC Braid 4.1Ω/M′ 13.4Ω/km	Core: .238 Armor: .563	6.05 14.30	78	66%	19.7	64.6	1 10 50 100 200 400	.6 2.1 3.6 7.5 11.0 16.0	2.0 6.9 11.8 24.6 36.1 52.5
*Blue PVC inner jacket. Allen-Bradley P/N 1770-CD																			
Steel Interlocked Armor • PE Insulation • Blue Sunlight-resistant PVC Outer Jacket* (Color Code: Clear, Blue)																			
Steel Armored Blue Hose 300V 60°C	**139463** new	NEC: CMG CL2 CEC: CM, CMG FT4, HLBCD (haz loc)	1000 6000	304.8 1828.8	220.0 1488.0	100.0 676.4	20 AWG (7x28) .038″ Tinned Copper 9.5Ω/M′ 31.0Ω/km	.154	3.91	Beldfoil +55% TC Braid 4.1Ω/M′ 13.4Ω/km	Core: .238 Armor: .563	6.05 14.30	78	66%	19.7	64.6	1 10 50 100 200 400	.6 2.1 3.6 7.5 11.0 16.0	2.0 6.9 11.8 24.6 36.1 52.5
*Blue PVC inner jacket. Allen-Bradley P/N 1770-CD																			
Continuously Corrugated AL Armor • PE Insulation • Blue Sunlight-resistant PVC Outer Jacket* (Color Code: Clear, Blue)																			
Continuously Armored Blue Hose 300V 60°C	**189463** new	NEC: PLTC	6000	1828.8	864.0	392.7	20 AWG (7x28) .038″ Tinned Copper 9.5Ω/M′ 31.0Ω/km	.154	3.91	Beldfoil +55% TC Braid 4.1Ω/M′ 13.4Ω/km	Core: .238 Armor: .500	6.05 12.70	78	66%	19.7	64.6	1 10 50 100 200 400	.6 2.1 3.6 7.5 11.0 16.0	2.0 6.9 11.8 24.6 36.1 52.5
*Blue PVC inner jacket. Allen-Bradley P/N 1770-CD																			
78 Ohm • 20 AWG Stranded (7x28) .038″ Tinned Copper • 93% Tinned Copper Braid Shield																			
Polyethylene Insulation • Blue PVC Jacket (Color Code: Clear, Blue)																			
UL AWM Style 2092 (300V 60°C)	**9272**	NEC: CM CEC: CM	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.9 20.0 20.0 39.0 40.0	2.2 9.1 9.1 17.7 18.2	20 AWG (7x28) .038″ Tinned Copper 9.5Ω/M′ 31.0Ω/km	.156	3.96	93% TC Braid Shield 3.4Ω/M′ 11.2Ω/km	.244	6.20	78	66%	19.7	64.6	1 10 50 100 200 400	.6 2.1 5.0 7.5 11.0 16.0	2.0 6.9 16.4 24.6 36.1 52.5
For Plenum version of 9272, see 89272. CPE jacket optional.																			
95 Ohm • RG-22B/U Type • 18 AWG Stranded (7x26) Bare Copper† • (2) Tinned Copper Braids (95% Coverage)																			
Polyethylene Insulation • Black Non-contaminating PVC Jacket																			
80°C VW-1	**9250**		500 1000	152.4 304.8	64.5 128.0	29.3 58.2	18 AWG (7x26) .046″ BC 6.6Ω/M′ 21.5Ω/km	.285	7.24	2 TC Braid 95% Shield .9Ω/M′ 3.0Ω/km	.420	10.67	95	66%	16.0	52.5	1 10 20 50 100 400	.3 .9 1.3 2.1 3.0 6.3	1.0 3.0 4.3 6.9 9.8 20.7
CPE jacket optional.																			

†1 conductor has tinned center strand.

AL = Aluminum • BC = Bare Copper • DCR = DC Resistance • PE = Polyethylene • TC = Tinned Copper

Industrial Data Solutions® — Industrial Twinax

Twinaxial Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
100 Ohm • 20 AWG Stranded (7x28) .037″ One Tinned, One Bare Copper • Duofoil® + 86% Tinned Copper Braid Shield (100% Shield Coverage)																			
Polyethylene Insulation • Black PVC Jacket																			
75°C  IBM P/N 7362211	**9207**	NEC: CMG CL2 CEC: CMG FT4	100 U-500 500 1000 1640 2000 3280 5000	30.5 U-152.4 152.4 304.8 500.0 609.6 1000.0 1524.0	7.1 34.0 33.5 68.0 111.5 136.0 219.8 350.0	3.2 15.5 15.2 30.9 50.7 61.8 99.9 159.1	20 AWG (7x28) .037″ 1 TC 1 BC 9.5Ω/M′ 31.0Ω/km	.236	5.99	Duofoil + 86% TC Braid 2.5Ω/M′ 8.2Ω/km	.330	8.38	100	66%	15.5	50.9	1 10 50 100 200 400	.3 1.2 2.8 4.1 6.4 10.2	1.0 3.9 9.2 13.5 21.0 33.5
												For Plenum version of 9207, see 89207. CPE jacket optional.							
124 Ohm • 25 AWG Stranded (7x33) .021″ Tinned Copper • Beldfoil® (100% Shield Coverage) • Stranded Tinned Copper Drain Wire																			
Polyethylene Insulation • Blue PVC Jacket (Color Code: Clear, Blue)																			
UL AWM Style 2092 (300V 60°C) Shorting Fold	**9271**	NEC: CM CEC: CM	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.7 14.0 14.0 27.0 28.0	1.7 6.4 6.4 12.3 12.7	25 AWG (7x33) .021″ Tinned Copper 31.8Ω/M′ 104.3Ω/km	.170	4.32	100% Beldfoil Shield 12.0Ω/M′ 39.4Ω/km	.240	6.10	124	66%	12.2	40.0	1 10 50 100 200 400	.6 1.7 3.6 5.0 6.9 9.6	2.0 5.6 11.8 16.4 22.6 31.5
												CPE jacket optional.							
124 Ohm • 16 AWG Solid .051″ Bare Copper • Duofoil + 90% Tinned Copper Braid Shield (100% Shield Coverage)																			
Foam Polyethylene Insulation • Black PVC Jacket (Color Code: White, Blue)																			
UL AWM Style 2448 (30V 60°C)	**9860**	NEC: CMX CEC: CMX	500 1000 2000	152.4 304.8 609.6	52.0 103.0 202.0	23.6 46.8 91.8	16 AWG (solid) .051″ Bare Copper 4.2Ω/M′ 13.8Ω/km	.322	8.18	Duofoil +90% TC Braid 1.3Ω/M′ 4.3Ω/km	.440	11.18	124	78%	10.9	35.8	1 10 50 100 200 400	.18 .71 1.8 2.9 4.1 6.2	.6 2.3 5.9 9.5 13.5 20.3
												CPE jacket optional.							
150 Ohm • 22 AWG Stranded (19x34) .031″ Tinned Copper • Duofoil (100% Shield Coverage) • Stranded Tinned Copper Drain Wire																			
Datalene® Insulation • Black PVC Jacket (Color Code: Black, Yellow)																			
UL AWM Style 2668 (30V 60°C) VW-1	**9182**	NEC: CL2X CMX CEC: CMX	U-500 500 1000	U-152.4 152.4 304.8	23.0 23.5 45.0	10.5 10.7 20.5	22 AWG (19x34) .031″ Tinned Copper 14.0Ω/M′ 45.9Ω/km	.275	6.98	100% Duofoil Shield 6.3Ω/M′ 20.7Ω/km	.345	8.76	150	78%	8.8	28.9	1 10 50 100 200 400	.4 1.2 2.7 4.3 6.2 8.8	1.3 3.9 8.7 14.1 20.3 28.9
												For Plenum version of 9182, see 89182. Dual version: YR41609 CPE jacket optional.							
Plenum • Foam FEP Insulation • Black FEP Jacket (Color Code: Black, Yellow)																			
	89182	NEC: CMP CL2P CEC: CMP FT6	100 500† 1000†	30.5 152.4 304.8	6.4 28.0 53.0	2.9 12.7 24.1	22 AWG (19x34) .031″ Tinned Copper 14.0Ω/M′ 45.9Ω/km	.278	7.06	100% Duofoil Shield 6.3Ω/M′ 20.7Ω/km	.307	7.80	150	78%	8.8	28.9	1 10 50 100 200 400	.4 1.2 2.7 4.3 6.2 8.8	1.3 3.9 8.7 14.1 20.3 28.9

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene-propylene • TC = Tinned Copper

†Spools are one piece, but length may vary ±10% from length shown.

Industrial Data Solutions® — Industrial Twinax

DataTray® 600V Twinaxial Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
18 AWG Stranded (7x26) Tinned Copper • Overall Beldfoil® + 55% Tinned Copper Braid Shield (100% Coverage)																			
Flame-retardant Polyolefin Insulation • Dark Blue Sunlight-resistant PVC Jacket (Color Code: White, Blue)																			
UL Type TC 600V 75°C Z-Fold® P-MSHA-C-7K-1827*	**3072F**	NEC: CMG, ITC TC, PLTC CEC: CMG FT4	250 500 1000 2500 5000 10000	76.2 152.4 304.8 762.0 1524.0 3048.0	17.5 34.0 69.0 170.0 345.0 710.0	8.0 15.5 31.4 77.3 156.8 322.7	18 AWG (7x26) .046″ Tinned Copper 6.9Ω/M′ 22.7Ω/km	.192	4.88	Beldfoil +55% TC Braid (100% Shield) 3.2Ω/M′ 10.4Ω/km	.324	8.23	78	65%	19.5	64	1 10 50 100 200 400	.7 2.0 3.8 5.5 7.8 10.8	2.3 6.6 12.5 18.0 25.6 35.4
												For CPE jacketed version order Part No. YM45044. CPE jacket optional.							
UL Type TC 600V 75°C Z-Fold®	**3073F**	NEC: CMG, ITC TC, PLTC CEC: CMG FT4	250 1000 5000	76.2 304.8 1524.0	21.0 85.0 420.0	9.5 38.6 190.9	18 AWG (7x26) .046″ Tinned Copper 6.9Ω/M′ 22.7Ω/km	.246	6.25	Beldfoil +55% TC Braid (100% Shield) 2.9Ω/M′ 9.6Ω/km	.388	9.86	100	65%	15.3	50.2	1 10 50 100 200 400	.6 1.6 3.0 4.3 6.1 7.6	1.8 5.2 9.8 14.2 20.1 24.9
												CPE jacket optional.							
UL Type TC 600V 75°C Z-Fold®	**3074F**	NEC: CMG, ITC TC, PLTC CEC: CMG FT4	500 1000 2500	152.4 304.8 762.0	52.5 100.0 250.0	23.9 45.5 113.6	18 AWG (7x26) .046″ Tinned Copper 6.9Ω/M′ 22.7Ω/km	.328	8.33	Beldfoil +55% TC Braid (100% Shield) 2.8Ω/M′ 9.1Ω/km	.460	11.68	124	65%	12.3	40.3	1 10 50 100 200 400	.5 1.2 2.4 3.5 4.9 6.8	1.5 3.9 7.9 11.4 16.2 22.4
												CPE jacket optional.							

DCR = DC Resistance • TC = Tinned Copper if conductor, or Tray Cable if NEC rating.

*Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration certification.

Industrial Data Solutions® — Industrial Coax

ControlNet™ Quad Shielded Coax

ControlNet is a high-speed serial communication system for communication between devices that require time-critical application exchange.

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-6/U Type • 18 AWG Solid Bare Copper-covered Steel • Duobond® IV* Quad Shield																			
Foam Polyethylene Insulation • PVC Jacket (Black or Intrinsically Safe Blue)																			
	3092A	NEC: CL2R CMR CEC: CMG FT4	500	152.4	22.0	10.0	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.8Ω/km	.180	4.57	Duobond IV Quad Shield 3.6Ω/M′ 11.8Ω/km	.298	7.57	75	82%	16.2	53.1	1	.35	1.2
			1000	304.8	42.0	19.1											2	.38	1.3
			2000	609.6	84.0	38.2											5	.45	1.5
			2500▲	762.2	100.0	45.5											10	.59	1.9
												Sweep tested 5 MHz to 50 MHz. CPE jacket optional.					20	.86	2.8
																	50	1.37	4.5
																	100	1.97	6.5
																	200	2.82	9.3
▲2500 ft. put-up available in Black only. For Rockwell authorized Flexible ControlNet order YR28890 (Tinned Copper Braid version).																	300	3.48	11.4
																	400	4.04	13.3
Plenum • Foam FEP Insulation • Fluorocopolymer Jacket (Black or Intrinsically Safe Blue◆)																			
150°C	**3093A**	NEC: CMP CEC: CMP FT6	1000◆	304.8	40.0	18.2	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.8Ω/km	.170	4.32	Duobond IV Quad Shield 3.6Ω/M′ 11.8Ω/km	.274	6.96	75	82%	16.3	53.5	1	.36	1.2
			2000	609.6	80.0	36.4											2	.38	1.3
			2500	762.0	100.0	45.5											5	.50	1.6
																	10	.65	2.1
																	20	.95	3.1
												Sweep tested 5 MHz to 50 MHz.					50	1.50	4.9
																	100	2.12	7.0
																	200	2.99	9.8
◆Blue available as standard in 1000 ft. only. Suitable for Outdoor and Direct Burial applications.																	300	3.66	12.0
																	400	4.23	13.9
RG-6/U Type • 20 AWG Stranded (105x40) Bare Copper • Duobond IV* Quad Shield																			
Foam Polyethylene Insulation • PVC Jacket (Black or Intrinsically Safe Blue)																			
High-Flex	**3092F** new	NEC: CL2 CM CEC: CM	1000	304.8	45.0	20.5	20 AWG (105x40) .040″ Bare Copper 10.5Ω/M′ 34.4Ω/km	.183	4.65	Duobond IV Quad Shield 3.6Ω/M′ 11.8Ω/km	.303	7.70	75	79%	17.0	55.8	1	.36	1.2
			5000	1524.0	225.0	102.3											2	.47	1.5
																	5	.80	2.6
																	10	1.20	3.9
												Sweep tested 5 MHz to 400 MHz. CPE jacket optional.					20	2.00	6.6
																	50	3.20	10.5
																	100	4.60	15.1
																	200	6.50	21.3
IEEE 802.4 MAP/IEEE 802.7 Mini-MAP.																	300	8.00	26.2
																	400	9.30	30.5

BCCS = Bare Copper-covered Steel • DCR = DC Resistance

*Duobond IV Quad Shield = Duobond II Foil + 60% aluminum braid + Duofoil + 40% aluminum braid.

ControlNet is a ControlNet International trademark.

Industrial Data Solutions® — Industrial Coax

ControlBus™ Quad Shielded Coax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch	Nominal Core OD mm	Shielding Materials Nom. DCR	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
RG-6/U Type • 20 AWG Stranded (105x40) Bare Copper • Duobond® IV* Quad Shield																			
Foam Polyethylene Insulation • PVC Jacket (Black or Intrinsically Safe Blue)																			
High-Flex	**3092F** new	NEC: CL2 CM CEC: CM	1000	304.8	45.0	20.5	20 AWG (105x40) .040″ Bare Copper 10.5Ω/M′ 34.4Ω/km	.183	4.65	Duobond IV Quad Shield 3.6Ω/M′ 11.8Ω/km	.303	7.70	75	79%	17.0	55.8	1	.36	1.2
			5000	1524.0	225.0	102.3											2	.47	1.5
																	5	.80	2.6
																	10	1.20	3.9
																	20	2.00	6.6
																	50	3.20	10.5
																	100	4.60	15.1
																	200	6.50	21.3
																	300	8.00	26.2
																	400	9.30	30.5
IEEE 802.4 MAP/IEEE 802.7 Mini-MAP.												Sweep tested 5 MHz to 400 MHz. CPE jacket optional.							
RG-6/U Type • 18 AWG Solid Bare Copper-covered Steel • Duobond IV* Quad Shield																			
Foam Polyethylene Insulation • Gray PVC Jacket																			
	3131A	NEC: CL2R CMR CEC: CMR FT4	1000†	304.8	41.0	18.6	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.8Ω/km	.180	4.57	Duobond IV Quad Shield 3.6Ω/M′ 11.8Ω/km	.298	7.57	75	82%	16.2	53.1	1	.35	1.2
			2500	762.2	97.5	44.3											2	.38	1.3
																	5	.45	1.5
																	10	.59	1.9
																	20	.86	2.8
																	50	1.37	4.5
																	100	1.97	6.5
																	200	2.82	9.3
IEEE 802.4 MAP/IEEE 802.7 Mini-MAP. Tap marks every 2.6 meters to aid users in installation.												Sweep tested 5 MHz to 400 MHz. CPE jacket optional.					300	3.48	11.4
																	400	4.04	13.3
Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
150°C	**3132A**	NEC: CMP CEC: CMP FT6	1000	304.8	36.0	16.4	18 AWG (solid) .040″ BCCS 28.0Ω/M′ 91.8Ω/km	.170	4.32	Duobond IV Quad Shield 3.6Ω/M′ 11.8Ω/km	.274	6.96	75	82%	16.3	53.5	1	.36	1.2
																	2	.38	1.3
																	5	.50	1.6
																	10	.65	2.1
																	20	.95	3.1
												Sweep tested 5 MHz to 400 MHz.						50	1.50	4.9
																	100	2.12	7.0
IEEE 802.4 MAP/IEEE 802.7 Mini-MAP. Tap marks every 2.6 meters to aid users in installation. Suitable for Outdoor and Direct Burial applications.																	200	2.99	9.8
																	300	3.66	12.0
																	400	4.23	13.9
RG-11/U Type • 14 AWG Solid Bare Copper-covered Steel • Duobond IV* Quad Shield																			
Foam Polyethylene Insulation • Gray PVC Jacket																			
	3094A	NEC: CL2R CMR CEC: CMG FT4	500†	152.4	31.0	14.1	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond IV Quad Shield 1.8Ω/M′ 5.9Ω/km	.407	10.34	75	82%	16.2	53.1	1	.30	1.0
			1000†	304.8	62.0	28.2											2	.32	1.0
			2000	609.6	120.0	54.5											5	.40	1.3
																	10	60	2.0
																	20	.71	2.3
												Sweep tested 5 MHz to 400 MHz. CPE jacket optional.					50	.90	3.0
																	100	1.20	3.9
																	200	1.70	5.9
IEEE 802.4 MAP Tap marks every 2.6 meters to aid users in installation.																	300	2.08	6.8
																	400	2.40	7.9
Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
150°C	**3095A**	NEC: CMP CEC: CMP FT6	1000†	304.8	76.0	34.5	14 AWG (solid) .064″ BCCS 11.0Ω/M′ 36.1Ω/km	.280	7.11	Duobond IV Quad Shield 1.8Ω/M′ 5.9Ω/km	.387	9.83	75	82%	16.5	54.1	1	.20	.7
																	2	.22	.7
																	5	.28	.9
																	10	.39	1.3
																	20	.60	2.0
												Sweep tested 5 MHz to 400 MHz.					50	1.20	3.9
																	100	1.70	5.6
IEEE 802.4 MAP Tap marks every 2.6 meters to aid users in installation. Suitable for Outdoor and Direct Burial applications.																	200	2.50	8.2
																	300	3.04	10.0
																	400	3.50	11.5

BCCS = Bare Copper-covered Steel • DCR = DC Resistance • FEP = Fluorinated Ethylene-propylene

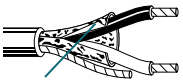
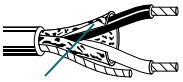
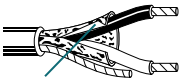
*Duobond IV Quad Shield = Duobond II Foil + 60% aluminum braid + Duofoil® + 40% aluminum braid.
†Spools are one piece, but length may vary ±10% from length shown.

Industrial Data Solutions® — Industrial Data

DataBus® ISA/SP-50 Fieldbus* or Profibus Cables

Fieldbus is a standardized digital communications protocol that enables a simple pair of wires to power and carry the communication signals between field devices and a control room.

Profibus is one of the largest open industrial fieldbus networks in the world.

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
Fieldbus*/Profibus PA • 18 AWG Stranded (7x26) Tinned Copper • Beldfoil® (100% Shield Coverage) • Tinned Copper Drain Wire																			
Polyolefin Insulation • Orange or Blue PVC Jacket (Color Code: Blue, Orange)																			
Type A 300V 75°C (31.25 KBits/sec)  Shorting Fold	**3076F**	NEC: PLTC CM ITC CEC: CM	250 500 1000 2500 5000	76.2 152.4 304.8 762.0 1524.0	10.5 18.5 34.0 85.0 170.0	4.8 8.4 15.5 38.6 77.3	18 AWG (7x26) .048″ Tinned Copper 7.3Ω/M′ 24.0Ω/km	—	—	100% Beldfoil Shield 7.5Ω/M′ 24.6Ω/km	.253	6.43	100 @ 31.25 KHz	66%	24.0	78.7	.039	.08	.26
												CPE jacket optional.							
Fieldbus: Orange jacket. Profibus PA: Intrinsically Safe Blue jacket.																			
Fieldbus* • 22 AWG Stranded (7x30) Tinned Copper • Beldfoil (100% Shield Coverage) • Tinned Copper Drain Wire																			
Polyolefin Insulation • Orange PVC Jacket (Color Code: Blue, Orange)																			
Type B 300V 75°C (31.25 KBits/sec)  Shorting Fold	**3077F**	NEC: PLTC CM ITC CEC: CM	500 1000	152.4 304.8	11.0 23.0	5.0 10.5	22 AWG (7x30) .030″ Tinned Copper 17.1Ω/M′ 56.0Ω/km	—	—	100% Beldfoil Shield 11.4Ω/M′ 37.4Ω/km	.196	4.97	100 @ 31.25 KHz	66%	23.5	77.1	.039	.14	.45
												CPE jacket optional.							
Cellular Polyolefin Insulation • Orange PVC Jacket (Color Code: Blue, Orange)																			
High Speed▲ 300V 75°C (1.0 & 2.5 MBits/sec)  Shorting Fold	**3078F**	NEC: PLTC CM CEC: CM	250 500 1000 2500	76.2 152.4 304.8 762.0	12.0 23.0 44.0 115.0	5.5 10.5 20.0 52.3	22 AWG (7x30) .030″ Tinned Copper 17.1Ω/M′ 56.0Ω/km	—	—	100% Beldfoil Shield 3.3Ω/M′ 11.1Ω/km	.351	8.92	150 @ 1 MHz	78%	8.5	27.9	.250 .625 1.250 3.125	.18 .26 .34 .55	.59 .85 1.12 1.81
												CPE jacket optional.							
Profibus DP • 22 AWG Solid Bare Copper • Beldfoil + 65% Tinned Copper Braid Shield (100% Shield Coverage)																			
Cellular Polyolefin Insulation • Chrome or Violet PVC Jacket (Color Code: Red, Green)																			
300V 75°C	**3079A**	NEC: PLTC CMG CEC: CMG FT4	1000 2000 3600	304.8 609.6 1097.6	46.0 94.0 169.2	20.9 42.7 76.9	22 AWG (solid) .026″ Bare Copper 16.0Ω/M′ 52.5Ω/km	.198	5.03	Beldfoil + 65% TC Braid Shield (100% Coverage) 3.9Ω/M′ 12.8Ω/km	.315	8.00	150	78%	9.0	29.5	.2 4.0 16.0 100.0 300.0	.27 .67 1.37 3.75 6.52	.9 2.2 4.5 12.3 21.4
												For CPE jacketed version order Part No. YR45047. For LSOH (FRNC) jacketed version, order Part No. YR44731.							
Siemens Sinec L2 cable.																			

DCR = DC Resistance • TC = Tinned Copper

*Capacitance Unbalance not per ISA/SP-50 Fieldbus

▲For HSE, see Industrial Ethernet Section for copper and fiber cables.

Industrial Data Solutions® — Industrial Data

DeviceBus® for ODVA DeviceNet™

DeviceNet is an open industrial network standard that addresses all kinds of field devices. It allows interchangeability of simple devices and total direct connectivity of larger, more complex communication links.

Features and Benefits

- Data and power in one cable
- Reduced cable and installation costs
- Twisted and shielded for noise immunity (round versions)
- Easier connectivity (flat versions)
- Fully compliant with ODVA specs

DeviceNet Communications Rate Table

Communications Rate	Maximum Distance																			
	3082A		3082F		3082K		3083A		3084F		3084A/3085A		7895A		7896A		7897A		7900A	
	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m
125 Kbps	1640	500	1640	500	1378	420	1640	500	328	100	328	100	984	300	1378	420	1640	500	328	100
250 Kbps	820	250	820	250	656	200	820	250	328	100	328	100	820	250	656	200	820	250	328	100
500 Kbps	328	100	328	100	328	100	328	100	328	100	328	100	328	100	328	100	328	100	328	100

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Shielding Materials Nom. DCR	Color Code	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg				Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
600V Class 1 Thick • 15 and 18 AWG Stranded Tinned Copper • 100% Individually Foil Shielded + Overall 65% TC Braid • Drain Wire*																		
PVC/Nylon Insulation (Power) • **FEP Insulation** (Data) • **Lt. Gray Sunlight/Oil-resistant PVC Jacket**																		
High Velocity Thick 600V 75°C	**7897A** new	NEC: TC	500 1000 2000	152.4 304.8 609.6	63.5 124.0 250.0	28.9 56.4 113.6	(2)15 AWG TC (19x28) 3.6Ω/M′ 11.8Ω/km (2)18 AWG TC (19x30) 6.9Ω/M′ 22.6Ω/km	100% Individual Foil + Overall 65% TC Braid 1.8Ω/M′ 5.7Ω/km	Power Pair: Red/Black Data Pair: Blue/White	.440	11.18	120	— Data: 75%	12.0	39.4	.125 .500 1.000	.13 .25 .40	.43 .82 1.31
*18 AWG stranded (19x30) tinned copper drain wire. Meter marks on jacket to aid users in installation.																		
600V Class 1 ODVA Cable V • 16 and 18 AWG Stranded Tinned Copper • 100% Individually Foil Shielded + Overall 65% TC Braid • Drain Wire*																		
PVC/Nylon Insulation (Power) • **F-R Polypropylene Insulation** (Data) • **Lt. Gray Sunlight/Oil-resistant PVC Jacket**																		
Open Wiring 600V 75°C	**7896A** new	NEC: TC	500 1000 2000	152.4 304.8 609.6	70.0 136.0 276.0	31.8 64.8 125.5	(2)16 AWG TC (19x29) 4.9Ω/M′ 16.1Ω/km (2)18 AWG TC (19x30) 6.9Ω/M′ 22.6Ω/km	100% Individual Foil + Overall 65% TC Braid 1.8Ω/M′ 5.7Ω/km	Power Pair: Red/Black Data Pair: Blue/White	.502	12.75	120	— Data: 64%	14.7	48.2	.125 .500 1.000	.13 .25 .40	.43 .82 1.31
C(UL) AWM I/II A/B *18 AWG stranded (19x30) tinned copper drain wire. Meter marks on jacket to aid users in installation.																		
600V Class 1 ODVA Cable IV • 16 and 18 AWG Stranded Tinned Copper • Unshielded																		
PVC/Nylon Insulation (Power) • **F-R Polypropylene Insulation** (Data) • **Lt. Gray Sunlight/Oil-resistant PVC Jacket**																		
Drop 600V 75°C	**7900A** new	NEC: TC	500 1000	152.4 304.8	45.0 92.0	20.5 41.8	(2)16 AWG TC (19x29) 4.9Ω/M′ 16.1Ω/km (2)18 AWG TC (19x30) 6.9Ω/M′ 22.6Ω/km	Unshielded	Power Pair: Red/Black Data Pair: Blue/White	.430	10.92	120	— Data: 64%	14.7	48.2	.125 .500 1.000	.13 .25 .40	.43 .82 1.31
Meter marks on jacket to aid users in installation.																		

DCR = DC Resistance • FEP = Fluorinated Ethylene-propylene • F-R = Flame-retardant • TC = Tinned Copper if conductor, or Tray Cable if NEC rating.

ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.

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DeviceBus® for ODVA DeviceNet™

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Shielding Materials Nom. DCR	Color Code	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
300V Class 2 Thick • 15 and 18 AWG Stranded Tinned Copper • 100% Individually Foil Shielded + Overall 65% TC Braid • Drain Wire*																		
PVC Insulation (Power) • **FPE Insulation** (Data) • **Lt. Gray Sunlight/Oil-resistant PVC Jacket**																		
Thick 75°C 	**3082A** new	NEC: CMG, PLTC CEC: CMG FT4	500 1000 2000	152.4 304.8 609.6	64.0 128.0 260.0	29.1 58.2 118.2	(2)15 AWG TC (19x28) 3.6Ω/M′ 11.8Ω/km (2)18 AWG TC (19x30) 6.9Ω/M′ 22.6Ω/km	100% Individual Foil + Overall 65% TC Braid 1.8Ω/M′ 5.9Ω/km	Power Pair: Red/Black Data Pair: Blue/White	.460	11.68	120	— Data: 75%	12.0	39.4	.125 .500 1.000	.13 .25 .36	.43 .82 1.18
UL AWM 20201 • C(UL) AWM I/II A *18 AWG stranded (19x30) tinned copper drain wire. Meter marks on jacket to aid users in installation.																		
High-Flex Thick 75°C 	**3082F** new	NEC: CMG, PLTC CEC: CMG FT4	500 1000 2000	152.4 304.8 609.6	72.0 140.0 284.0	32.7 63.6 129.1	(2)15 AWG TC (65x33) 3.6Ω/M′ 11.8Ω/km (2)18 AWG TC (65x36) 6.9Ω/M′ 22.6Ω/km	100% Individual Foil + Overall 65% TC Braid 1.8Ω/M′ 5.9Ω/km	Power Pair: Red/Black Data Pair: Blue/White	.460	12.07	120	— Data: 75%	12.0	39.4	.125 .500 1.000	.13 .25 .36	.43 .82 1.18
UL AWM 20201 • C(UL) AWM I/II A *18 AWG stranded (65x36) tinned copper drain wire. Meter marks on jacket to aid users in installation.																		
PVC Insulation (Power) • **FPE Insulation** (Data) • **Yellow CPE Jacket**																		
Thick 80°C 	**3083A**	NEC: CMG, PLTC CEC: CMG FT4	1000 2000	304.8 609.6	133.0 270.0	60.5 122.7	(2)15 AWG TC (19x28) 3.6Ω/M′ 11.8Ω/km (2)18 AWG TC (19x30) 6.9Ω/M′ 22.6Ω/km	100% Individual Foil + Overall 65% TC Braid 1.8Ω/M′ 5.9Ω/km	Power Pair: Red/Black Data Pair: Blue/White	.475	12.07	120	— Data: 75%	12.0	39.4	.125 .500 1.000	.13 .25 .36	.43 .82 1.18
*18 AWG stranded (19x30) tinned copper drain wire. Meter marks on jacket to aid users in installation.																		

DCR = DC Resistance • FPE = Foam Polyethylene • TC = Tinned Copper if conductor, or Tray Cable if NEC rating.

ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.

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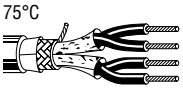
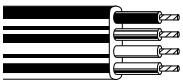
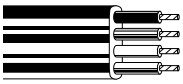
DeviceBus® for ODVA DeviceNet™

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Conductor (stranding) Diameter Nom. DCR	Shielding Materials Nom. DCR	Color Code	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 Ft.	Nominal Attenuation dB/ 100m
300V Class 2 Thin • 22 and 24 AWG Stranded Tinned Copper • 100% Individually Foil Shielded + Overall 65% TC Braid • Drain Wire*																		
PVC Insulation (Power) • **FPE Insulation** (Data) • **Lt. Gray Sunlight/Oil-resistant PVC Jacket**																		
Thin 75°C C(UL) AWM I/II A *22 AWG stranded (19x34) tinned copper drain wire. Meter marks on jacket to aid users in installation.	**3084A**	NEC: CL2 CMG CEC: CMG FT4	500 1000 2000	152.4 304.8 609.6	26.0 49.0 100.0	11.8 22.3 45.5	(2)22 AWG TC (154x44) 17.5Ω/M′ 57.4Ω/km (2)24 AWG TC (105x44) 28.0Ω/M′ 91.9Ω/km	100% Individual Foil + Overall 65% TC Braid 3.2Ω/M′ 10.5Ω/km	Power Pair: Red/Black Data Pair: Blue/White	.280	7.11	120	— Data: 75%	12.0	39.4	.125 .500 1.000	.29 .50 .70	.95 1.64 2.30
High-Flex Thin 75°C  C(UL) AWM I/II A *22 AWG stranded (26x36) tinned copper drain wire. Meter marks on jacket to aid users in installation.	**3084F** new	NEC: CL2 CMG CEC: CMG FT4	500 1000 2000	152.4 304.8 609.6	23.5 45.0 90.0	10.7 20.5 40.9	(2)22 AWG TC (154x44) 17.5Ω/M′ 57.4Ω/km (2)24 AWG TC (105x44) 28.0Ω/M′ 91.9Ω/km	100% Individual Foil + Overall 65% TC Braid 3.2Ω/M′ 10.5Ω/km	Power Pair: Red/Black Data Pair: Blue/White	.275	6.99	120	— Data: 75%	12.0	39.4	.125 .500 1.000	.29 .50 .70	.95 1.64 2.30
PVC Insulation (Power) • **FPE Insulation** (Data) • **Yellow CPE Jacket**																		
Thin 80°C *22 AWG stranded (19x34) tinned copper drain wire. Meter marks on jacket to aid users in installation.	**3085A**	NEC: CL2 CMG CEC: CMG FT4	500 1000 2000	152.4 304.8 609.6	25.0 47.0 96.0	11.4 21.4 43.6	(2)22 AWG TC (154x44) 17.5Ω/M′ 57.4Ω/km (2)24 AWG TC (105x44) 28.0Ω/M′ 91.9Ω/km	100% Individual Foil + Overall 65% TC Braid 3.2Ω/M′ 10.5Ω/km	Power Pair: Red/Black Data Pair: Blue/White	.280	7.11	120	— Data: 75%	12.0	39.4	.125 .500 1.000	.29 .50 .70	.95 1.64 2.30
300V Class 2 ODVA Cable III • 20 and 18 AWG Stranded TC • 100% Individually Foil Shielded + Overall 65% TC Braid • Drain Wire*																		
PVC Insulation (Power) • **FPE Insulation** (Data) • **Lt. Gray Sunlight/Oil-resistant PVC Jacket**																		
Mid 75°C UL AWM 20201 *20 AWG stranded (19x32) tinned copper drain wire. Meter marks on jacket to aid users in installation.	**7895A** new	NEC: CMG PLTC CEC: CMG FT4	500 1000	152.4 304.8	42.0 83.0	19.1 37.7	(2)20 AWG TC (19x32) 10.9Ω/M′ 35.8Ω/km (2)18 AWG TC (19x30) 6.9Ω/M′ 22.6Ω/km	100% Individual Foil + Overall 65% TC Braid 3.2Ω/M′ 10.5Ω/km	Power Pair: Red/Black Data Pair: Blue/White	.378	9.60	120	— Data: 75%	12.0	39.4	.125 .500 1.000	.29 .50 .70	.95 1.64 2.30
Flat • 16 AWG Stranded (19x29) Tinned Copper • Unshielded																		
PVC Insulation (Power) • **FPE Insulation** (Data) • **Lt. Gray Sunlight-resistant PVC Jacket**																		
Class 2 300V 75°C 	**3082K** new	NEC: CMG CL2 PLTC CEC: CMG FT4	246 656 1378	75.0 200.0 420.0	30.8 78.7 165.4	14.0 35.8 75.2	(4)16 AWG TC (19x29) 4.9Ω/M′ 16.1Ω/km	Unshielded	Power Pair: Red/Black Data Pair: Blue/White	.760 x .210	10.92 x 5.33	120	— Data: 75%	12.0	39.4	.125 .500 1.000	.13 .25 .40	.43 .82 1.31
PVC Insulation • Black Sunlight-resistant PVC Jacket																		
Class 1 Power 600V 75°C 	**3082KP** new	NEC: CMG, ITC, PLTC, TC CEC: CMG FT4	246 656 1378	75.0 200.0 420.0	32.0 81.3 170.9	14.5 37.0 77.7	(4)16 AWG TC (19x29) 4.9Ω/M′ 16.1Ω/km	Unshielded	Red/Black, Blue/White	.760 x .210	10.92 x 5.33	—	—	—	—	—	—	—

DCR = DC Resistance • FPE = Foam Polyethylene • F-R = Flame-retardant • TC = Tinned Copper if conductor, or Tray Cable if NEC rating.

ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.

Industrial Data Solutions® — Industrial Data

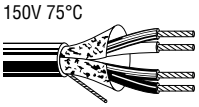
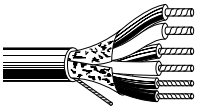
DeviceBus® for Honeywell Smart Distributed System

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Shielding Materials Nom. DCR	Color Code	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg				Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
22 AWG Stranded Tinned Copper • Each Pair Individually Beldfoil® Shielded																		
PVC Insulation (Power) • **Cellular PE Insulation** (Data) • **Dark Gray PVC Jacket**																		
UL AWM Style 2464 30V 80°C CSA AWM I/II A	**3087A**	NEC: CL2 CEC: FT1	500 1000 2000	152.4 304.8 609.6	22.0 41.0 84.0	10.0 18.6 38.2	(4)22 AWG (19x34) .030″ Tinned Copper 17.5Ω/M′ 57.4Ω/km	100% Beldfoil Each Pair	Power Pair: Blue/Brown Data Pair: Black/White	.290	7.37	120	— Data: 76%	12.0	39.4	.125 .500 1.000	.23 .42 .60	.76 1.38 1.97
Micro Cable (Drop)																		
16 and 20 AWG Stranded Tinned Copper • Each Pair Individually Beldfoil Shielded																		
PVC Insulation (Power) • **Cellular PE Insulation** (Data) • **Dark Gray PVC Jacket**																		
UL AWM Style 2464 30V 80°C CSA AWM I/II A	**3086A**	NEC: CL2 CEC: FT1	500 1000	152.4 304.8	40.0 80.0	18.2 36.4	(2)16 AWG TC (19x29) .067″ 3.6Ω/M′ 11.8Ω/km (2)20 AWG TC (19x32) .041″ 10.0Ω/M′ 32.8Ω/km	100% Beldfoil Each Pair	Power Pair: Blue/Brown Data Pair: Black/White	.398	10.11	120	— Data: 76%	12.0	39.4	.125 .500 1.000	.18 .35 .47	.59 1.15 1.54
Mini Cable (Trunk)																		

DCR = DC Resistance • TC = Tinned Copper

Industrial Data Solutions® — Industrial Data

DeviceBus® for Square D/Seriplex®

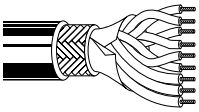
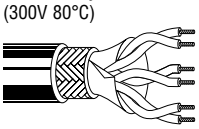
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Shielding Materials Nom. DCR	Color Code	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	
			Ft.	m	Lbs.	kg				Inch	mm			pF/Ft.	pF/m
18 and 22 AWG Stranded Tinned Copper • Overall 100% Beldfoil® Shield • 22 AWG Drain Wire															
Foam HDPE Insulation (Power) • **Foam HDPE Insulation** (Data) • **Orange PVC Jacket**															
150V 75°C 	**3124A**	NEC: CL2 CM CEC: CM	500 1000	152.4 304.8	25.0 47.0	11.4 21.4	(2)18 AWG (16x30) .040″ TC 6.8Ω/M′ 21.3Ω/km (2)22 AWG (7x30) .030″ TC 18.1Ω/M′ 59.4Ω/km	100% Overall Beldfoil Shield 10.7Ω/M′ 35.1Ω/km	Power Pair: Red/Black Data Pair: White/Green	.308	7.82	150	— Data: 78%	9.0	30.0
16 and 22 AWG Stranded Tinned Copper • Overall 100% Beldfoil Shield • 22 AWG Drain Wire															
Foam HDPE Insulation (Power) • **Foam HDPE Insulation** (Data) • **Orange PVC Jacket**															
150V 75°C	**3125A**	NEC: CL2 CM CEC: CM	500 1000	152.4 304.8	31.5 63.0	14.3 28.6	(2)16 AWG (26x30) .060″ TC 4.5Ω/M′ 14.8Ω/km (2)22 AWG (7x30) .030″ TC 18.1Ω/M′ 59.4Ω/km	100% Overall Beldfoil Shield 10.0Ω/M′ 32.8Ω/km	Power Pair: Red/Black Data Pair: White/Green	.368	9.35	150	— Data: 78%	9.0	30.0
16, 22 and 12 AWG Stranded Tinned Copper • Overall 100% Beldfoil Shield • 22 AWG Drain Wire															
Foam HDPE Insulation (Control) • **Foam HDPE Insulation** (Data) • **PVC Insulation** (Power) • **Orange PVC Jacket**															
150V 75°C 	**3126A**	NEC: CL2 CM CEC: CM	500 1000	152.4 304.8	57.5 114.0	26.1 51.8	(2)16 AWG (26x30) .060″ TC 4.5Ω/M′ 14.8Ω/km (2)22 AWG (7x30) .030″ TC 18.1Ω/M′ 59.4Ω/km (2)12 AWG (65x30) .090″ TC 1.8Ω/M′ 5.9Ω/km	100% Overall Beldfoil Shield 9.5Ω/M′ 31.2Ω/km	Control Pair: Red/Black Data Pair: White/Green Power Pair: Black/White, Red/White	.486 x .363	12.34 x 9.22	150	— Data: 78% —	9.0	30.0

DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper

Square D/Seriplex is a Square D/Schneider AEG trademark.

Industrial Data Solutions® — Industrial Data

DeviceBus® for Phoenix Contact InterBus®-S

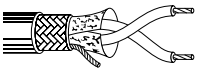
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Shielding Materials Nom. DCR	Color Code	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	
			Ft.	m	Lbs.	kg				Inch	mm			pF/Ft.	pF/m
18 and 24 AWG Stranded Tinned Copper • Overall 100% Beldfoil® Shield + 90% Tinned Copper Braid															
PVC Insulation (Power) • **PE Insulation** (Data) • **Green Polyurethane Jacket**															
UL AWM Style 20233 (300V 80°C) 	**3119A**		500 1000	152.4 304.8	35.5 71.0	16.1 32.3	(3)18 AWG (7x24) .060″ TC 3.7Ω/M′ 12.1Ω/km (3pr)24 AWG (7x32) .024″ TC 24.0Ω/M′ 78.7Ω/km	100% Overall Beldfoil + 90% TC Braid 2.7Ω/M′ 8.9Ω/km	Power: Red, Blue, Green w/ Yellow Stripe Data: White/Brown, Pink/Gray, Yellow/Green	.333	8.46	100	— Data: 66%	15.4	50.5
24 AWG Stranded Tinned Copper • Overall 100% Beldfoil Shield + 90% Tinned Copper Braid															
PE Insulation • Green Polyurethane Jacket															
UL AWM Style 20233 (300V 80°C) 	**3120A**		500 1000	152.4 304.8	28.0 56.0	12.7 25.5	(3pr)24 AWG (7x32) TC 24.0Ω/M′ 78.7Ω/km	100% Overall Beldfoil + 90% TC Braid 2.7Ω/M′ 8.9Ω/km	White/Brown, Pink/Gray, Yellow/Green	.313	7.95	100	66%	15.4	50.5

DCR = DC Resistance • TC = Tinned Copper

InterBus-S is a Phoenix Contact trademark.

Industrial Data Solutions® — Industrial Data

EIA Industrial RS-485 PLTC/CM

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Stranded (7x30) Tinned Copper • Twisted Pairs • Overall 100% Beldfoil® Shield + 90% TC Braid • 22 AWG Stranded TC Drain Wire																		
Datalene® Insulation • Black UV Resistant PVC Jacket (CPE jacket optional)																		
Oil Res II 300V 	**3105A**	NEC: CM PLTC CEC: CM FT1	1	See Chart Below	500 1000 5000	152.4 304.8 1523.9	25.0 50.0 255.0	11.4 22.7 115.9	14.7Ω/M′ 48.2Ω/km	2.9Ω/M′ 9.5Ω/km	.286	7.26	120	78%	11.0	36.1	20.0	65.6
													For CPE jacketed version order Part No. YR44345					
	3106A	NEC: CM PLTC CEC: CM FT1	1.5†	See Chart Below	500 1000 5000	152.4 304.8 1523.9	27.0 51.0 260.0	12.3 23.2 118.2	14.7Ω/M′ 48.2Ω/km	2.8Ω/M′ 9.2Ω/km	.302	7.67	120	78%	11.0	36.1	20.0	65.6
													For CPE jacketed version order Part No. YR46721					
	3107A	NEC: CM PLTC CEC: CM FT1	2	See Chart Below	1000 4000 5000	304.8 1219.2 1523.9	73.0 300.0 385.0	33.2 136.4 175.0	14.7Ω/M′ 48.2Ω/km	1.4Ω/M′ 4.6Ω/km	.356	9.04	120	78%	11.0	36.1	20.0	65.6
													For CPE jacketed version order Part No. YR46792					
	3108A	NEC: CM PLTC CEC: CM FT1	3	See Chart Below	1000 2000	304.8 609.6	93.0 184.0	42.3 83.6	14.7Ω/M′ 48.2Ω/km	1.4Ω/M′ 4.6Ω/km	.420	10.67	120	78%	11.0	36.1	20.0	65.6
													For CPE jacketed version order Part No. YR45287					
	3109A	NEC: CM PLTC CEC: CM FT1	4	See Chart Below	1000 2000	304.8 609.6	107.0 218.0	48.6 99.1	14.7Ω/M′ 48.2Ω/km	1.1Ω/M′ 3.6Ω/km	.420	10.67	120	78%	11.0	36.1	20.0	65.6
													For CPE jacketed version order Part No. YR44768					

DCR = DC Resistance • TC = Tinned Copper

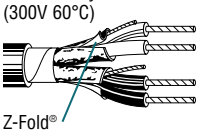
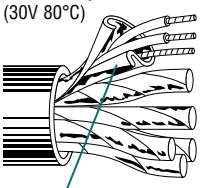
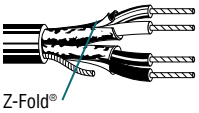
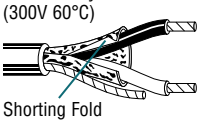
* Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† All conductors are under the braid shield; one pair is under the Beldfoil shield.

Color Code Chart

Pair No.	Color Combination
1	White/Blue Stripe Blue/White Stripe
2	White/Orange Stripe Orange/White Stripe
3	White/Green Stripe Green/White Stripe
4	White/Brown Stripe Brown/White Stripe

Industrial Data Solutions® — Interconnect Cable

Shielded Twisted Pair Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
24 AWG Stranded (7x32) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil® • 24 AWG Stranded TC Drain Wire																		
Datalene® Insulation • Chrome PVC Jacket																		
UL AWM Style 2493 (300V 60°C)  Z-Fold®	**9729**	NEC: CM CEC: CM	2	See Chart 3 (Tech Info Section)	100 500 1000 10000	30.5 152.4 304.8 3048.0	4.3 20.5 39.0 390.0	2.0 9.3 17.7 177.8	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.317	8.05	100	78%	12.5	41.0	23.2	76.1
For Plenum version of 9729, see 89729 or 82729.																		
22 AWG Stranded (7x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil • 22 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2919 (30V 80°C)  Z-Fold®	**8777**	NEC: CM CEC: CM	3	See Chart 3 (Tech Info Section)	100 250 U-500 500 U-1000 1000 1640 3280 5000 10000	30.5 76.2 U-152.4 152.4 U-304.8 304.8 499.9 999.7 1524.0 3048.0	5.3 11.3 21.0 21.0 41.0 42.0 67.2 137.8 210.0 450.0	2.4 5.1 9.5 9.5 18.7 19.1 30.6 62.6 95.5 204.5	15.0Ω/M′ 49.2Ω/km	10.6Ω/M′ 34.8Ω/km	.273	6.93	50	66%	30	98	55	180
For Plenum versions of 8777, see 88777, 87777 or 82777.																		
22 AWG Stranded (7x30) • Tinned Copper • Twisted Pairs • Individually Shielded with 100% Beldfoil • 24 AWG Stranded TC Drain Wire																		
Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS 60°C	**8723**	NEC: CM CEC: CM	2	Red/Black, Green/White	100 U-500 500 U-1000 1000 1640 U-2000 2000 3280 5000 10000	30.5 U-152.4 152.4 U-304.8 304.8 499.9 U-609.6 609.6 999.7 1524.0 3048.0	2.3 10.5 10.0 20.0 20.0 32.8 40.0 40.0 65.6 95.0 200.0	1.0 4.8 4.5 9.1 9.1 14.9 18.2 18.2 29.8 43.2 90.9	15.0Ω/M′ 49.2Ω/km	16.6Ω/M′ 54.5Ω/km	.168	4.27	45	66%	35	115	62	203
For Plenum versions of 8723, see 88723, 87723 or 82723.																		
Plenum • FEP Insulation • Red FEP Jacket (Pairs Cabled on Common Axis to Reduce Diameter)																		
300V RMS, Non-conduit  Z-Fold®	**88723**	NEC: CMP CEC: CMP FT6	2	Red/Black, Green/White	100 500 1000	30.5 152.4 304.8	3.4 11.0 21.0	1.5 5.0 9.5	16.0Ω/M′ 52.5Ω/km	16.6Ω/M′ 54.5Ω/km	.148	3.76	40	69%	35	115	67	220
18 AWG Stranded Conductors (16x30) • Tinned Copper • Twisted Pair • Overall 100% Beldfoil Shield • 20 AWG Stranded TC Drain Wire																		
Polyethylene Insulation • Chrome PVC Jacket																		
UL AWM Style 2092 (300V 60°C)  Shorting Fold	**8760**	NEC: CM CEC: CM	1	Black, Clear	250 U-500 500 U-1000 1000 2000 5000 10000	76.2 U-152.4 152.4 U-304.8 304.8 609.6 1524.0 3048.0	6.8 13.0 13.0 26.0 25.0 50.0 135.0 260.0	3.1 5.9 5.9 11.8 11.4 22.7 61.4 118.2	—	—	.222	5.64	—	—	24	79	44	144
For Plenum versions of 8760, see 88760, 87760 or 82760.																		

DCR = DC Resistance • TC = Tinned Copper

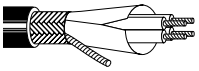
* Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.

VFD (Variable Frequency Drive) Cable

1000V UL Flexible Motor Supply Cable

VFD cables carry the power from AC drive systems to AC motors and are designed to withstand harsh operating environments characterized by high voltage spikes, high noise levels and adverse environmental conditions.

Description	Part No.	AWG	Cond. Stranding	Standard Lengths		Standard Unit Wt.		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Lbs.	N	Inch	mm
4-conductor (3) Stranded TC Signals + (1) Full-sized Ground • Overall Beldfoil® + 85% TC Braid Shield • Full Sized TC Drain Wire*													
XLPE Insulation • Black Sunlight-resistant PVC Jacket (ICEA Method 4 Color Code: Black and Numbered, Green Ground)													
1000V UL **Flexible Motor Supply Cable** 600V UL 1277 Type TC 1000V CSA AWM I/II A/B FT4 Open Wiring per NEC Article 340 90°C Wet/Dry	**29500**	16	26x30	250	76.2	40.3	18.3	.48	12.19	83	368	3.9	99.06
				500	152.4	93.5	42.5						
				1000	304.8	169.0	76.8						
				6000	1829.3	1068.0	485.5						
	29501	14	41x30	250	76.2	55.0	25.0	.55	13.97	174	773	4.5	114.30
				500	152.4	124.0	56.4						
				1000	304.8	243.0	110.5						
				5000	1524.0	1105.0	502.3						
	29502	12	65x30	250	76.2	69.8	31.7	.60	15.24	243	1081	4.8	121.92
				500	152.4	151.5	68.9						
				1000	304.8	298.0	135.5						
				5000	1524.0	1570.0	713.6						
	29503	10	105x30	250	76.2	91.3	41.5	.66	16.76	329	1463	5.4	137.16
				500	152.4	194.5	88.4						
				1000	304.8	375.0	170.5						
				5000	1524.0	2025.0	920.5						
	29504	8	7x19x29	250	76.2	158.5	72.0	.89	22.61	523	2326	7.3	185.42
				500	152.4	332.0	150.9						
				1000	304.8	660.0	300.0						
				5000	1524.0	3135.0	1425.0						
	29505	6	7x19x27	250	76.2	221.3	100.6	.99	25.15	840	3736	8.0	203.20
				1000	304.8	906.0	411.8						
				3500	1066.8	3206.0	1457.3						
	29506	4	7x19x25	250	76.2	319.5	145.2	1.15	29.21	1327	5903	9.2	233.68
				1000	304.8	1250.0	568.2						
				3000	914.4	3843.0	1746.8						
	29507	2	7x19x23	250	76.2	437.8	199.0	1.29	32.77	2110	9386	10.5	266.70
XHHW-2, RHW-2 rated singles. Suitable for Direct Burial applications.				500	152.4	875.5	398.0						
				1000	304.8	1711.0	777.7						
				2000	609.6	3682.0	1673.6						



TC = Tinned Copper if conductor, or Tray Cable if NEC rating. • XLPE = Cross-linked Polyethylene

*Drain wire and ground wire are the same AWG size as conductor.

Belden Infinity® Flexible Automation Cable

Overview and Application Guide

Belden Infinity is a complete line of control, data, video, and power cables specifically designed to handle the rigorous speeds and near-constant motion encountered in automated equipment such as robots, pick and place machines, automatic handling systems, multi-axis machine tools, and conveyor systems.

When the application demands highly flexible cables offering exceptional cable life and performance, specify Belden Infinity.

Belden Infinity Means More Performance And Longer Life

Reduced Cable Memory — Belden Infinity's unique design, including no central core conductor, and neutralized cabling, results in cables that are relaxed, with almost no memory.

Greater Flex Life — Belden Infinity cables offer superior flexibility and are able to handle the vigorous motions and high speeds encountered in automated equipment.

Greater System Uptime — Belden Infinity cables combine specialized manufacturing techniques with precision copper stranding and rugged insulation and jacketing compounds to maximize flex life and reliability.

No Talc Problems — Unlike the potentially harmful talc used in other cables, Belden's non-toxic, non-irritating slipper compound facilitates flexing and also complies with OSHA regulations. It's safer for employees and operators and is less likely to contaminate solder joints or mechanical compounds.

CE Conformity — All Belden Infinity cables are CE marked per the Conformité Européenne low voltage directive, allowing trade of product in Europe.

Custom Designs — Other designs available upon request.

Product Series Descriptions

- **C-TC+** — The C-TC+ series is designed for C-track and extreme flex applications up to 9 million flex cycles*. This series utilizes super fine stranding and some of the tightest lay lengths allowed by UL, providing outstanding flex life.
- **FCC** — The FCC series is a cost effective alternative for C-track and moderate flexing applications rated up to 1 million flex cycles*.
- **Flex Data Cables** — Belden Infinity Flex Data cables are designed for industrial applications where precise data transmission is combined with high-flexing. These cables are ideal for effective operation of computer controlled equipment or other automated production processes, even in harsh environments.
- **Flex Vision** — Belden Infinity Vision cables are continuous flex video cables designed for machine vision applications. They are ideal for motion-controlled video and with inspection and measurement equipment.

Application Guide

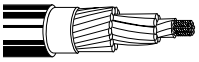
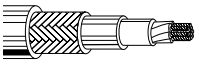
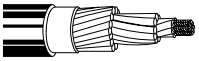
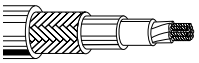
Belden Infinity Series	C-Track Systems	Multi-Axis Machining	Robotics	Automated Assembly Systems	Material Handling Systems	Pick & Place Systems	Automated Storage Retrieval	Gantry Systems	Machine Vision	Motion-Controlled Video	Inspection & Measure Equip.	Festooning	Servo	Power
FCC Oil & abrasion resistant 600V UL & CSA rated Life Expectancy: Over 1 million flex cycles*	●	●		●	●	●	●	●			●	●	●	●
C-TC+ Oil & abrasion resistant 600V UL & CSA rated Life Expectancy: Over 9 million flex cycles*	★	★	●	★	★	★	★	★			★	★	★	★
DATA Oil & abrasion resistant 300V UL & CSA rated Life Expectancy: Over 1 million flex cycles*	●	●	●	●	●	●	●	●			●	●		
VISION Abrasion resistant 30V UL & CSA rated Life Expectancy: Over 1 million flex cycles*	●	●		●	●	●	●	●	★	✚	✚	●		

● Satisfactory ✚ Superior ★ Supreme

*Based on Belden recommended installation guidelines.

Belden Infinity® Flexible Automation Cable

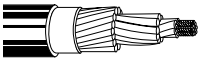
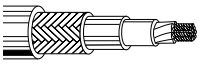
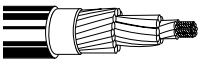
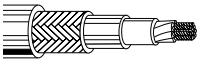
600V C-TC+ Control Cables for Extreme Flexing
(9 Million Flex Cycles*)

Description	Part No.	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Maximum Pull Tension	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	Lbs.	N
20 AWG Stranded (74x38) Bare Copper • Unshielded (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • Orange Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7101A**	3	250 500 1000	76.2 152.4 304.8	11.0 24.5 47.0	5.0 11.1 21.4	.020	.51	.045	1.14	.275	6.99	45	200
	**7102A**	4	250 500 1000	76.2 152.4 304.8	13.3 27.5 53.0	6.0 12.5 24.1	.020	.51	.045	1.14	.295	7.49	59	262
	7105A	9	250 500 1000	76.2 152.4 304.8	29.8 52.0 104.0	13.5 23.6 47.3	.020	.51	.055	1.40	.435	11.05	130	578
	7106A	12	250 500 1000	76.2 152.4 304.8	32.3 66.5 134.0	14.7 30.2 60.9	.020	.51	.055	1.40	.455	11.56	178	791
	7107A	18	250 500	76.2 152.4	50.0 101.0	22.7 45.9	.020	.51	.065	1.65	.545	13.84	260	1156
Temp Rating: -40° to 90°C (-5° to 90°C flexing)	**7108A**	25	250 500	76.2 152.4	71.5 143.5	32.5 65.2	.020	.51	.080	2.03	.665	16.89	370	1645
20 AWG Stranded (74x38) Bare Copper • 85% Tinned Copper Braid Shield (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • PVC Inner Jacket • Orange Oil- and Abrasion-resistant PVC Outer Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7106AS**	12	250 500	76.2 152.4	57.5 116.0	26.1 52.7	.020	.51	Inner: .025 Outer: .055	.64 1.40	.535	13.59	194	863
														
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
18 AWG Stranded (114x38) Bare Copper • Unshielded (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • Orange Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7110A**	3	250 500 1000	76.2 152.4 304.8	12.8 26.0 50.0	5.8 11.8 22.7	.020	.51	.035	.89	.300	7.62	69	306
	**7113A**	7	250 500 1000	76.2 152.4 304.8	29.0 55.5 111.0	13.2 25.2 50.5	.020	.51	.060	1.52	.438	11.13	155	689
	7115A	12	250 500 1000	76.2 152.4 304.8	40.3 84.5 169.0	18.3 38.4 76.8	.020	.51	.060	1.52	.513	13.03	270	1201
	7116A	18	250 500	76.2 152.4	63.0 126.0	28.6 57.3	.020	.51	.060	1.52	.598	15.19	400	1779
	7117A	25	250 500	76.2 152.4	89.3 179.0	40.6 81.4	.020	.51	.083	2.11	.744	18.90	570	2535
Temp Rating: -40° to 90°C (-5° to 90°C flexing)	**7118A**	34	250 500	76.2 152.4	108.8 216.0	49.4 98.2	.020	.51	.083	2.11	.822	20.88	775	3447
18 AWG Stranded (114x38) Bare Copper • 85% Tinned Copper Braid Shield (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • PVC Inner Jacket • Orange Oil- and Abrasion-resistant PVC Outer Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7111AS**	4	250 500	76.2 152.4	4.0 60.5	1.8 27.5	.020	.51	Inner: .025 Outer: .050	.64 1.27	.405	10.29	84	323
	**7115AS**	12	250 500 1000	76.2 152.4 304.8	72.8 144.5 287.0	33.1 65.7 130.5	.020	.51	Inner: .025 Outer: .065	.64 1.65	.600	15.24	252	1121
	7117AS	25	250 500	76.2 152.4	138.8 277.5	63.1 126.1	.020	.51	Inner: .025 Outer: .080	.64 2.03	.815	20.70	273	1214
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														

*Based on proper installation techniques in a C-track cable guide.

Belden Infinity® Flexible Automation Cable

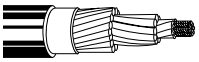
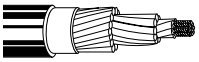
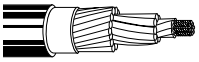
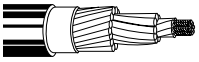
600V C-TC+ Control Cables for Extreme Flexing
(9 Million Flex Cycles*)

Description	Part No.	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Maximum Pull Tension	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	Lbs.	N
16 AWG Stranded (190x38) Bare Copper • Unshielded (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • Orange Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7122A**	3	250 500 1000	76.2 152.4 304.8	16.3 43.5 84.0	7.4 19.8 38.2	.020	.51	.045	1.14	.325	8.26	114	507
	**7125A**	7	250 500 1000	76.2 152.4 304.8	38.5 73.5 148.0	17.5 33.4 67.3	.020	.51	.060	1.52	.480	12.19	260	1156
	7126A	9	250 500 1000	76.2 152.4 304.8	49.3 97.5 195.0	22.4 44.3 88.6	.020	.51	.060	1.52	.545	13.84	340	1512
	7127A	12	250 500 1000	76.2 152.4 304.8	53.3 122.5 243.0	24.2 55.7 110.5	.020	.51	.060	1.52	.570	14.48	450	2001
	7128A	18	250 500	76.2 152.4	85.3 172.0	38.8 78.2	.020	.51	.060	1.52	.670	17.02	680	3025
	7129A	25	250 500	76.2 152.4	124.5 247.5	56.5 112.5	.020	.51	.080	2.03	.820	20.83	950	4226
	7130A	34	250 500	76.2 152.4	166.3 336.0	75.6 152.7	.020	.51	.080	2.03	.900	22.86	1290	5738
Temp Rating: -40° to 90°C (-5° to 90°C flexing)	**7132A**	50	250 500	76.2 152.4	230.5 464.5	104.8 211.1	.020	.51	.085	2.16	1.070	27.18	1900	8452
16 AWG Stranded (190x38) Bare Copper • 85% Tinned Copper Braid Shield (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • PVC Inner Jacket • Orange Oil- and Abrasion-resistant PVC Outer Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7121AS**	2	250 500	76.2 152.4	21.5 43.0	9.8 19.5	.020	.51	Inner: .025 Outer: .040	.64 1.02	.375	9.53	76	338
	**7123AS**	4	250 500	76.2 152.4	40.8 78.0	18.5 35.5	.020	.51	Inner: .025 Outer: .040	.64 1.02	.420	10.67	154	685
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
14 AWG Stranded (266x38) Bare Copper • Unshielded (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • Orange Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7136A**	4	250 500	76.2 152.4	39.0 74.5	17.7 33.9	.025	.64	.050	1.27	.430	10.92	212	943
	**7142A**	25	250 500	76.2 152.4	246.8 495.0	112.2 225.0	.025	.64	.090	2.29	1.000	25.40	1330	5916
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
14 AWG Stranded (266x38) Bare Copper • 85% Tinned Copper Braid Shield (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • PVC Inner Jacket • Orange Oil- and Abrasion-resistant PVC Outer Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7136AS**	4	250 500	76.2 152.4	74.0 145.0	33.6 65.9	.025	.64	Inner: .025 Outer: .045	.64 1.14	.500	12.70	248	1103
	**7141AS**	18	250 500	76.2 152.4	204.0 403.0	92.7 183.2	.025	.64	Inner: .025 Outer: .070	.64 1.78	.890	22.61	958	4261
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														

*Based on proper installation techniques in a C-track cable guide.

Belden Infinity® Flexible Automation Cable

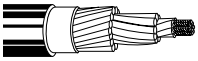
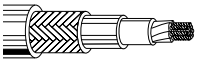
600V C-TC+ Control Cables for Extreme Flexing
(9 Million Flex Cycles*)

Description	Part No.	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Maximum Pull Tension	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	Lbs.	N
12 AWG Stranded (413x38) Bare Copper • Unshielded (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • Orange Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7145A**	4	250 500 1000	76.2 152.4 304.8	72.5 146.0 290.0	33.0 66.4 131.8	.030	.76	.075	1.91	.545	13.84	274	1218
														
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
10 AWG Stranded (658x38) Bare Copper • Unshielded (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • Orange Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7147A**	4	250 500	76.2 152.4	78.3 156.5	35.6 71.1	.030	.76	.075	1.91	.605	15.37	527	2331
														
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
6 AWG Stranded (665x34) Bare Copper • Unshielded (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • Orange Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7152A**	3	250 500	76.2 152.4	133.8 266.0	60.8 120.9	.060	1.52	.075	1.91	.825	20.96	1100	4893
														
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
2 AWG Stranded (1666x34) Bare Copper • Unshielded (Color Code: Red w/numbers + Green/Yellow ground)														
PVC Insulation • Orange Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7158A**	3	250	76.2	334.8	152.2	.070	1.78	.100	2.54	1.160	29.46	2499	11,117
														
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														

*Based on proper installation techniques in a C-track cable guide.

Belden Infinity® Flexible Automation Cable

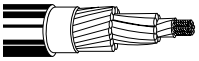
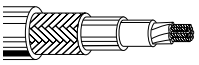
600V FCC Control Cables for Moderate Flexing
(1 Million Flex Cycles*)

Description	Part No.	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Maximum Pull Tension	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	Lbs.	N
20 AWG Stranded (10x30) Bare Copper • Unshielded (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • Gray Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7400A**	2	250 500 1000	76.2 152.4 304.8	11.0 25.0 44.0	5.0 11.4 20.0	.022	.56	.040	1.02	.240	6.10	26	115
	**7401A**	3	250 500 1000	76.2 152.4 304.8	13.0 30.0 59.0	5.9 13.6 26.8	.022	.56	.040	1.02	.250	6.35	39	173
	7402A	4	250 500 1000	76.2 152.4 304.8	15.0 33.0 64.0	6.8 15.0 29.1	.022	.56	.040	1.02	.275	6.99	52	231
	7403A	5	250 500 1000	76.2 152.4 304.8	17.5 38.0 72.0	8.0 17.3 32.7	.022	.56	.040	1.02	.300	7.62	65	289
	7404A	7	250 500 1000	76.2 152.4 304.8	22.0 44.5 86.0	10.0 20.2 39.1	.022	.56	.040	1.02	.345	8.76	91	404
	7405A	9	250 500 1000	76.2 152.4 304.8	29.5 71.5 144.0	13.4 32.5 65.5	.022	.56	.053	1.35	.410	10.41	117	520
	7406A	12	250 500 1000	76.2 152.4 304.8	30.8 88.5 177.0	14.0 40.2 80.5	.022	.56	.053	1.35	.420	10.67	156	693
	7407A	18	250 500	76.2 152.4	53.5 104.0	24.3 47.3	.022	.56	.053	1.35	.500	12.70	234	1040
Temp Rating: -40° to 90°C (-5° to 90°C flexing)	**7408A**	25	250 500	76.2 152.4	65.3 130.5	29.7 59.3	.022	.56	.065	1.65	.615	15.62	325	1445
20 AWG Stranded (10x30) Bare Copper • 85% Tinned Copper Braid Shield (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • PVC Inner Jacket • Gray Oil- and Abrasion-resistant PVC Outer Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7401AS**	3	250 500 1000	76.2 152.4 304.8	27.8 54.0 105.0	12.6 24.5 47.7	.022	.56	Inner: .025 Outer: .035	.64 .89	.320	8.13	45	200
	**7402AS**	4	250 500	76.2 152.4	32.8 64.0	14.9 29.1	.022	.56	Inner: .025 Outer: .035	.64 .89	.330	8.38	52	231
	7403AS	5	250 500	76.2 152.4	34.8 68.0	15.8 30.9	.022	.56	Inner: .025 Outer: .035	.64 .89	.370	9.40	65	289
	7404AS	7	250 500	76.2 152.4	37.8 71.5	17.2 32.5	.022	.56	Inner: .025 Outer: .040	.64 1.02	.420	10.67	91	404
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														

*Based on proper installation techniques in a C-track cable guide.

Belden Infinity® Flexible Automation Cable

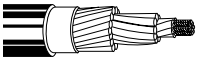
600V FCC Control Cables for Moderate Flexing
(1 Million Flex Cycles*)

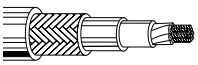
Description	Part No.	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Maximum Pull Tension	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	Lbs.	N
18 AWG Stranded (16x30) Bare Copper • Unshielded (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • Gray Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7409A**	2	250 500 1000	76.2 152.4 304.8	13.3 26.5 51.0	6.0 12.0 23.2	.022	.56	.040	1.02	.264	6.71	50	222
	**7410A**	3	250 500 1000	76.2 152.4 304.8	16.3 25.0 48.0	7.4 11.4 21.8	.022	.56	.040	1.02	.280	7.11	74	329
	7411A	4	250 500 1000	76.2 152.4 304.8	18.8 31.0 58.0	8.5 14.1 26.4	.022	.56	.040	1.02	.305	7.75	98	435
	7412A	5	250 500 1000	76.2 152.4 304.8	21.8 36.0 69.0	9.9 16.4 31.4	.022	.56	.040	1.02	.330	8.38	122	542
	7413A	7	250 500 1000	76.2 152.4 304.8	27.5 46.0 120.0	12.5 20.9 54.5	.022	.56	.040	1.02	.385	9.78	171	760
	7414A	9	250 500 1000	76.2 152.4 304.8	36.5 87.0 174.0	16.6 39.5 79.1	.022	.56	.050	1.27	.452	11.48	220	978
	7415A	12	250 500 1000	76.2 152.4 304.8	40.0 75.5 161.0	18.2 34.3 73.2	.022	.56	.050	1.27	.475	12.07	292	1298
	7416A	18	250 500	76.2 152.4	55.8 112.5	25.3 51.1	.022	.56	.050	1.27	.560	14.22	440	1957
	7417A	25	250 500	76.2 152.4	74.3 149.0	33.8 67.7	.022	.56	.072	1.83	.696	12.68	520	2313
	7418A	34	250 500	76.2 152.4	111.3 215.5	50.6 98.0	.022	.56	.072	1.83	.788	20.02	830	3692
	7419A	41	250 500	76.2 152.4	148.3 295.0	67.4 134.1	.022	.56	.075	1.91	.860	21.84	1001	4453
Temp Rating: -40° to 90°C (-5° to 90°C flexing)	**7420A**	50	250	76.2	186.5	84.8	.022	.56	.083	2.11	.940	23.88	1220	5427
18 AWG Stranded (16x30) Bare Copper • 85% Tinned Copper Braid Shield (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • PVC Inner Jacket • Gray Oil- and Abrasion-resistant PVC Outer Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7411AS**	4	250 500	76.2 152.4	29.0 56.5	13.2 25.7	.022	.56	Inner: .025 Outer: .032	.64 .81	.365	9.27	83	369
	**7413AS**	7	250 500	76.2 152.4	37.5 74.0	17.0 33.6	.022	.56	Inner: .025 Outer: .035	.64 .89	.450	11.43	145	645
	7415AS	12	250 500	76.2 152.4	61.5 124.0	28.0 56.4	.022	.56	Inner: .025 Outer: .045	.64 1.14	.550	13.97	230	1023
	7416AS	18	250 500	76.2 152.4	83.3 169.0	37.8 76.8	.022	.56	Inner: .025 Outer: .055	.64 1.40	.650	16.51	374	1663
	7417AS	25	250 500	76.2 152.4	113.8 228.0	51.7 103.6	.022	.56	Inner: .025 Outer: .060	.64 1.52	.765	19.43	520	2313
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														

*Based on proper installation techniques in a C-track cable guide.

Belden Infinity® Flexible Automation Cable

600V FCC Control Cables for Moderate Flexing
(1 Million Flex Cycles*)

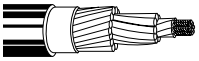
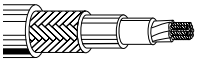
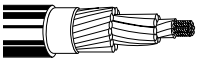
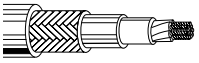
Description	Part No.	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Maximum Pull Tension	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	Lbs.	N
16 AWG Stranded (26x30) Bare Copper • Unshielded (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • Gray Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7421A**	2	500 1000	152.4 304.8	35.0 68.0	15.9 30.9	.022	.56	.040	1.02	.290	7.37	70	311
	**7422A**	3	250 500 1000	76.2 152.4 304.8	18.8 34.5 65.0	8.5 15.7 29.5	.022	.56	.040	1.02	.305	7.75	105	467
	7423A	4	250 500 1000	76.2 152.4 304.8	22.5 41.5 80.0	10.2 18.9 36.4	.022	.56	.040	1.02	.330	8.38	140	622
	7424A	5	250 500 1000	76.2 152.4 304.8	27.5 49.5 96.0	12.5 22.5 43.6	.022	.56	.040	1.02	.360	9.14	175	778
	7425A	7	250 500 1000	76.2 152.4 304.8	35.0 64.0 129.0	15.9 29.1 58.6	.022	.56	.040	1.02	.425	10.80	236	1049
	7426A	9	250 500 1000	76.2 152.4 304.8	50.5 95.0 190.0	23.0 43.2 86.4	.022	.56	.060	1.52	.540	13.72	304	1352
	7427A	12	250 500 1000	76.2 152.4 304.8	55.3 114.0 220.0	25.1 51.8 100.0	.022	.56	.065	1.65	.565	14.35	405	1801
	7428A	18	250 500	76.2 152.4	79.0 158.0	35.9 71.8	.022	.56	.065	1.65	.650	16.51	608	2704
	7429A	25	250 500	76.2 152.4	109.0 218.5	49.5 99.3	.022	.56	.060	1.52	.750	19.05	875	3892
Temp Rating: -40° to 90°C (-5° to 90°C flexing)	**7430A**	34	250 500	76.2 152.4	171.3 341.0	77.8 155.0	.022	.56	.075	1.91	.878	22.30	1145	5093

16 AWG Stranded (26x30) Bare Copper • 85% Tinned Copper Braid Shield (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • PVC Inner Jacket • Gray Oil- and Abrasion-resistant PVC Outer Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7422AS**	3	250 500	76.2 152.4	30.5 59.5	13.9 27.0	.022	.56	Inner: .025 Outer: .032	.64 .81	.370	9.40	105	467
	**7423AS**	4	250 500	76.2 152.4	36.0 68.0	16.4 30.9	.022	.56	Inner: .025 Outer: .035	.64 .89	.400	10.16	140	622
	7427AS	12	250 500	76.2 152.4	81.8 164.5	37.2 74.8	.022	.56	Inner: .025 Outer: .060	.64 1.52	.630	16.00	420	1868
	7428AS	18	250 500	76.2 152.4	119.0 238.5	54.1 108.4	.022	.56	Inner: .025 Outer: .070	.64 1.78	.740	18.80	630	2802
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														

*Based on proper installation techniques in a C-track cable guide.

Belden Infinity® Flexible Automation Cable

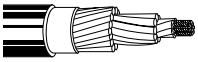
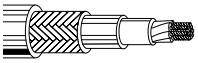
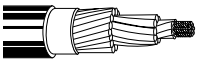
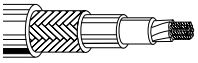
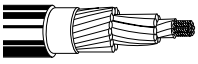
600V FCC Control Cables for Moderate Flexing
(1 Million Flex Cycles*)

Description	Part No.	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Maximum Pull Tension	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	Lbs.	N
14 AWG Stranded (41x30) Bare Copper • Unshielded (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • Gray Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7434A**	2	250 500 1000	76.2 152.4 304.8	34.0 66.5 92.0	15.5 30.2 41.8	.023	.58	.045	1.14	.335	8.51	201	894
	**7435A**	3	250 500 1000	76.2 152.4 304.8	39.8 78.5 98.0	18.1 35.7 44.5	.023	.58	.045	1.14	.350	8.89	201	894
	7436A	4	250 500 1000	76.2 152.4 304.8	49.3 95.0 131.0	22.4 43.2 59.5	.023	.58	.050	1.27	.395	10.03	201	894
	7438A	7	250 500 1000	76.2 152.4 304.8	74.8 150.5 202.0	34.0 68.4 91.8	.023	.58	.060	1.52	.525	13.34	373	1659
	7439A	9	250 500 1000	76.2 152.4 304.8	110.8 223.0 334.0	50.3 101.4 151.8	.023	.58	.070	1.78	.620	15.75	480	2135
	7440A	12	250 500 1000	76.2 152.4 304.8	142.5 285.5 427.0	64.8 129.8 194.1	.023	.58	.075	1.91	.660	16.76	640	2847
Temp Rating: -40° to 90°C (-5° to 90°C flexing)	**7442A**	25	250 500	76.2 152.4	223.8 454.5	101.7 206.6	.023	.58	.090	2.29	.930	23.62	1337	5947
14 AWG Stranded (41x30) Bare Copper • 85% Tinned Copper Braid Shield (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • PVC Inner Jacket • Gray Oil- and Abrasion-resistant PVC Outer Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7436AS**	4	250 500	76.2 152.4	49.3 95.0	22.4 43.2	.023	.58	Inner: .025 Outer: .055	.64 1.40	.482	12.24	212	943
	**7438AS**	7	250 500	76.2 152.4	74.8 150.5	34.0 68.4	.023	.58	Inner: .025 Outer: .060	.64 1.52	.563	14.30	371	1650
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
12 AWG Stranded (65x30) Bare Copper • Unshielded (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • Gray Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7444A**	3	250 500	76.2 152.4	53.5 103.5	24.3 47.0	.028	.71	.060	1.52	.450	11.43	253	1125
	**7445A**	4	250 500	76.2 152.4	63.5 124.0	28.9 56.4	.028	.71	.070	1.78	.505	12.83	338	1503
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
12 AWG Stranded (65x30) Bare Copper • 85% Tinned Copper Braid Shield (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • PVC Inner Jacket • Gray Oil- and Abrasion-resistant PVC Outer Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7445AS**	4	250 500	76.2 152.4	85.8 171.5	39.0 78.0	.028	.71	Inner: .030 Outer: .070	.76 1.78	.580	14.73	338	1503
														
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														

*Based on proper installation techniques in a C-track cable guide.

Belden Infinity® Flexible Automation Cable

600V FCC Control Cables for Moderate Flexing
(1 Million Flex Cycles*)

Description	Part No.	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Maximum Pull Tension	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	Lbs.	N
10 AWG Stranded (105x30) Bare Copper • Unshielded (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • Gray Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7447A**	4	250 500	76.2 152.4	70.8 142.5	32.2 64.8	.030	.76	.070	1.78	.570	14.48	672	3014
 Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
10 AWG Stranded (105x30) Bare Copper • 85% Tinned Copper Braid Shield (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • PVC Inner Jacket • Gray Oil- and Abrasion-resistant PVC Outer Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7447AS**	4	250 500	76.2 152.4	92.8 185.5	42.2 84.3	.030	.76	Inner: .035 Outer: .065	.89 1.65	.660	16.76	546	2428
 Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
8 AWG Stranded (168x30) Bare Copper • Unshielded (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • Gray Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7449A**	3	250 500	76.2 152.4	102.0 163.0	46.4 74.1	.045	1.14	.070	1.78	.655	16.64	690	3069
	**7450A**	4	250 500	76.2 152.4	113.8 228.0	51.7 103.6	.045	1.14	.070	1.78	.715	18.16	920	4092
Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
8 AWG Stranded (168x30) Bare Copper • 85% Tinned Copper Braid Shield (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • PVC Inner Jacket • Gray Oil- and Abrasion-resistant PVC Outer Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7450AS**	4	250 500	76.2 152.4	141.3 281.0	64.2 127.7	.045	1.14	Inner: .040 Outer: .065	1.02 1.65	.815	20.70	872	3879
 Temp Rating: -40° to 90°C (-5° to 90°C flexing)														
6 AWG Stranded (266x30) Bare Copper • Unshielded (Color Code: Black w/numbers + Green/Yellow ground)														
PVC Insulation • Gray Oil- and Abrasion-resistant PVC Jacket														
UL AWM Style 2587 (600V 90°C) CSA AWM I/II A/B	**7453A**	4	250	76.2	185.0	84.1	.060	1.52	.085	2.16	.925	23.50	1472	6548
 Temp Rating: -40° to 90°C (-5° to 90°C flexing)														

*Based on proper installation techniques in a C-track cable guide.

Belden Infinity® Flexible Automation Cable

300V Flex Data Cables
(1 Million Flex Cycles*)

Description	Part No.	No. of Pairs	UL NEC/ C(UL) CEC Type	RS Type	Color Code	Standard Lengths		Standard Unit Weight		Nominal OD		Maximum Capacitance		Nom. Imped. (Ω)
						Ft.	m	Lbs.	kg	Inch	mm	pF/Ft.	pF/m	
Flex Data • 24 AWG Stranded (41x40) Bare Copper • Twisted Pairs • Overall 100% Beldfoil® + 85% TC Braid Shield • Drain Wire†														
Foam Polyethylene Insulation with Skin • Bright Green Oil-resistant PVC Jacket														
300V 80°C	**7200A**	1	NEC: CM CEC: CM	232 485	White, Blue	500 1000	152.4 304.8	20.5 40.0	9.3 18.2	.240	6.10	15.0	49.2	120
	7201A	2	NEC: CM CEC: CM	232 485	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	26.0 48.0	11.8 21.8	.322	8.18	15.0	49.2	120
	7202A	3	NEC: CM CEC: CM	232 485	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	27.5 52.0	12.5 23.6	.347	8.81	15.0	49.2	120
	7203A	4	NEC: CM CEC: CM	232 485	See Chart 5 (Tech Info Section)	500 1000	152.4 304.8	30.0 59.0	13.6 26.8	.372	9.45	15.0	49.2	120
	7205A	1	NEC: CM CEC: CM	232 422	White, Blue	500 1000	152.4 304.8	19.5 37.0	8.9 16.8	.232	5.89	14.0	45.9	100
Temp Rating: -20° to 80°C (-5° to 90°C flexing)	**7206A**	1	NEC: CM CEC: CM	232 485	White, Blue	500 1000	152.4 304.8	35.0 67.0	15.9 30.5	.302	7.67	10.0	32.8	150

TC = Tinned Copper

* Based on proper installation techniques in a C-track cable guide.
† 24 AWG stranded (41x40) tinned copper drain wire.

Belden Infinity® Flexible Automation Cable

75 Ohm Flex Vision Coax Cables
(1 Million Flex Cycles*)

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal Core OD		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg	Conductor	Shield	Inch	mm	Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
Sub-Mini Type • 30 AWG Stranded (7x38) Tinned Cadmium Bronze • 95% Tinned Copper "French Braid" Shield																			
Foam Polyethylene Insulation • Electric Blue Belflex® Jacket																			
UL AWM	**7500A**	CEC:	250	76.2	3.0	1.4	108.0Ω/M′	13.3Ω/M′	.056	1.42	.110	2.79	75	78%	16.7	54.8	2.2	.9	.03
Style 1354		FT1	500	152.4	4.5	2.0	354.0Ω/km	43.6Ω/km									5	1.4	.05
30V 80°C			1000	304.8	9.0	4.1											10	2.0	.07
CSA AWM I/II A/B																	30	3.4	.11
																	50	4.4	.14
																	100	6.4	.21
Mini Type • 25 AWG Stranded (19x38) Bare Copper • 95% Tinned Copper "French Braid" Shield																			
Foam Polyethylene Insulation • Electric Blue Belflex Jacket																			
UL AWM	**7501A**	CEC:	250	76.2	4.0	1.8	35.0Ω/M′	9.1Ω/M′	.090	2.29	.146	3.71	75	77%	17.7	58.1	2.2	.6	.02
Style 1354		FT1	500	152.4	7.5	3.4	114.8Ω/km	29.9Ω/km									5	.9	.03
30V 80°C			1000	304.8	14.0	6.4											10	1.3	.04
CSA AWM I/II A/B																	30	2.2	.07
																	50	2.9	.10
																	100	4.2	.14
RG-59 Type • 22 AWG Stranded (19x34) Bare Copper • 95% Tinned Copper "French Braid" Shield																			
Foam Polyethylene Insulation • Electric Blue Belflex Jacket																			
UL AWM	**7502A**	CEC:	250	76.2	10.5	4.8	13.4Ω/M′	6.4Ω/M′	.146	3.71	.242	6.15	75	79%	18.0	59.1	2.2	.4	.01
Style 1354		FT1	500	152.4	18.0	8.2	44.0Ω/km	21.0Ω/km									5	.5	.02
30V 80°C			1000	304.8	34.0	15.5											10	.8	.03
CSA AWM I/II A/B																	30	1.4	.05
																	50	1.8	.06
																	100	2.7	.09
RG-6/U Type • 20 AWG Stranded (7x15x40) Bare Copper • 95% Tinned Copper "French Braid" Shield																			
Foam Polyethylene Insulation • Electric Blue Belflex Jacket																			
UL AWM	**7503A**	CEC:	250	76.2	12.0	5.5	8.1Ω/M′	11.0Ω/M′	.185	4.70	.275	6.99	75	80%	17.3	56.8	2.2	.3	.01
Style 1354		FT1	500	152.4	21.0	9.5	26.6Ω/km	36.1Ω/km									5	.4	.01
30V 80°C			1000	304.8	40.0	18.2											10	.6	.02
CSA AWM I/II A/B																	30	1.1	.04
																	50	1.5	.05
																	100	2.2	.07
RG-11 Type • 16 AWG Stranded (7x37x40) Bare Copper • 95% Tinned Copper "French Braid" Shield																			
Foam Polyethylene Insulation • Electric Blue Belflex Jacket																			
UL AWM	**7504A**	CEC:	250	76.2	21.8	9.9	3.5Ω/M′	3.6Ω/M′	.285	7.24	.405	10.29	75	81%	17.3	56.8	2.2	.2	.01
Style 1354		FT1	500	152.4	42.5	19.3	11.5Ω/km	11.8Ω/km									5	.3	.01
30V 80°C			1000	304.8	84.0	38.2											10	.4	.01
CSA AWM I/II A/B																	30	.8	.03
																	50	1.0	.03
																	100	1.5	.05

DCR = DC Resistance

*Based on proper installation techniques in a C-track cable guide.

Instrumentation Cable

300V Power-Limited Tray Cables — Overview

Construction

Soft annealed bare or tinned copper with PVC flame retardant insulation and jacket. Other insulation and jacket options are available (see table below). Communication wire included on all multi-pair/multi-triad 1000 and 3000 series part numbers, 22 AWG (7x30) bare copper, orange PVC insulation. Nylon rip cord included in all PVC/PVC instrumentation cables.

Other Construction Options:

UL Listed for PLTC	
Insulation/Jacket	Max. Temp Rating
XLPE/PVC	90°C
XLPE/CPE	90°C
PVC/PVC	105°C
PVC/CPE	105°C
PE/PVC	75°C
FPE/PVC	75°C
TPE/TPE	105°C
XLPE/Haloarrest® I	90°C
XLPE/Hypalon®	90°C

Voltage Rating

300 Volts

Temperature Rating

See table above.

Application

These cables are suitable for installation in wet or dry locations. Cable jackets are resistant to sunlight, moisture and vapor penetration.

Unshielded

Twisted non-shielded pairs and triads provide a minimal OD allowing greater tray and conduit fill. Non-shielded instrument pairs may be utilized when recommended by the instrument manufacturer and used in a metallic conduit.

Overall Shield

Recommended for use in instrumentation applications where signals are transmitted in excess of 100 millivolts except in areas where high voltage and current sources create excessive noise interference. The Beldfoil® shield with drain wire provides 100% coverage for maximum shield effectiveness.

Individually Shielded and Overall Shielded

Individually shielded pairs or triads with an overall shield are recommended for use in instrumentation applications where optimum noise rejection is required. Individual pair/triad shields are fully isolated from each other and contain a separate drain wire for grounding, to provide maximum protection from crosstalk and common mode interference. Cables with an overall shield provide additional electrostatic noise protection.

Specifications

- UL Subject 13
- UL Subject 2250
- NEC Article 725 Class 2 and Class 3 Circuits
- NEC Article 727
- NEC Type PLTC Listed, which is approved for cable tray use in Class 1, Division 2, hazardous areas and non-hazardous areas, cable trays, raceways, conduit and supported by messenger wires.
- Sunlight-resistant.
- NEC Type ITC Listed, which is approved for cable tray use, raceways, hazardous locations according to Articles 501, 502, 503, and 504; or as aerial cable on a messenger, and under raised floors in control rooms and rack rooms where arranged to prevent damage to the cable. Usages are allowed based on qualified persons servicing all installations.
- UL 1581 Vertical Tray Flame Test comparable to IEEE 383 (70,000 BTU/hr.) Flame Test.
- PVC/PVC Constructions are CEC CMG FT4 and IEEE 1202 rated.
- Design options — call 1-800-BELDEN-1 or 1-800-BELDEN-3.

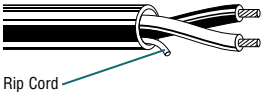
Standard lengths may be subject to tolerance. Custom lengths may be available upon request. Contact the Belden Electronics Division Customer Service Department for additional information. 1-800-BELDEN-1 or 1-800-BELDEN-3.

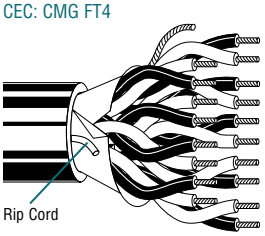
Hypalon is a DuPont trademark.

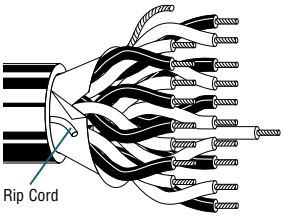
Instrumentation Cable

300V Power-Limited Tray Cables

Description	Part No.	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
22 AWG Pairs Stranded (7x30) Tinned Copper • Twisted Pairs															
Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9407**	1	E2	U-500 U-1000	U-152.4 U-304.8	9.5 18.0	4.3 8.2	.037	.94	.198	5.03	19	84	2.00	50.80
Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9322**	1	E2	U-500 U-1000	U-152.4 U-304.8	11.0 22.0	5.0 10.0	.037	.94	.200	5.08	28	124	2.00	50.80
	9512	2	E2	500 1000	152.4 304.8	21.0 42.0	9.5 19.1	.042	1.07	.308	7.82	46	204	3.00	76.20
	9513	3	E2	500 1000	152.4 304.8	25.5 51.0	11.6 23.2	.042	1.07	.324	8.23	63	280	3.25	82.55
	9514	4	E2	500 1000	152.4 304.8	32.5 67.0	14.8 30.5	.042	1.07	.356	9.04	80	355	3.50	88.90
	9516	6	E2	500 1000	152.4 304.8	45.5 94.0	20.7 42.7	.053	1.35	.418	10.62	118	524	4.25	107.95
	9520	9	E2	500 1000	152.4 304.8	64.5 121.0	29.3 55.0	.053	1.35	.454	11.53	172	765	4.75	120.65
	9521	11	E2	500 1000	152.4 304.8	72.0 146.0	32.7 66.4	.053	1.35	.506	12.85	200	889	5.35	135.89
	9524	15	E2	500 1000	152.4 304.8	89.5 178.0	40.7 80.9	.053	1.35	.594	15.09	280	1245	6.00	152.40
	9526	19	E2	500 1000	152.4 304.8	114.5 224.0	52.0 101.8	.063	1.60	.644	16.36	350	1557	6.33	160.78
	9527	27	E2	500 1000	152.4 304.8	156.5 321.0	71.1 145.9	.063	1.60	.763	19.38	500	2224	7.50	190.50
	9551	51	E2	1000	304.8	567.0	257.7	.074	1.88	1.017	25.83	937	4168	9.50	241.30
22 AWG Pairs Stranded (7x30) Bare Copper* • Twisted Pairs															
Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**3000A**	2	E1	Bulk	Bulk	—	—	.043	1.09	.310	7.87	46	204	3.00	76.20
	3004A	4	E1	Bulk	Bulk	—	—	.042	1.07	.351	8.92	80	355	3.50	88.90
	3006A	8	E1	Bulk	Bulk	—	—	.053	1.35	.454	11.53	172	765	4.75	120.65
	3008A	12	E1	Bulk	Bulk	—	—	.053	1.35	.536	13.61	210	934	5.00	127.00
	3010A	16	E1	Bulk	Bulk	—	—	.053	1.35	.594	15.09	290	1290	6.00	152.40
	3012A	24	E1	Bulk	Bulk	—	—	.065	1.65	.749	19.02	440	1957	7.50	190.50
	3014A	50	E1	Bulk	Bulk	—	—	.075	1.91	.950	24.13	915	4070	9.50	241.30







F-R = Flame-retardant

*For tinned copper conductors, order with B suffix.

E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

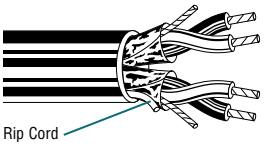
Multiple pair or triad cables have each pair/triad numbered for ease of identification.

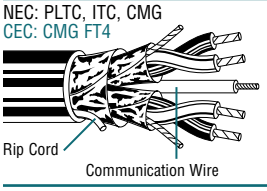
Bulk = Non-stocked item. Specify length, 1 piece per reel.

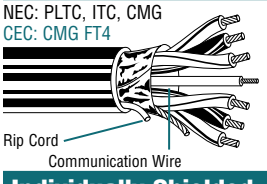
Instrumentation Cable

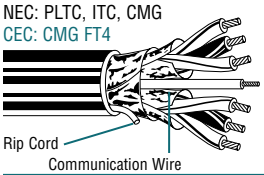
300V Power-Limited Tray Cables

Description	Part No.	No. of Pairs/ Triads	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
22 AWG Pairs Stranded (7x30) Tinned Copper • Twisted Pairs *(continued)*															
Individually Shielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9328**	2	E2	500 1000	152.4 304.8	22.5 46.0	10.2 20.9	.042	1.07	.323	8.20	54	240	3.00	76.20
	9329	3	E2	500 1000	152.4 304.8	29.0 60.0	13.2 27.3	.042	1.07	.341	8.66	54	240	3.50	88.90
	9330	4	E2	500 1000	152.4 304.8	37.0 72.0	16.8 32.7	.042	1.07	.372	9.45	65	289	3.50	88.90
	9331	6	E2	500 1000	152.4 304.8	54.0 108.0	24.5 49.1	.053	1.35	.457	11.61	101	449	4.33	109.98
	9332	9	E2	500 1000	152.4 304.8	75.0 145.0	34.1 65.9	.053	1.35	.530	13.46	160	711	5.00	127.00
	9333	11	E2	500 1000	152.4 304.8	89.0 177.0	40.5 80.5	.053	1.35	.592	15.04	160	711	5.50	139.70
	9335	19	E2	500 1000	152.4 304.8	141.5 287.0	64.3 130.5	.063	1.60	.711	18.06	264	1174	6.50	165.10
	9337	51	E2	500 1000	152.4 304.8	392.5 741.0	178.4 336.8	.074	1.88	1.132	28.75	658	2927	10.00	254.00
22 AWG Pairs Stranded (7x30) Bare Copper* • Twisted Pairs															
Individually Shielded + Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**3001A**	2	E1	Bulk	Bulk	—	—	.042	1.07	.324	8.23	54	240	3.25	82.55
	3005A	4	E1	Bulk	Bulk	—	—	.043	1.09	.360	9.14	115	511	3.50	88.90
	3007A	8	E1	Bulk	Bulk	—	—	.053	1.35	.497	12.62	250	1112	5.25	133.35
	3009A	12	E1	Bulk	Bulk	—	—	.053	1.35	.570	14.48	300	1334	5.75	146.05
	3011A	16	E1	Bulk	Bulk	—	—	.064	1.63	.674	17.12	350	1557	6.25	158.75
	3013A	24	E1	Bulk	Bulk	—	—	.065	1.65	.800	20.32	540	2402	8.00	203.20
	3015A	50	E1	Bulk	Bulk	—	—	.075	1.91	1.050	26.67	1330	5916	10.50	266.70
22 AWG Triads Stranded (7x30) Tinned Copper • Twisted Triads															
Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9491**	1	E1	U-500 U-1000	U-152.4 U-304.8	12.0 24.0	5.5 10.9	.037	.94	.208	5.28	29	129	2.00	50.80
Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9363**	1	E1	U-500 U-1000	U-152.4 U-304.8	13.5 26.0	6.1 11.8	.037	.94	.210	5.33	29	129	2.00	50.80
22 AWG Triads Stranded (7x30) Bare Copper* • Twisted Triads															
Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**3002A**	2	E1	Bulk	Bulk	—	—	.043	1.09	.330	8.38	62	275	3.50	88.90
Individually Shielded + Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**3003A**	2	E1	Bulk	Bulk	—	—	.043	1.09	.330	8.38	82	364	3.25	82.55









F-R = Flame-retardant
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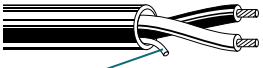
E1, E2 = Refer to Industrial Technical Information section for color code. Alternate color coding available upon request. • Multiple pair or triad cables have each pair/triad numbered for ease of identification.
Bulk = Non-stocked item. Specify length, 1 piece per reel.

Instrumentation Cable

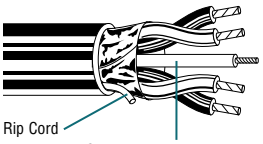
300V Power-Limited Tray Cables

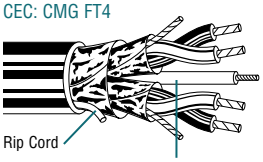
Description	Part No.	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
20 AWG Pairs Stranded (19x32) Tinned Copper • Twisted Pairs															
Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9408**	1	E2	U-500 U-1000	U-152.4 U-304.8	12.0 23.0	5.5 10.5	.037	.94	.214	5.44	31	138	2.00	50.80
Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9320**	1	E2	U-500 U-1000	U-152.4 U-304.8	13.5 26.0	6.1 11.8	.037	.94	.217	5.51	40	178	2.00	50.80



20 AWG Pairs Stranded (7x28) Bare Copper* • Twisted Pairs

Description	Part No.	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Maximum Pull Tension Lbs.	Maximum Pull Tension N	Minimum Bend Radius Inch	Minimum Bend Radius mm
Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**1033A**	1	E1	1000 10000	304.8 3048.0	29.0 300.0	13.2 136.4	.037	.94	.213	5.41	42	187	2.25	57.15
	3016A	2	E1	Bulk	Bulk	—	—	.042	1.07	.332	8.43	92	409	3.75	95.25
	1056A	4	E1	10000	3048.0	970.0	440.9	.053	1.35	.408	10.36	135	601	4.25	107.95
	1057A	8	E1	10000	3048.0	1410.0	640.9	.053	1.35	.472	11.99	247	1099	5.00	127.00
	1058A	12	E1	7500	2286.0	1537.5	698.9	.053	1.35	.564	14.33	359	1597	6.00	152.40
	1059A	16	E1	5000	1524.0	1275.0	579.5	.064	1.63	.649	16.48	471	2095	6.50	165.10
	1060A	24	E1	5000	1524.0	1735.0	788.6	.064	1.63	.786	19.96	695	3092	8.25	209.55
	1061A	36	E1	2500	762.0	1347.5	612.5	.074	1.88	.960	24.38	1031	4587	10.00	254.00
	1062A	50	E1	2500	762.0	1825.0	829.5	.074	1.88	1.117	28.37	1423	6330	11.50	292.10
Individually Shielded + Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**1075A**	2	E1	10000	3048.0	760.0	345.5	.042	1.07	.337	8.56	97	432	3.75	95.25
	1076A	4	E1	7500	2286.0	802.5	364.8	.053	1.35	.411	10.44	171	761	4.50	114.30
	1077A	8	E1	7500	2286.0	1335.0	606.8	.053	1.35	.514	13.06	320	1424	5.50	139.70
	1078A	12	E1	7500	2286.0	2010.0	913.6	.064	1.63	.637	16.18	468	2082	6.75	171.45
	1079A	16	E1	5000	1524.0	1630.0	740.9	.064	1.63	.704	17.88	617	2745	7.50	190.50
	1091A	20	E1	5000	1524.0	2030.0	922.7	.064	1.63	.780	19.81	765	3403	8.25	209.55
	1080A	24	E1	2500	762.0	1267.5	576.1	.074	1.88	.863	21.92	914	4066	9.00	228.60
	1081A	36	E1	2000	609.6	1436.0	652.7	.074	1.88	1.035	26.29	1359	6046	10.50	266.70
	1082A	50	E1	2000	609.6	1858.0	844.5	.074	1.88	1.215	30.86	1878	8355	12.75	323.85





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*For Tinned copper conductors, order with B suffix.

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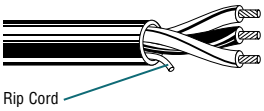
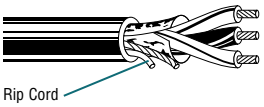
Instrumentation Cable

300V Power-Limited Tray Cables

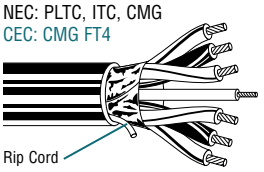
Description	Part No.	No. of Triads	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
20 AWG Triads Stranded (19x32) Tinned Copper • Twisted Triads															
Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9492**	1	E1	U-500 U-1000	U-152.4 U-304.8	15.5 30.0	7.0 13.6	.037	.94	.225	5.72	46	205	2.25	57.15
Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9364**	1	E1	U-500 U-1000	U-152.4 U-304.8	17.5 34.0	8.0 15.5	.037	.94	.228	5.79	46	205	2.25	57.15

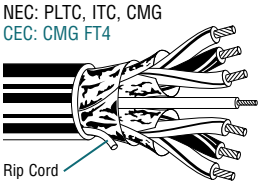




20 AWG Triads Stranded (7x28) Bare Copper* • Twisted Triads

Description	Part No.	No. of Triads	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Maximum Pull Tension Lbs.	Maximum Pull Tension N	Minimum Bend Radius Inch	Minimum Bend Radius mm
Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**1526A**	1	E1	10000	3048.0	320.0	145.5	.037	.94	.224	5.69	42	187	2.25	57.15
	3017A	2	E1	Bulk	Bulk	—	—	.055	1.40	.380	9.65	97	432	4.00	101.60
	3020A	4	E1	Bulk	Bulk	—	—	.055	1.40	.470	11.94	174	774	4.75	120.65
	3021A	8	E1	Bulk	Bulk	—	—	.055	1.40	.560	14.22	330	1468	5.00	127.00
	3022A	12	E1	Bulk	Bulk	—	—	.066	1.68	.710	18.03	485	2158	7.00	177.80
	3023A	16	E1	Bulk	Bulk	—	—	.064	1.63	.821	20.85	600	2669	7.75	196.85
	3024A	24	E1	Bulk	Bulk	—	—	.074	1.88	1.031	26.19	920	4093	9.25	234.95
Individually Shielded + Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**3018A**	2	E1	Bulk	Bulk	—	—	.055	1.40	.420	10.67	102	454	4.25	107.95
	1083A	4	E1	10000	3048.0	1410.8	640.9	.053	1.35	.499	12.67	228	1014	4.75	120.65
	1084A	8	E1	7500	2286.0	1852.5	842.0	.064	1.63	.575	10.81	432	1922	6.25	158.75
	1085A	12	E1	5000	1524.0	1765.0	802.3	.064	1.63	.714	18.14	636	2829	7.75	196.85
	1092A	16	E1	5000	1524.0	2190.0	995.5	.064	1.63	.793	20.14	841	3741	8.50	215.90
	1086A	20	E1	2500	762.0	1622.5	737.5	.074	1.88	.996	25.30	1250	5561	10.75	273.05
	3067A	24	E1	Bulk	Bulk	—	—	.074	1.88	1.292	32.82	1410	6273	13.00	330.20





F-R = Flame-retardant

*For Tinned copper conductors, order with B suffix.

E1 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

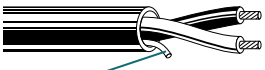
Multiple pair or triad cables have each pair/triad numbered for ease of identification.

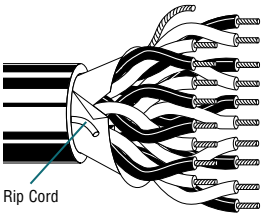
Bulk = Non-stocked item. Specify length, 1 piece per reel.

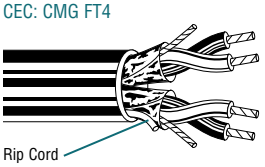
Instrumentation Cable

300V Power-Limited Tray Cables

Description	Part No.	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
18 AWG Pairs Stranded (19x30) Tinned Copper • Twisted Pairs															
Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9409**	1	E2	U-500	U-152.4	14.5	6.6	.037	.94	.230	5.84	49	218	2.25	57.15
Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9318**	1	E2	U-500 U-1000	U-152.4 U-304.8	18.0 35.0	8.2 15.9	.037	.94	.233	5.92	60	267	2.25	57.15
	9552	2	E2	500 1000	152.4 304.8	35.5 69.0	16.1 31.4	.042	1.07	.375	9.53	65	289	3.75	95.25
	9553	3	E2	500 1000	152.4 304.8	48.5 95.0	22.0 43.2	.053	1.35	.420	10.67	145	645	4.25	107.95
	9554	4	E2	500 1000	152.4 304.8	55.0 109.0	25.0 49.5	.053	1.35	.447	11.35	187	832	4.50	114.30
	9556	6	E2	500 1000	152.4 304.8	78.5 153.0	35.7 69.5	.053	1.35	.497	12.62	270	1201	5.00	127.00
	9559	9	E2	500 1000	152.4 304.8	107.5 213.0	48.9 96.8	.053	1.35	.579	14.71	395	1757	6.00	152.40
	9563	11	E2	500 1000	152.4 304.8	134.5 273.0	61.1 124.1	.063	1.60	.665	16.89	478	2126	6.75	171.45
	9565	15	E2	500 1000	152.4 304.8	169.0 342.0	76.8 155.5	.063	1.60	.739	18.77	640	2847	7.50	190.50
Individually Shielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9368**	2	E2	500 1000	152.4 304.8	37.5 73.0	17.0 33.2	.042	1.07	.378	9.60	125	556	3.75	95.25
	9369	3	E2	500 1000	152.4 304.8	55.0 109.0	25.0 49.5	.053	1.35	.423	10.74	220	979	4.25	107.95
	3029A	4	E1	Bulk	Bulk	—	—	.053	1.35	.461	11.71	296	1317	4.50	114.30
	9388	4	E2	500 1000	152.4 304.8	71.5 135.0	32.5 61.4	.053	1.35	.461	11.71	296	1317	4.50	114.30
	9389	6	E2	500 1000	152.4 304.8	97.0 190.0	44.1 86.4	.053	1.35	.538	13.67	440	1957	5.25	133.35
	9390	9	E2	500 1000	152.4 304.8	138.5 272.0	63.0 123.6	.064	1.63	.652	16.56	666	2963	6.50	165.10
	9391	11	E2	500 1000	152.4 304.8	158.5 321.0	72.0 145.9	.064	1.63	.729	18.52	815	3626	7.25	184.15
	9392	15	E2	500 1000	152.4 304.8	209.0 428.0	95.0 194.5	.064	1.63	.808	20.52	1100	4893	8.00	203.20







F-R = Flame-retardant

E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

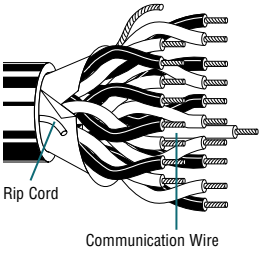
Multiple pair or triad cables have each pair/triad numbered for ease of identification.

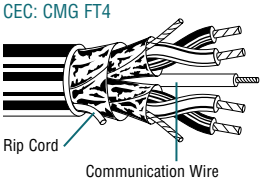
Bulk = Non-stocked item. Specify length, 1 piece per reel.

Instrumentation Cable

300V Power-Limited Tray Cables

Description	Part No.	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
18 AWG Pairs Stranded (7x26) Bare Copper • Twisted Pairs															
Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket (See chart below for other options)															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**1032A**	1	E1	1000 10000	304.8 3048.0	39.0 410.0	17.7 186.4	.037	.94	.233	5.92	67	298	2.50	63.50
	3025A	2	E1	Bulk	Bulk	—	—	.042	1.07	.375	9.53	112	498	3.50	88.90
	1529A	3	E1	7500	2286.0	742.5	337.5	.053	1.35	.415	10.54	165	734	4.25	107.95
	1466A	4	E1	7500	2286.0	870.0	395.5	.053	1.35	.452	11.48	211	939	4.50	114.30
	1467A	8	E1	7500	2286.0	1432.5	651.1	.053	1.35	.542	13.77	389	1731	5.50	139.70
	1468A	12	E1	5000	1524.0	2350.0	1068.2	.064	1.63	.673	17.09	560	2491	6.75	171.45
	3034A	16	E1	Bulk	Bulk	—	—	.066	1.68	.738	18.75	640	2847	7.50	190.50
	1471A	24	E1	2500	762.0	1302.5	592.0	.074	1.88	.932	23.67	1105	4916	9.25	234.95
	1472A	36	E1	1250	381.0	910.0	413.6	.074	1.88	1.062	26.97	1640	7296	10.50	266.70
	3041A	50	E1	Bulk	Bulk	—	—	.074	1.88	1.240	31.50	2240	10049	12.75	323.85
Individually Shielded + Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket (See chart for other options)															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**1474A**	2	E1	7500	2286.0	720.0	327.3	.053	1.35	.408	10.16	149	663	4.00	101.60
	1475A	4	E1	7500	2286.0	1057.5	480.7	.053	1.35	.468	11.89	267	1188	4.75	120.65
	1476A	8	E1	5000	1524.0	1185.0	538.6	.053	1.35	.590	14.99	501	2229	6.00	152.40
	1477A	12	E1	5000	1524.0	1815.0	825.0	.064	1.63	.733	18.62	779	3465	7.25	184.15
	3035A	16	E1	Bulk	Bulk	—	—	.064	1.63	.805	20.45	850	3781	8.50	215.90
	1480A	24	E1	2500	762.0	1712.5	778.4	.074	1.88	1.019	25.88	1440	6406	10.25	260.35
	1481A	36	E1	1250	381.0	1165.0	529.5	.074	1.88	1.163	29.54	2148	9556	11.75	298.45
	3042A	50	E1	Bulk	Bulk	—	—	.084	2.13	1.389	35.28	2935	13057	14.00	355.60





F-R = Flame-retardant

E1 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

Multiple pair or triad cables have each pair/triad numbered for ease of identification.

Bulk = Non-stocked item. Specify length, 1 piece per reel.

Conductor, Insulation and Jacket Options

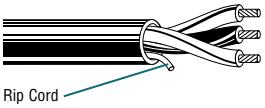
To Specify:
1234 A Start with Part No. — Add or replace letter code

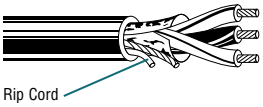
Bare	Tinned	Insulation/Jacket
A	B	PVC/PVC
C	D	XLPE/PVC
K	L	TPE/TPE
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

Instrumentation Cable

300V Power-Limited Tray Cables

Description	Part No.	No. of Triads	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
18 AWG Triads Stranded (19x30) Tinned Copper • Twisted Triads															
Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9493**	1	E1	U-500 U-1000	U-152.4 U-304.8	19.5 39.0	8.9 17.7	.037	.94	.242	6.15	62	276	2.25	57.15
Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9365**	1	E1	U-500 U-1000	U-152.4 U-304.8	22.5 44.0	10.2 20.0	.037	.94	.245	6.22	74	329	2.50	63.50

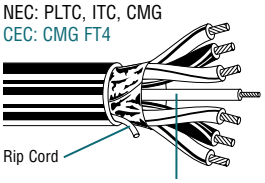




18 AWG Triads Stranded (7x26) Bare Copper • Twisted Triads

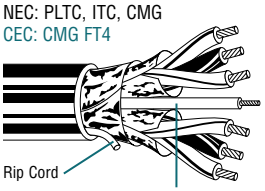
Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket (See chart below for other options)

NEC: PLTC, ITC, CMG CEC: CMG FT4	**1036A**	1	E1	1000 10000	304.8 3048.0	46.0 470.0	20.9 213.6	.037	.94	.245	6.22	90	400	2.50	63.50
	3027A	2	E1	Bulk	Bulk	—	—	.055	1.40	.420	10.67	165	734	4.25	107.95
	3030A	4	E1	Bulk	Bulk	—	—	.055	1.40	.500	12.70	240	1068	4.50	114.30
	3032A	8	E1	Bulk	Bulk	—	—	.064	1.63	.665	16.89	501	2229	5.75	146.05
	3036A	16	E1	Bulk	Bulk	—	—	.077	1.96	.900	22.86	1050	4671	9.00	228.60
	3038A	24	E1	Bulk	Bulk	—	—	.077	1.96	1.020	25.91	1450	6450	10.25	260.35



Individually Shielded + Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket (See chart for options)

NEC: PLTC, ITC, CMG CEC: CMG FT4	**3028A**	2	E1	Bulk	Bulk	—	—	.055	1.40	.450	11.43	175	779	4.50	114.30
	3031A	4	E1	Bulk	Bulk	—	—	.053	1.35	.513	13.03	255	1134	5.25	133.35
	3033A	8	E1	Bulk	Bulk	—	—	.064	1.63	.685	17.40	560	2491	6.50	165.10
	3068A	12	E1	Bulk	Bulk	—	—	.063	1.60	.826	20.98	800	3559	8.50	215.90
	3037A	16	E1	Bulk	Bulk	—	—	.074	1.88	.940	23.88	1320	5872	10.50	266.70
	3039A	24	E1	Bulk	Bulk	—	—	.074	1.88	1.158	29.41	1620	7207	11.25	285.75



F-R = Flame-retardant

E1 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

Multiple pair or triad cables have each pair/triad numbered for ease of identification.

Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:

1234 A
Start with Part No. — Add or replace letter code

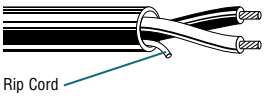
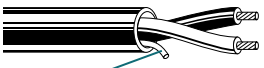
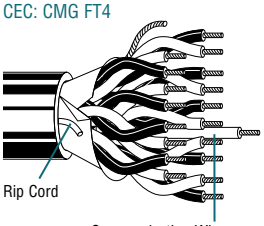
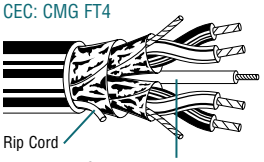
Conductor, Insulation and Jacket Options**

Bare	Tinned	Insulation/Jacket
A	B	PVC/PVC
C	D	XLPE/PVC
K	L	TPE/TPE
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

**For 1000 and 3000 Series cables only.

Instrumentation Cable

300V Power-Limited Tray Cables

Description	Part No.	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
16 AWG Pairs Stranded (19x29) Tinned Copper • Twisted Pairs															
Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9410**	1	E2	U-500 U-1000	U-152.4 U-304.8	19.0 37.0	8.6 16.8	.037	.94	.254	6.45	60	267	2.50	63.50
 Rip Cord															
Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9316**	1	E2	U-500 U-1000	U-152.4 U-304.8	21.5 43.0	9.8 19.5	.037	.94	.256	6.50	90	400	2.50	63.50
Rip Cord															
16 AWG Pairs Stranded (7x24) Bare Copper • Twisted Pairs															
Unshielded • F-R PVC Insulation • F-R PVC Jacket (See chart below for other insulation and jacket options)															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**1035A**	1	E1	1000 10000	304.8 3048.0	38.0 410.0	17.3 186.4	.037	.94	.254	6.45	72	320	2.50	63.50
 Rip Cord															
Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket (See chart below for other options)															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**1030A**	1	E1	1000 10000	304.8 3048.0	45.0 470.0	20.5 213.6	.037	.94	.257	6.53	94	418	2.50	63.50
 Rip Cord, Communication Wire	**3043A**	2	E1	Bulk	Bulk	—	—	.053	1.35	.437	11.10	188	836	4.50	114.30
	1528A	3	E1	7500	2286.0	982.5	446.6	.053	1.35	.457	11.61	259	1152	4.75	120.65
	1484A	4	E1	7500	2286.0	1200.0	545.5	.053	1.35	.495	12.57	330	1468	5.00	127.00
	1485A	8	E1	7500	2286.0	2002.5	910.2	.053	1.35	.597	15.16	616	2740	6.00	152.40
	1486A	12	E1	5000	1524.0	1965.0	893.2	.064	1.63	.749	19.02	902	4013	7.50	190.50
	3050A	16	E1	Bulk	Bulk	—	—	.064	1.63	.838	21.29	1187	5281	8.50	215.90
	1489A	24	E1	1250	381.0	923.8	419.9	.074	1.88	1.047	26.59	1758	7821	10.50	266.70
	1490A	36	E1	1250	381.0	1313.8	597.2	.074	1.88	1.197	30.40	2615	11633	11.75	298.45
	3056A	50	E1	Bulk	Bulk	—	—	.088	2.24	1.550	39.37	3615	16082	15.50	393.70
Individually Shielded + Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket (See chart for options)															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**1492A**	2	E1	7500	2286.0	885.0	402.3	.053	1.35	.450	11.43	232	1032	4.50	114.30
 Rip Cord, Communication Wire	**1493A**	4	E1	7500	2286.0	1402.5	637.5	.055	1.40	.516	13.11	420	1868	5.00	127.00
	1494A	8	E1	5000	1524.0	1645.0	747.7	.066	1.68	.677	17.20	795	3537	7.00	177.80
	1495A	12	E1	2500	762.0	1180.0	536.4	.066	1.68	.816	20.73	1170	5205	8.25	209.55
	3051A	16	E1	Bulk	Bulk	—	—	.074	1.88	.936	23.77	1546	6878	10.00	254.00
	1498A	24	E1	1250	381.0	1111.3	505.1	.074	1.88	1.149	29.18	2296	10214	11.50	292.10
	1499A	36	E1	1250	381.0	1622.5	737.5	.084	2.13	1.334	33.88	3422	15223	13.50	342.90
	3057A	50	E1	Bulk	Bulk	—	—	.088	2.24	1.600	40.64	4735	21064	16.00	406.40

F-R = Flame-retardant

E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

Multiple pair or triad cables have each pair/triad numbered for ease of identification.

Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:	
1234	**A**
Start with Part No.	Add or replace letter code

Conductor, Insulation and Jacket Options**

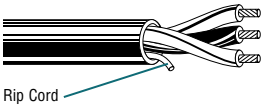
Bare	Tinned	Insulation/Jacket
A	B	PVC/PVC
C	D	XLPE/PVC
K	L	TPE/TPE
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

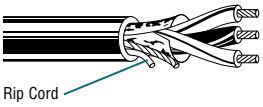
**For 1000 and 3000 Series cables only.

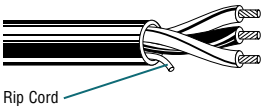
Instrumentation Cable

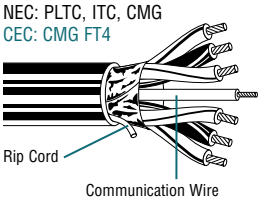
300V Power-Limited Tray Cables

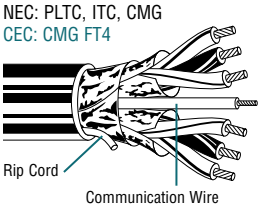
Description	Part No.	No. of Triads	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
16 AWG Triads Stranded (19x29) Tinned Copper • Twisted Triads															
Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9494**	1	E1	U-500 U-1000	U-152.4 U-304.8	25.0 50.0	11.4 22.7	.037	.94	.268	6.81	91	405	2.75	69.85
Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9366**	1	E1	U-500 U-1000	U-152.4 U-304.8	29.0 58.0	13.2 26.4	.037	.94	.270	6.86	116	516	2.75	69.85
16 AWG Triads Stranded (7x24) Bare Copper • Twisted Triads															
Unshielded • F-R PVC Insulation • F-R PVC Jacket (See chart below for other options)															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**1034A**	1	E1	1000 4000	304.8 1219.2	51.0 204.0	23.2 92.7	.037	.94	.268	6.81	107	476	2.75	69.85
Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket (See chart below for other options)															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**1031A**	1	E1	1000 10000	304.8 3048.0	58.0 600.0	26.4 272.7	.037	.94	.271	6.88	130	578	2.75	69.85
	3044A	2	E1	Bulk	Bulk	—	—	.053	1.35	.483	12.27	259	1152	4.75	120.65
	3046A	4	E1	Bulk	Bulk	—	—	.053	1.35	.566	14.38	473	2104	5.75	146.05
	3048A	8	E1	Bulk	Bulk	—	—	.063	1.60	.754	19.15	902	4013	7.50	190.50
	3052A	16	E1	Bulk	Bulk	—	—	.074	1.88	1.032	26.21	1758	7821	11.25	285.75
	3054A	24	E1	Bulk	Bulk	—	—	.074	1.88	1.174	29.82	2615	11633	11.75	298.45
Individually Shielded + Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket (See chart for options)															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**3045A**	2	E1	Bulk	Bulk	—	—	.053	1.35	.491	12.47	304	1352	5.00	127.00
	3047A	4	E1	Bulk	Bulk	—	—	.053	1.35	.569	14.45	563	2505	6.00	152.40
	3049A	8	E1	Bulk	Bulk	—	—	.064	1.63	.764	19.41	1081	4809	8.00	203.20
	3069A	12	E1	Bulk	Bulk	—	—	.074	1.88	.998	25.35	1500	6673	10.00	254.00
	3053A	16	E1	Bulk	Bulk	—	—	.074	1.88	1.142	29.01	2117	9418	11.50	292.10
	3055A	24	E1	Bulk	Bulk	—	—	.084	2.13	1.320	33.53	3153	14026	13.25	336.55











F-R = Flame-retardant

E1 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

Multiple pair or triad cables have each pair/triad numbered for ease of identification.

Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:

1234 A
Start with Part No. — Add or replace letter code

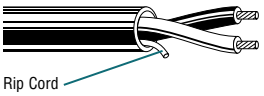
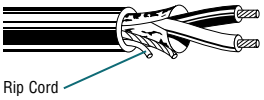
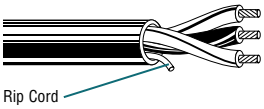
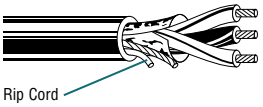
Conductor, Insulation and Jacket Options**

Bare	Tinned	Insulation/Jacket
A	B	PVC/PVC
C	D	XLPE/PVC
K	L	TPE/TPE
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

**For 1000 and 3000 Series cables only.

Instrumentation Cable

300V Power-Limited Tray Cables

Description	Part No.	No. of Pairs/ Triads	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
14 AWG Pairs Stranded (42x30) Tinned Copper • Twisted Pairs															
Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9411**	1	E2	U-500 1000	U-152.4 304.8	28.5 60.0	13.0 27.3	.042	1.07	.322	8.18	124	552	3.25	82.55
 Rip Cord															
Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9314**	1	E2	U-500 1000	U-152.4 304.8	35.5 71.0	16.1 32.3	.042	1.07	.324	8.23	140	623	3.25	82.55
 Rip Cord															
14 AWG Triads Stranded (42x30) Tinned Copper • Twisted Triads															
Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9495**	1	E1	500 1000	152.4 304.8	45.5 92.0	20.7 41.8	.042	1.07	.340	8.64	186	827	3.50	88.90
 Rip Cord															
Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9367**	1	E1	500 1000	152.4 304.8	43.0 88.0	19.5 40.0	.042	1.07	.343	8.71	188	836	3.50	88.90
 Rip Cord															

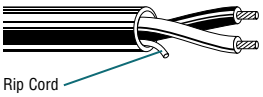
F-R = Flame-retardant

E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

Instrumentation Cable

300V Power-Limited Tray Cables

Description	Part No.	No. of Pairs/ Triads	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
12 AWG Pairs Stranded (65x30) Tinned Copper • Twisted Pairs															
Unshielded • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9412**	1	E2	500 U-1000	152.4 U-304.8	40.0 80.0	18.2 36.4	.042	1.07	.370	9.40	197	876	4.25	107.95
Overall 100% Beldfoil® Shield • F-R PVC Insulation • F-R PVC Jacket															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**9312**	1	E2	500 1000	152.4 304.8	49.0 96.0	22.3 43.6	.042	1.07	.373	9.47	225	1001	4.25	107.95
12 AWG Triads Stranded (7x20) Bare Copper • Twisted Triads															
Overall 100% Beldfoil Shield • F-R PVC Insulation • F-R PVC Jacket (See chart below for other options)															
NEC: PLTC, ITC, CMG CEC: CMG FT4	**3102A**	1	E1	Bulk	Bulk	—	—	.053	1.35	.416	10.57	315	1401	3.50	88.90



F-R = Flame-retardant

E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:

1234 A
Start with Part No. — Add or replace letter code

Conductor, Insulation and Jacket Options**

Bare	Tinned	Insulation/Jacket
A	B	PVC/PVC
C	D	XLPE/PVC
K	L	TPE/TPE
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

**For 1000 and 3000 Series cables only.

Instrumentation Cable

Thermocouple Extension Cables and Thermocouple Wire — Overview

Construction Thermocouple Extension Cable

Conductor material determined by the thermocouple extension wire type. FEP or PVC insulated with FEP or PVC jacket. Nylon rip cord included in all thermocouple extension cables except high-temperature FEP jacketed cables. Communication wire included on all multi-pair, non-FEP constructions — 22 AWG (7x30) bare copper orange PVC insulation.

NOTE: The temperature ranges in Table A are applicable only to the thermocouple conductors and not to the cable. The cable must never be exposed to temperatures higher than the maximum temperature ratings shown in Table B.

Table B: Other Insulation/Jacket Options

UL Listed for PLTC	
Insulation/Jacket	Max. Temp Rating
XLPE/PVC	90°C
XLPE/CPE	90°C
PVC/PVC	105°C
PVC/CPE	105°C
PE/PVC	75°C
FPE/PVC	75°C
TPE/TPE	105°C
XLPE/Haloarrest® I	90°C
FEP/FEP	200°C

Application

Unshielded

Parallel non-shielded extension wire may be utilized in low noise environments when recommended by the instrument manufacturer.

Overall Shield

Recommended, except in areas where high voltage and current sources create excessive noise interference. The Beldfoil® shield with drain wire provides 100% coverage for maximum shield effectiveness.

Individually Shielded

Individually shielded pairs are recommended for use in applications where optimum noise rejection is required.

PVC Insulated, PVC Jacketed Cable Specifications

- UL Subject 13
- UL 1581 Vertical Tray Flame Test comparable to IEEE 383 (70,000 BTU) Flame Test
- ANSI/MC 96.1–1982
- NEC CMG
- NEC Type PLTC Listed, which is approved for cable tray use in Class 1, Division 2, hazardous areas and non-hazardous areas, cable trays, raceways, conduit and supported by messenger wires.
- NEC Type ITC Listed, which is approved for cable tray use, raceways hazardous locations according to Articles 501, 502, 503 and 504; or as aerial on a cable messenger, and under raised floors in control rooms and rack rooms where arranged to prevent damage to the cable. Usages are allowed based on qualified persons servicing all installations.
- PVC/PVC constructions are CEC CMG FT4 and IEEE 1202 rated.
- UL 1277 TC versions approved for use in Class 1 trays available as special.

Shielded Twisted Pair

(FEP insulated, FEP jacketed cable specifications)

- UL Subject 13
- UL 910 Steiner Tunnel Flame Test comparable to FT6 Flame Test
- ANSI/MC 96.1–1982
- NEC Type CL3P/PLTC Listed, which is approved for use in ducts, plenums and other space used for environmental air.
- UL 1277 TC versions approved for use in Class 1 trays available as special.

Thermocouple Wire

Conductor material determined by the thermocouple type. FEP insulated and jacketed flat constructions.

FEP thermocouple wire is impervious to chemical attack and is flame retardant.

Table A: Thermocouple Identification and Limits of Error — Reference Junction 0°C*

ANSI Symbol	Temperature Range (°C)	Limits of Error Standard (°C)	Jacket Color	Insulation Color Code		Conductor Identification	
				Positive (+)	Negative (-)	Positive (+)	Negative (-)
E	0 to 340 340 to 540	±1.7°C ±.50%	Brown	Purple	Red	Chromel® Non-magnetic	Constantan Silver Color
J	0 to 293 293 to 480	±2.2°C ±.75%	Brown	White	Red	Iron Magnetic	Constantan Non-magnetic
K	0 to 293 293 to 980	±2.2°C ±.75%	Brown	Yellow	Red	Chromel Non-magnetic	Alumel® Magnetic
T	0 to 133 133 to 260	±1.0°C ±.75%	Brown	Blue	Red	Copper Copper Color	Constantan Non-magnetic
EX	0 to 200	±1.7°C	Purple	Purple	Red	Chromel	Constantan
JX	0 to 200	±2.2°C	Black	White	Red	Iron	Constantan
KX	0 to 200	±2.2°C	Yellow	Yellow	Red	Chromel	Alumel
TX	0 to 100	±1.0°C	Blue	Blue	Red	Copper	Constantan

Limits of error per ANSI MC96.1-1982. Limits shown do not include system or installation error. Percentages refer to the temperature being measured.

*The Temperature Range and Limits of Error are for standard grade thermocouples, Reference ANSI MC96.1-1982 for special grade thermocouples. The Temperature Ranges for type E, J, K and T thermocouple wires listed above pertain to 20 AWG wire.

Additional constructions available upon request.

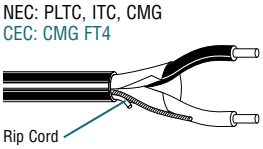
Chromel and Alumel are Hoskins Manufacturing Company trademarks.

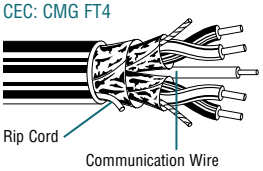
Standard lengths may be subject to tolerance. Custom lengths may be available upon request. Contact the Belden Electronics Division Customer Service Department for additional information. 1-800-BELDEN-1 or 1-800-BELDEN-3.

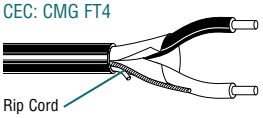
Instrumentation Cable

Thermocouple Extension Cables

Description	Part No.	ANSI Type	No. of Pairs	Color Code	Jacket Color	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
						Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
20 AWG Pairs Solid Conductors • (See chart on page 15.52 for conductor specifications by ANSI Type)													
Overall 100% Beldfoil® Shield • PVC Insulation • PVC Jacket													
300V 105°C NEC: PLTC, ITC, CMG CEC: CMG FT4	**3111A**	JX	1	White, Red	Black	5000	1524.0	115.0	52.3	.016	.41	.206	5.23
	1102A	JX	4	White, Red	Black	5000	1524.0	410.0	186.4	.016	.41	.365	9.27
	1001A	JX	8	White, Red	Black	5000	1524.0	680.0	309.1	.016	.41	.461	11.70
	1002A	JX	12	White, Red	Black	5000	1524.0	895.0	406.8	.016	.41	.551	13.99
	3112A	KX	1	Yellow, Red	Yellow	5000	1524.0	120.0	54.5	.016	.41	.206	5.23
	1103A	KX	8	Yellow, Red	Yellow	5000	1524.0	675.0	306.8	.016	.41	.461	11.70
	3113A	TX	1	Blue, Red	Blue	5000	1524.0	115.0	52.3	.016	.41	.206	5.23
Individually Shielded + Overall 100% Beldfoil Shield • PVC Insulation • PVC Jacket													
300V 105°C NEC: PLTC, ITC, CMG CEC: CMG FT4	**1112A**	EX	4	Purple, Red	Purple	5000	1524.0	475.0	215.9	.016	.41	.383	9.73
	3115A	JX	2	White, Red	Black	5000	1524.0	315.0	143.2	.016	.41	.332	8.43
	1006A	JX	4	White, Red	Black	5000	1524.0	480.0	218.2	.016	.41	.383	9.73
	1007A	JX	8	White, Red	Black	5000	1524.0	830.0	377.3	.016	.41	.503	12.78
	1008A	JX	12	White, Red	Black	5000	1524.0	1155.0	525.0	.016	.41	.603	15.32
	1009A	JX	16	White, Red	Black	5000	1524.0	1490.0	677.3	.016	.41	.692	17.58
	1012A	KX	4	Yellow, Red	Yellow	5000	1524.0	530.0	240.9	.016	.41	.383	9.73
	1013A	KX	8	Yellow, Red	Yellow	5000	1524.0	825.0	375.0	.016	.41	.503	12.78
	1014A	KX	12	Yellow, Red	Yellow	5000	1524.0	1195.0	543.2	.016	.41	.603	15.32
	1015A	KX	16	Yellow, Red	Yellow	5000	1524.0	1480.0	672.7	.016	.41	.692	12.58
	1016A	KX	24	Yellow, Red	Yellow	4000	1219.2	1716.0	780.0	.016	.41	.850	21.59
	1017A	KX	36	Yellow, Red	Yellow	3000	914.4	1854.0	842.7	.016	.41	.989	25.12
	1025A	TX	12	Blue, Red	Blue	4000	1219.2	996.0	452.7	.016	.41	.603	15.32
16 AWG Pairs Solid Conductors • (See chart on page 15.52 for conductor specifications by ANSI Type)													
Overall 100% Beldfoil Shield • PVC Insulation • PVC Jacket													
300V 105°C NEC: PLTC, ITC, CMG CEC: CMG FT4	**1101A**	EX	1	Purple, Red	Purple	10000	3048.0	450.0	204.5	.017	.43	.248	6.30
	1000A	JX	1	White, Red	Black	1000 10000	304.8 3048.0	42.0 450.0	19.1 204.5	.017	.43	.248	6.30
	1018A	KX	1	Yellow, Red	Yellow	1000 10000	304.8 3048.0	42.0 450.0	19.1 204.5	.017	.43	.248	6.30
	1023A	TX	1	Blue, Red	Blue	10000	3048.0	450.0	204.5	.017	.43	.248	6.30







Multiple pair cables have each pair numbered for ease of identification.

Instrumentation Cable

High-Temperature Thermocouple Extension Cables and Thermocouple Wire

Description	Part No.	ANSI Type	No. of Pairs/ Cond.	Color Code	Jacket Color	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
						Ft.	m	Lbs.	kg	Inch	mm	Inch	mm
High-Temp Extension Cable • 20 AWG Solid Conductors • (See chart on page 15.52 for conductor specifications by ANSI Type)													
Plenum • Unshielded • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P	**83932**	KX	2/c	Yellow, Red	Yellow	500 1000	152.4 304.8	7.0 14.0	3.2 6.4	.010	.25	.076 x .128	1.93 x 3.25
	83934	TX	2/c	Blue, Red	Blue	1000	304.8	15.0	6.8	.010	.25	.076 x .128	1.93 x 3.25
High-Temp Extension Cable • 20 AWG Stranded (7x28) • (See chart on page 15.52 for conductor specifications by ANSI Type)													
Plenum • Unshielded • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P	**83930**	JX	2/c	White, Red	Black	500 1000	152.4 304.8	7.5 15.0	3.4 6.8	.010	.25	.082 x .140	2.08 x 3.56
Plenum • Overall 100% Beldfoil® Shield • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P	**83955**	EX	1 pr.	Purple, Red	Purple	500 1000	152.4 304.8	9.0 18.0	4.1 8.2	.010	.25	.145	3.68
	83950	JX	1 pr.	White, Red	Black	500 1000	152.4 304.8	9.5 18.0	4.3 8.2	.010	.25	.145	3.68
	83952	KX	1 pr.	Yellow, Red	Yellow	500 1000	152.4 304.8	9.5 18.0	4.3 8.2	.010	.25	.145	3.68
	83954	TX	1 pr.	Blue, Red	Blue	500 1000	152.4 304.8	9.0 18.0	4.1 8.6	.010	.25	.145	3.68
High-Temp Extension Cable • 16 AWG Pairs Solid Conductors • (See chart on page 15.52 for conductor specifications by ANSI Type)													
Plenum • Overall 100% Beldfoil Shield • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P	**1114A**	EX	1	Purple, Red	Purple	5000	1524.0	160.0	72.7	.010	.25	.172	4.37
	1115A	JX	1	White, Red	Black	5000	1524.0	155.0	70.5	.010	.25	.172	4.37
	1116A	KX	1	Yellow, Red	Yellow	5000	1524.0	160.0	72.7	.010	.25	.171	4.34
	1117A	TX	1	Blue, Red	Blue	5000	1524.0	160.0	72.7	.010	.25	.172	4.37
High-Temp Extension Cable • 16 AWG Pairs Stranded (7x24) • (See chart on page 15.52 for conductor specifications by ANSI Type)													
Plenum • Overall 100% Beldfoil Shield • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P	**83951**	JX	1	White, Red	Black	500 1000	152.4 304.8	17.5 37.0	8.0 16.8	.010	.25	.189	4.80
	83953	KX	1	Yellow, Red	Yellow	500 1000	152.4 304.8	18.0 34.0	8.2 15.5	.010	.25	.187	4.75
High-Temp Thermocouple Wire • 20 AWG Solid Conductors • (See chart on page 15.52 for conductor specifications by ANSI Type)													
Plenum • Unshielded • FEP Insulation • FEP Jacket													
300V 200°C NEC: PLTC, CL3P	**83915**	E	2/c	Purple, Red	Brown	500 1000	152.4 304.8	8.0 15.0	3.6 6.8	.010	.25	.076 x .128	1.93 x 3.25
	83900	J	2/c	White, Red	Brown	100 500 1000	30.5 152.4 304.8	2.1 7.5 14.0	1.0 3.4 6.4	.010	.25	.076 x .128	1.93 x 3.25
	83905	K	2/c	Yellow, Red	Brown	100 500 1000	30.5 152.4 304.8	2.1 7.5 14.0	1.0 3.4 6.4	.010	.25	.076 x .128	1.93 x 3.25
	83910	T	2/c	Blue, Red	Brown	100 500 1000	30.5 152.4 304.8	2.1 7.5 14.0	1.0 3.4 6.4	.010	.25	.076 x .128	1.93 x 3.25

FEP = Fluorinated Ethylene-propylene

Multiple pair cables have each pair numbered for ease of identification.

Instrumentation Cable

600V Tray Cables – Overview

Construction

Soft annealed bare or tinned copper conductors. PVC insulated with a nylon overcoat, 90°C PVC Jacket, TFN, TFFN or THHN style singles. Nylon rip cord included in all PVC-Nylon/PVC instrumentation cables.

Tray Cable Construction Options

UL Listed for MC and TC			
Insulation/Jacket	Max. Temp Rating		Flame Tests
	Wet	Dry	
PVC—Nylon/PVC (THHN or THWN) 14 AWG & larger	75°C	90°C	UL 1581 FT4/ IEEE 1202
PVC—Nylon/PVC (TFN or TFFN) 16 & 18 AWG	NA	90°C	UL 1581 FT4/ IEEE 1202
XLPE (XHHW–2)/ PVC or CPE 14 AWG & larger	90°C	90°C	UL 1581 FT4/ IEEE 1202 VW-1 rated singles
XLPE (RFH–2)/ PVC or CPE 16 & 18 AWG	75°C	75°C	UL 1581 FT4/ IEEE 1202 VW-1 rated singles
FRPO/PVC 18 AWG & larger	—	75°C	UL 1581
TPE/TPE	75°C	90°C	UL 1581
FRPO/PVC	75°C	90°C	UL 1581
XLPE/Haloarrest® I (XHHW-2) 14 AWG & larger	90°C	90°C	UL 1581 VW-1 rated singles
XLPE/Haloarrest I 16 & 18 AWG (RFH-2)	75°C	75°C	UL 1581
FEP/PVC	90°C	90°C	UL 1581
XLPE/Hypalon® (XHHW-2) 14 AWG & larger	90°C	90°C	UL 1581 VW-1 rated singles
XLPE/Hypalon (RFH-2) 16 & 18 AWG	75°C	75°C	UL 1581 VW-1 rated singles

Voltage Rating

600 Volts

Temperature Rating

See table above.

Application

These cables are suitable for installation in wet or dry locations. Cable jackets are resistant to sunlight, moisture and vapor penetration. The cables can be used in raceways, and (supported by messenger wire), outdoor applications and direct burial applications.

Unshielded

Twisted non-shielded instrument pairs provide a minimal OD allowing greater tray and conduit fill. Non-shielded instrument pairs may be utilized when recommended by the instrument manufacturer and used in a metallic conduit.

Overall Shield

Recommended for use in instrumentation applications where signals are transmitted in excess of 100 millivolts except in areas where high voltage and current sources creates excessive noise interference. The Beldfoil® shield with drain wire provides 100% coverage for maximum shield effectiveness.

Individually Shielded and Overall Shielded

Individually shielded pairs or triads with an overall shield are recommended for use in instrumentation applications where optimum noise rejection is required. Individual pair/triad shields are fully isolated from each other and contain a separate drain wire for grounding, to provide maximum protection from crosstalk and common mode interference. Cables with an overall shield provide additional electrostatic noise protection.

To Specify:

1234 A

Start with Part No. — Add or replace letter code

Specifications

- UL Subject 1277
- UL 1581 Vertical Tray Flame Test comparable to IEEE 383 (70,000 BTU/hr.) Flame Test
- NEC Type TC Listed, which is approved for cable tray use in Class 1, Division 2 areas, per NEC Articles 340, 318 and 501 and for Class 1 circuits as permitted in Article 725
- Bare Copper Constructions are NEC Type NPLF Listed, which is approved for use in Non Power Limited Fire Protective Signaling circuits, per NEC Article 760
- PVC-Nylon/PVC, XLPE/PVC and XLPE/CPE constructed cables meet IEEE 1202/FT4 (70,000 BTU) Flame Tests

MC Cable Ratings Optional

Customize any 600V TC instrumentation cable, with armor and a full-sized ground. See chart below to specify.

To Specify MC Rated Cable

1	2	3456	A
Overall Jacket Type	Armor Type	Core 4-digit Part No. 600V TC Instrumentation	Conductor, Insulation, Inner Jacket Type

Overall Jacket Type

Code	Material
1	PVC
3	CPE
4	TPE
5	HDPE
6	Oil Res II
7	Haloarrest I

Armor Type

Code	Material
2	Aluminum Interlock
3	Steel Interlock

Conductor, Insulation and Jacket Options**

Bare	Tinned	Insulation/Jacket
A	B	PVC-Nylon/PVC
C	D	XLPE/PVC
E	F	FRPO/PVC
G	H	XLPE/TPE
K	L	TPE/TPE
M	N	PVC-Nylon/Oil Res II
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest I

**For 1000 and 3000 Series cables only.

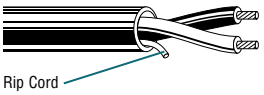
Hypalon is a DuPont trademark.

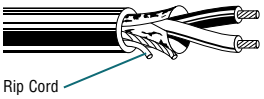
Standard lengths may be subject to tolerance. Custom lengths may be available upon request. Contact the Belden Electronics Division Customer Service Department for additional information. 1-800-BELDEN-1 or 1-800-BELDEN-3.

Instrumentation Cable

600V Tray Cables

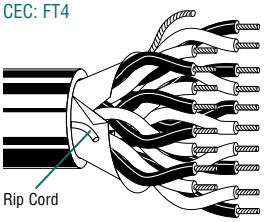
Description	Part No.	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
18 AWG Pairs Stranded (19x30) Tinned Copper • Twisted Pairs															
Unshielded • PVC/Nylon Insulation • PVC Jacket															
NEC: TC CEC: FT4	**9486**	1	E2	1000	304.8	44.0	20.0	.048	1.22	.275	6.99	45	200	2.75	69.85
Overall 100% Beldfoil® Shield • PVC/Nylon Insulation • PVC Jacket															
NEC: TC CEC: FT4	**9341**	1	E2	500 1000	152.4 304.8	24.0 46.0	10.9 20.9	.048	1.22	.276	7.01	67	298	2.75	69.85

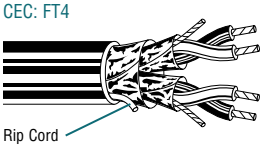




18 AWG Pairs Stranded (7x26) Bare Copper • Twisted Pairs

Overall 100% Beldfoil Shield • PVC/Nylon Insulation • PVC Jacket (See chart below for other options)															
NEC: TC, NPLF CEC: FT4	**1120A**	1	E2	10000	3048.0	450.0	204.5	.048	1.22	.269	6.83	67	298	2.75	69.85
	3088A	1	E1	Bulk	Bulk	—	—	.048	1.22	.269	6.83	67	298	2.75	69.85
	1063A	2	E1	10000	3048.0	780.0	354.5	.053	1.35	.417	10.59	112	498	4.25	107.95
	1064A	4	E1	7500	2286.0	930.0	422.7	.053	1.35	.480	12.19	202	898	4.75	120.65
	1065A	8	E1	7500	2286.0	1665.0	756.8	.064	1.63	.599	15.21	381	1695	6.00	152.40
	1066A	12	E1	5000	1524.0	1535.0	697.7	.064	1.63	.719	18.26	560	2491	7.25	184.15
	1067A	16	E1	5000	1524.0	1920.0	872.7	.064	1.63	.804	20.42	739	3288	8.00	203.20
	1068A	24	E1	2500	762.0	1502.5	683.0	.084	2.13	1.032	26.21	1098	4885	10.25	260.35
	1087A	36	E1	1250	381.0	1042.5	473.9	.084	2.13	1.174	29.82	1635	7273	11.75	298.45
	1088A	50	E1	1250	381.0	1437.5	653.4	.084	2.13	1.375	34.93	2262	10063	14.50	368.30
Individually Shielded + Overall 100% Beldfoil Shield • PVC/Nylon Insulation • PVC Jacket (See chart for options)															
NEC: TC, NPLF CEC: FT4	**1048A**	2	E1	7500	2286.0	630.0	286.4	.048	1.22	.432	10.97	140	623	4.00	101.60
	1049A	4	E1	7500	2286.0	1117.5	508.0	.053	1.35	.498	12.65	258	1148	5.00	127.00
	1050A	8	E1	7500	2286.0	2010.0	913.6	.064	1.63	.663	16.84	493	2193	6.50	165.10
	1051A	12	E1	5000	1524.0	1960.0	890.9	.064	1.63	.798	20.27	728	3239	7.75	196.85
	1052A	16	E1	2500	762.0	1350.0	613.6	.084	2.13	.927	23.55	963	4284	9.00	228.60
	1053A	24	E1	2500	762.0	1837.5	835.2	.084	2.13	1.135	28.83	1434	6379	11.25	285.75
	1054A	36	E1	1250	381.0	1307.5	594.3	.084	2.13	1.299	32.99	2139	9516	13.00	338.20
	1038A	50	E1	1000	304.8	1272.0	578.2	.084	2.13	1.527	38.79	2962	13177	15.25	387.35





E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

Multiple pair or triad cables have each pair/triad numbered for ease of identification.

Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:	
1234	**A**
Start with Part No.	Add or replace letter code

Conductor, Insulation and Jacket Options**

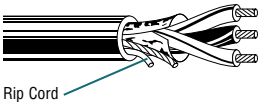
Bare	Tinned	Insulation/Jacket
A	**B**	PVC-Nylon/PVC
C	**D**	XLPE/PVC
E	**F**	FRPO/PVC
G	**H**	XLPE/TPE
K	**L**	TPE/TPE
M	**N**	PVC-Nylon/Oil Res II
Q	**R**	XLPE/CPE
S	**T**	XLPE/Haloarrest® I

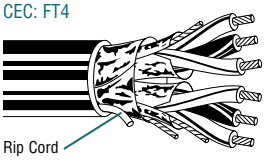
**For 1000 and 3000 Series cables only.

Instrumentation Cable

600V Tray Cables

Description	Part No.	No. of Triads	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
18 AWG Triads Stranded (7x26) Bare Copper • Twisted Triads															
Overall 100% Beldfoil® Shield • PVC/Nylon Insulation • PVC Jacket (See chart below for other options)															
NEC: TC, NPLF CEC: FT4	**1121A**	1	E2	500 1000 10000	152.4 304.8 3048.0	25.0 50.0 500.0	11.4 22.7 227.3	.048	1.22	.282	7.16	90	400	2.75	69.85
	3089A	1	E1	Bulk	Bulk	—	—	.048	1.22	.284	7.21	90	400	2.75	69.85
Individually Shielded + Overall 100% Beldfoil Shield • PVC/Nylon Insulation • PVC Jacket (See chart for options)															
NEC: TC, NPLF CEC: FT4	**3064A**	2	E1	Bulk	Bulk	—	—	.048	1.22	.493	12.52	185	823	4.75	120.65
	1093A	4	E1	7500	2286.0	1492.5	678.4	.064	1.63	.577	14.66	347	1544	6.00	152.40
	1094A	8	E1	5000	1524.0	1770.0	804.5	.064	1.63	.743	18.87	672	2989	7.50	190.50
	1095A	12	E1	2500	762.0	1332.5	605.7	.084	2.13	.939	23.85	997	4435	9.75	247.65
	3066A	16	E1	Bulk	Bulk	—	—	.084	2.13	1.046	26.57	1322	5881	10.50	266.70
	1096A	24	E1	2000	609.6	1946.0	884.5	.084	2.13	1.280	32.51	1971	8768	13.00	330.20





E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

Multiple pair or triad cables have each pair/triad numbered for ease of identification.

Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:

1234 A
Start with Part No. — Add or replace letter code

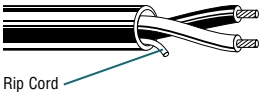
Conductor, Insulation and Jacket Options

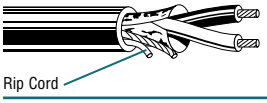
Bare	Tinned	Insulation/Jacket
A	B	PVC-Nylon/PVC
C	D	XLPE/PVC
E	F	FRPO/PVC
G	H	XLPE/TPE
K	L	TPE/TPE
M	N	PVC-Nylon/Oil Res II
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

Instrumentation Cable

600V Tray Cables

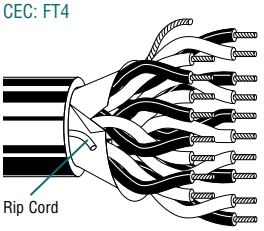
Description	Part No.	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Maximum Pull Tension Lbs.	Maximum Pull Tension N	Minimum Bend Radius Inch	Minimum Bend Radius mm
16 AWG Pairs Stranded (19x29) Tinned Copper • Twisted Pairs															
Unshielded • PVC/Nylon Insulation • PVC Jacket															
NEC: TC CEC: FT4	**9487**	1	E2	500 1000	152.4 304.8	26.5 52.0	12.0 23.6	.048	1.22	.299	7.59	70	311	3.00	76.20
Overall 100% Beldfoil® Shield • PVC/Nylon Insulation • PVC Jacket															
NEC: TC CEC: FT4	**9342**	1	E2	500 1000	152.4 304.8	30.0 60.0	13.6 27.3	.048	1.22	.301	7.65	105	467	3.00	76.20

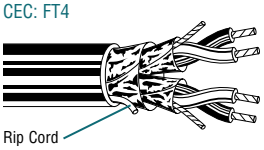




16 AWG Pairs Stranded (7x24) Bare Copper • Twisted Pairs

Overall 100% Beldfoil Shield • PVC/Nylon Insulation • PVC Jacket (See chart below for other options)															
NEC: TC/NPLF CEC: FT4	**1118A**	1	E2	10000	3048.0	560.0	254.5	.048	1.22	.302	7.67	105	467	3.00	76.20
	3090A	1	E1	Bulk*	Bulk*	—	—	.048	1.22	.302	7.67	105	467	3.00	76.20
	1069A	2	E1	7500	2286.0	720.0	327.3	.048	1.22	.451	11.46	179	796	4.50	114.30
	1527A	3	E1	7500	2286.0	1020.0	463.6	.053	1.35	.486	12.34	250	1112	4.75	120.65
	1070A	4	E1	7500	2286.0	1387.5	630.7	.066	1.68	.558	14.17	321	1428	5.50	139.70
	1071A	8	E1	7500	2286.0	2250.0	1022.7	.066	1.68	.670	17.02	607	2700	6.75	171.45
	1072A	12	E1	5000	1524.0	2095.0	952.3	.066	1.68	.804	20.42	893	3973	8.00	203.20
	1073A	16	E1	2500	762.0	1455.0	661.4	.084	2.13	.928	23.57	1178	5240	9.50	241.30
	1074A	24	E1	1250	381.0	1053.8	479.0	.089	2.26	1.147	29.13	1892	8417	11.50	292.10
	1089A	36	E1	1250	381.0	1401.3	636.9	.084	2.13	1.297	32.94	2606	11593	13.00	330.20
	1090A	50	E1	1250	381.0	941.3	427.8	.084	2.13	1.588	40.34	3606	16042	16.00	406.40
Individually Shielded + Overall 100% Beldfoil Shield • PVC/Nylon Insulation • PVC Jacket (See chart for options)															
NEC: TC, NPLF CEC: FT4	**1055A**	2	E1	7500	2286.0	885.0	402.3	.048	1.22	.416	10.57	223	992	4.25	107.95
	1037A	3	E1	7500	2286.0	1087.5	494.3	.048	1.22	.476	12.09	317	1410	4.75	120.65
	1039A	4	E1	7500	2286.0	1515.0	688.6	.064	1.63	.578	14.68	411	1828	5.75	146.05
	1040A	6	E1	5000	1524.0	1455.0	661.4	.064	1.63	.674	17.12	599	2665	6.75	171.45
	1041A	8	E1	5000	1524.0	1815.0	825.0	.064	1.63	.725	18.42	786	3497	7.25	184.15
	1042A	12	E1	2500	762.0	1340.0	609.1	.084	2.13	.868	22.05	1161	5165	8.75	222.25
	1043A	16	E1	2500	762.0	1765.0	802.3	.084	2.13	1.013	25.73	1537	6838	10.25	260.35
	1044A	20	E1	2500	762.0	2042.5	928.4	.084	2.13	1.121	28.47	1912	8506	11.25	285.75
	1045A	24	E1	1250	381.0	1248.8	567.6	.084	2.13	1.244	31.60	2287	10174	12.50	317.50
	1046A	36	E1	1250	381.0	1798.8	817.6	.084	2.13	1.423	36.14	3413	15183	14.25	361.95
	1047A	50	E1	1000	304.8	358.0	162.7	.084	2.13	1.713	43.51	4726	21024	17.25	438.15





E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

Multiple pair or triad cables have each pair/triad numbered for ease of identification.

*Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:

1234 A
Start with Part No. — Add or replace letter code

Conductor, Insulation and Jacket Options**

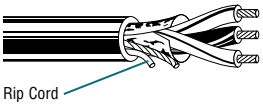
Bare	Tinned	Insulation/Jacket
A	B	PVC-Nylon/PVC
C	D	XLPE/PVC
E	F	FRPO/PVC
G	H	XLPE/TPE
K	L	TPE/TPE
M	N	PVC-Nylon/Oil Res II
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

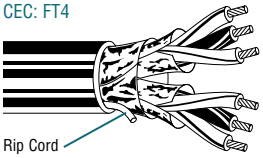
**For 1000 and 3000 Series cables only.

Instrumentation Cable

600V Tray Cables

Description	Part No.	No. of Triads	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
16 AWG Triads Stranded (7x24) Bare Copper • Twisted Triads															
Overall 100% Beldfoil® Shield • PVC/Nylon Insulation • PVC Jacket (See chart below for other options)															
NEC: TC, NPLF CEC: FT4	**1119A**	1	E2	500 1000 10000	152.4 304.8 3048.0	36.0 69.0 710.0	16.4 31.4 322.7	.048	1.22	.317	8.05	143	636	3.00	76.20
	3091A	1	E1	Bulk*	Bulk*	—	—	.048	1.22	.317	8.05	143	636	3.00	76.20
Individually Shielded + Overall 100% Beldfoil Shield • PVC/Nylon Insulation • PVC Jacket (See chart for options)															
NEC: TC, NPLF CEC: FT4	**1097A**	4	E1	5000	1524.0	1425.0	647.7	.064	1.63	.646	16.41	554	2465	6.50	165.10
	1098A	8	E1	2500	762.0	1362.5	619.3	.084	2.13	.877	22.28	1072	4769	8.75	222.25
	1099A	12	E1	2500	762.0	1890.0	859.1	.089	2.26	1.065	27.05	1590	7073	10.50	266.70
	3118A	16	E1	Bulk*	Bulk*	—	—	.084	2.13	1.234	31.34	1771	7879	12.25	311.15
	1100A	24	E1	1250	381.0	1758.8	799.4	.084	2.13	1.447	36.75	3144	13986	14.50	368.30
	3130A	36	E1	Bulk*	Bulk*	—	—	.110	2.79	1.773	45.03	3600	16015	18.00	457.20





E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

Multiple pair or triad cables have each pair/triad numbered for ease of identification.

*Bulk = Non-stocked item. Specify length, 1 piece per reel.

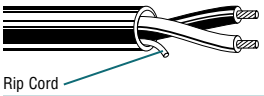
Conductor, Insulation and Jacket Options

To Specify:
1234 A Start with Part No. — Add or replace letter code

Bare	Tinned	Insulation/Jacket
A	B	PVC-Nylon/PVC
C	D	XLPE/PVC
E	F	FRPO/PVC
G	H	XLPE/TPE
K	L	TPE/TPE
M	N	PVC-Nylon/Oil Res II
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

Instrumentation Cable

600V Tray Cables

Description	Part No.	No. of Pairs/ Triads	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
14 AWG Pairs Stranded (42x30) Tinned Copper • Twisted Pairs															
Unshielded • PVC/Nylon Insulation • PVC Jacket															
NEC: TC CEC: FT4	**9488**	1	E2	1000	304.8	78.0	35.5	.048	1.22	.359	9.12	107	476	3.50	88.90
 Rip Cord															
Overall 100% Beldfoil® Shield • PVC/Nylon Insulation • PVC Jacket															
NEC: TC CEC: FT4	**9343**	1	E2	500 1000	152.4 304.8	43.5 85.0	19.8 38.6	.048	1.22	.358	9.09	160	712	3.50	88.90
Rip Cord															
14 AWG Pairs Stranded (7x22) Bare Copper • Twisted Pairs															
Overall 100% Beldfoil Shield • PVC/Nylon Insulation • PVC Jacket (See chart below for other options)															
NEC: TC, NPLF CEC: FT4	**3080A**	1	E1	Bulk*	Bulk*	—	—	.048	1.22	.342	8.69	160	712	3.50	88.90
Rip Cord															
14 AWG Triads Stranded (7x22) Bare Copper • Twisted Triads															
Overall 100% Beldfoil Shield • PVC/Nylon Insulation • PVC Jacket															
NEC: TC, NPLF CEC: FT4	**3081A**	1	E1	Bulk*	Bulk*	—	—	.048	1.22	.361	9.17	200	890	3.50	88.90
Rip Cord															

E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

*Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:

1234 A
Start with Part No. — Add or replace letter code

Conductor, Insulation and Jacket Options**

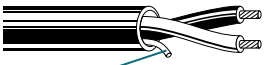
Bare	Tinned	Insulation/Jacket
A	B	PVC-Nylon/PVC
C	D	XLPE/PVC
E	F	FRPO/PVC
G	H	XLPE/TPE
K	L	TPE/TPE
M	N	PVC-Nylon/Oil Res II
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

**For 1000 and 3000 Series cables only.

Instrumentation Cable

600V Tray Cables

Description	Part No.	No. of Pairs/ Triads	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
12 AWG Pairs Stranded (37x27) Tinned Copper • Twisted Pairs															
Unshielded • PVC/Nylon Insulation • PVC Jacket															
NEC: TC CEC: FT4	**9489**	1	E2	1000	304.8	89.0	40.5	.045	1.14	.380	9.65	170	756	3.75	95.25
Overall 100% Beldfoil® Shield • PVC/Nylon Insulation • PVC Jacket															
NEC: TC CEC: FT4	**9344**	1	E2	500 1000	152.4 304.8	53.5 106.0	24.3 48.2	.045	1.14	.384	9.75	253	1126	3.75	95.25
12 AWG Pairs Stranded (7x20) Bare Copper • Twisted Pairs															
Overall 100% Beldfoil Shield • PVC/Nylon Insulation • PVC Jacket (See chart below for other options)															
NEC: TC, NPLF CEC: FT4	**3103A**	1	E1	Bulk*	Bulk*	—	—	.048	1.22	.380	9.65	253	1126	3.75	95.25
12 AWG Triads Stranded (7x20) Bare Copper • Twisted Triads															
Overall 100% Beldfoil Shield • PVC/Nylon Insulation • PVC Jacket (See chart below for other options)															
NEC: TC, NPLF CEC: FT4	**3104A**	1	E1	Bulk*	Bulk*	—	—	.048	1.22	.395	10.03	315	8001	4.00	101.60



E1, E2 = Refer to Industrial Technical Information section for color code.
Alternate color coding available upon request.

*Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:

1234 A
Start with Part No. — Add or replace letter code

Conductor, Insulation and Jacket Options**

Bare	Tinned	Insulation/Jacket
A	B	PVC-Nylon/PVC
C	D	XLPE/PVC
E	F	FRPO/PVC
G	H	XLPE/TPE
K	L	TPE/TPE
M	N	PVC-Nylon/Oil Res II
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

**For 1000 and 3000 Series cables only.

Control Cable

600V Type TC Cables — Overview

Introduction

Belden offers a wide selection of UL-rated 600V Tray Cable for a variety of control applications.

Multi-conductor versions are available from 18 to 1 AWG. These are unshielded and shielded versions that come with various insulation and jacket combinations.

These TC cables are installed in cable trays, ducts and conduit and can be used in direct burial applications. They are extensively used in manufacturing facilities, especially in the process industries such as petrochemical, steel, pulp and paper, cement and mining.

These flexible, space efficient cables can be substantially more economical than traditional wiring methods.

Construction

Soft annealed bare or tinned copper conductors, with various insulation and jacketing options as seen in chart below.

Tray Cable Construction Options

UL Listed for MC and TC			
Insulation/Jacket	Max. Temp Rating		Flame Tests
	Wet	Dry	
PVC—Nylon/PVC (THHN or THWN) 14 AWG & larger	75°C	90°C	UL 1581 FT4/ IEEE 1202
PVC—Nylon/PVC (TFN or TFFN) 16 & 18 AWG	NA	90°C	UL 1581 FT4/ IEEE 1202
XLPE (XHHW–2)/ PVC or CPE 14 AWG & larger	90°C	90°C	UL 1581 FT4/ IEEE 1202 VW-1 rated singles
XLPE (RFH–2)/ PVC or CPE 16 & 18 AWG	75°C	75°C	UL 1581 FT4/ IEEE 1202 VW-1 rated singles
FRPO/PVC 18 AWG & larger	—	75°C	UL 1581
TPE/TPE	75°C	90°C	UL 1581
FRPO/PVC	75°C	90°C	UL 1581
XLPE/Haloarrest® I (XHHW-2) 14 AWG & larger	90°C	90°C	UL 1581 VW-1 rated singles
XLPE/Haloarrest I 16 & 18 AWG (RFH-2)	75°C	75°C	UL 1581
FEP/PVC	90°C	90°C	UL 1581
XLPE/Hypalon® (XHHW-2) 14 AWG & larger	90°C	90°C	UL 1581 VW-1 rated singles
XLPE/Hypalon (RFH-2) 16 & 18 AWG	75°C	75°C	UL 1581 VW-1 rated singles

Voltage Rating

600 Volt TC

Temperature Rating

See Tray Cable Construction chart above.

Application

These cables are suitable for installation in wet or dry locations. Cable jackets are resistant to sunlight, moisture and vapor penetration. The cables can be used in raceways (supported by messenger wire), outdoor applications and direct burial applications.

Unshielded

Cabled non-shielded conductors provide a minimal O.D. allowing greater tray and conduit fill. Non-shielded control cable may be utilized when recommended by the equipment manufacturer and used in a metallic conduit.

Overall Shield

Recommended for use in control applications where signals are transmitted in excess of 100 millivolts, except in areas where high voltage and current sources create excessive noise interference. The Beldfoil® shield with drain wire provides 100% coverage for maximum shield effectiveness.

Only 2-conductor round constructions can be shielded. Flat constructions cannot be shielded.

Ground Wire

- Non-insulated, bare copper ground wires are included for constructions 8 through 2 AWG. Non-insulated, bare copper, full sized ground wires may be requested on other constructions.
- All shielded PVC-Nylon/PVC constructions include full sized ground (drain) wires.

Color Code

Multi-conductor control cables (10 AWG to 18 AWG) are printed alpha-numerically in addition to being color coded per ICEA Table E2.

8 AWG and larger are black and numbered per ICEA Method 4.

Refer to Industrial Technical Information for ICEA color code charts.

Specifications

- UL Subject 1277
- UL Subject 1424 (per outline for NPLF requirements dated May 3, 1979)
- UL 1581 Vertical Flame Test comparable to IEEE 383 (70,000 BTU/hr) Flame Test
- Approved for cable tray use in Class 1, Division 2 areas, per NEC Articles 340, 318 and 501, and for Class 1 circuits as permitted in Article 725
- PVC-Nylon/PVC, XLPE/PVC and XLPE/CPE constructed cables meet IEEE 1202/FT4 (70,000 BTU/hr) Flame Tests

Standard lengths may be subject to tolerance. Custom lengths may be available upon request. Contact the Belden Electronics Division Customer Service Department for additional information. 1-800-BELDEN-1 or 1-800-BELDEN-3.

Hypalon is a DuPont trademark.

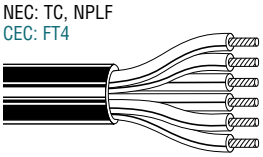
Control Cable

600V Type TC Cables

18 AWG Multi-conductor Stranded (7x26) Bare Copper

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)

NEC: TC, NPLF
CEC: FT4

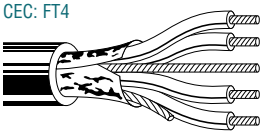


Description	Part No.	No. of Cond.	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Maximum Pull Tension Lbs.	Maximum Pull Tension N	Minimum Bend Radius Inch	Minimum Bend Radius mm
	27916A†	2	E2	10000	3048.0	420.0	190.9	.045	1.14	.19 x .28	4.83 x 7.11	26	116	1.90	48.26
	27325A††	2	E2	Bulk*	Bulk*	—	—	.045	1.14	.27	6.86	26	116	3.00	76.20
	27334A	3	E2	Bulk*	Bulk*	—	—	.045	1.14	.28	7.11	39	173	3.25	82.55
	27326A	4	E2	10000	3048.0	620.0	281.8	.045	1.14	.31	7.87	52	231	3.50	88.90
	27335A	5	E2	Bulk*	Bulk*	—	—	.045	1.14	.33	8.38	65	289	4.00	101.60
	27600A	6	E2	Bulk*	Bulk*	—	—	.045	1.14	.36	9.14	78	347	4.25	107.95
	27327A	7	E2	Bulk*	Bulk*	—	—	.045	1.14	.36	9.14	91	405	4.25	107.95
	27601A	8	E2	Bulk*	Bulk*	—	—	.045	1.14	.38	9.65	104	463	4.50	114.30
	27336A	9	E2	Bulk*	Bulk*	—	—	.045	1.14	.41	10.41	117	520	5.00	127.00
	27328A	10	E2	Bulk*	Bulk*	—	—	.060	1.52	.44	11.18	130	578	5.75	146.05
	27602A	11	E2	Bulk*	Bulk*	—	—	.060	1.52	.45	11.43	143	636	5.75	146.05
	27329A	12	E2	Bulk*	Bulk*	—	—	.060	1.52	.46	11.68	155	690	5.75	146.05
	27603A	13	E2	Bulk*	Bulk*	—	—	.060	1.52	.48	12.19	169	752	6.00	152.40
	27604A	14	E2	Bulk*	Bulk*	—	—	.060	1.52	.48	12.19	182	810	6.00	152.40
	27605A	15	E2	Bulk*	Bulk*	—	—	.060	1.52	.51	12.95	195	867	6.25	158.75
	27606A	16	E2	Bulk*	Bulk*	—	—	.060	1.52	.52	13.21	208	925	6.25	158.75
	27607A	17	E2	Bulk*	Bulk*	—	—	.060	1.52	.57	14.48	220	979	6.75	171.45
	27608A	18	E2	Bulk*	Bulk*	—	—	.060	1.52	.57	14.48	233	1037	6.75	171.45
	27609A	19	E2	Bulk*	Bulk*	—	—	.060	1.52	.57	14.48	247	1099	6.75	171.45
	27610A	20	E2	Bulk*	Bulk*	—	—	.060	1.52	.59	14.99	260	1157	7.00	177.80
	27611A	25	E2	Bulk*	Bulk*	—	—	.060	1.52	.65	16.51	325	1446	7.75	196.85
	27612A	30	E2	Bulk*	Bulk*	—	—	.060	1.52	.69	17.53	390	1735	8.25	209.55
	27613A	37	E2	Bulk*	Bulk*	—	—	.080	2.03	.74	18.80	481	2140	9.50	241.30
	27614A	50	E2	Bulk*	Bulk*	—	—	.080	2.03	.91	23.11	650	2892	11.00	279.40
	27632A	60	E2	Bulk*	Bulk*	—	—	.080	2.03	.96	24.38	780	3470	12.50	317.50

18 AWG Multi-conductor Stranded (7x26) Bare Copper • Overall 100% Beldfoil® Shield with Drain Wire

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)

NEC: TC, NPLF
CEC: FT4



27325AS	2	E2	10000	3048.0	460.0	209.1	.048	1.22	.276	7.01	67	298	2.80	71.12
27334AS	3	E2	10000	3048.0	560.0	254.5	.048	1.22	.292	7.42	90	400	2.90	73.66
27326AS	4	E2	10000	3048.0	690.0	313.6	.048	1.22	.315	8.00	112	498	3.10	81.28

E2 = Refer to Industrial Technical Information section for color code.

† Flat construction; overall shield not available.
†† Twisted Conductors.

*Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:		
12345	**A**	**S**
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil Shield

Conductor, Insulation and Jacket Options

Bare	Tinned	Insulation/Jacket
A	B	PVC-Nylon/PVC
C	D	XLPE/PVC
E	F	FRPO/PVC
G	H	XLPE/TPE
K	L	TPE/TPE
M	N	PVC-Nylon/Oil Res II
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

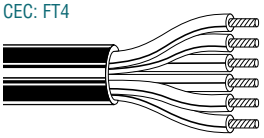
Control Cable

600V Type TC Cables

16 AWG Multi-conductor Stranded (7x24) Bare Copper

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)

NEC: TC, NPLF
CEC: FT4

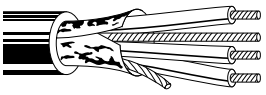


Description	Part No.	No. of Cond.	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Maximum Pull Tension Lbs.	Maximum Pull Tension N	Minimum Bend Radius Inch	Minimum Bend Radius mm
	27917A†	2	E2	10000	3048.0	480.0	218.2	.045	1.14	.22 x .34	5.59 x 8.64	41	182	2.00	50.80
	27337A††	2	E2	Bulk*	Bulk*	—	—	.045	1.14	.34	8.64	41	182	3.50	88.90
	27331A	3	E2	10000	3048.0	680.0	309.1	.045	1.14	.36	9.14	62	276	3.50	88.90
	27338A	4	E2	10000	3048.0	780.0	354.5	.045	1.14	.39	9.91	83	369	4.00	101.60
	27339A	5	E2	10000	3048.0	950.0	431.8	.045	1.14	.43	10.92	103	458	4.25	107.95
	27615A	6	E2	Bulk*	Bulk*	—	—	.045	1.14	.46	11.68	124	552	4.50	114.30
	27323A	7	E2	10000	3048.0	1280.0	581.8	.045	1.14	.46	11.68	145	645	4.50	114.30
	27616A	8	E2	10000	3048.0	1390.0	631.8	.045	1.14	.50	12.70	165	734	5.00	127.00
	27340A	9	E2	Bulk*	Bulk*	—	—	.045	1.14	.57	14.48	186	827	5.75	146.05
	27617A	10	E2	Bulk*	Bulk*	—	—	.045	1.14	.61	15.49	207	921	6.00	152.40
	27618A	11	E2	Bulk*	Bulk*	—	—	.045	1.14	.61	15.49	227	1010	6.00	152.40
	27341A	12	E2	5000	1524.0	900.0	409.1	.045	1.14	.63	16.00	248	1103	6.25	158.75
	27619A	13	E2	Bulk*	Bulk*	—	—	.045	1.14	.66	16.76	269	1197	6.50	165.10
	27620A	14	E2	Bulk*	Bulk*	—	—	.045	1.14	.66	16.76	290	1290	6.50	165.10
	27621A	15	E2	Bulk*	Bulk*	—	—	.060	1.52	.70	17.78	310	1379	7.00	177.80
	27330A	16	E2	Bulk*	Bulk*	—	—	.060	1.52	.70	17.78	331	1472	7.00	177.80
	27622A	17	E2	Bulk*	Bulk*	—	—	.060	1.52	.74	18.80	351	1561	7.50	190.50
	27623A	18	E2	Bulk*	Bulk*	—	—	.060	1.52	.74	18.80	372	1655	7.50	190.50
	27624A	19	E2	Bulk*	Bulk*	—	—	.060	1.52	.74	18.80	392	1744	7.50	190.50
	27625A	20	E2	Bulk*	Bulk*	—	—	.060	1.52	.77	19.56	412	1833	7.75	196.85
	27324A	25	E2	Bulk*	Bulk*	—	—	.080	2.03	.90	22.86	515	2291	9.00	228.60
	27626A	30	E2	Bulk*	Bulk*	—	—	.080	2.03	.95	24.13	619	2754	9.50	241.30
	27627A	37	E2	Bulk*	Bulk*	—	—	.080	2.03	1.02	25.91	763	3394	10.25	260.35
	27628A	50	E2	Bulk*	Bulk*	—	—	.080	2.03	1.12	28.45	1031	4587	11.25	285.75
	27633A	60	E2	Bulk*	Bulk*	—	—	.080	2.03	1.26	32.00	1237	5503	13.00	330.20

16 AWG Multi-conductor Stranded (7x24) Bare Copper • Overall 100% Beldfoil® Shield with Drain Wire

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)

NEC: TC, NPLF
CEC: FT4



	27337AS	2	E2	10000	3048.0	690.0	313.6	.047	1.19	.302	7.67	107	476	3.00	76.20
	27331AS	3	E2	10000	3048.0	760.0	345.5	.048	1.22	.320	8.13	143	636	3.20	81.28

E2 = Refer to Industrial Technical Information section for color code.

† Flat construction; overall shield not available.
†† Twisted Conductors.

*Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:		
12345	**A**	**S**
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil Shield

Conductor, Insulation and Jacket Options

Bare	Tinned	Insulation/Jacket
A	**B**	PVC-Nylon/PVC
C	**D**	XLPE/PVC
E	**F**	FRPO/PVC
G	**H**	XLPE/TPE
K	**L**	TPE/TPE
M	**N**	PVC-Nylon/Oil Res II
Q	**R**	XLPE/CPE
S	**T**	XLPE/Haloarrest® I

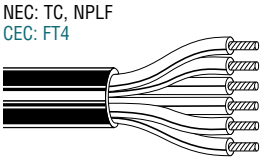
Control Cable

600V Type TC Cables

14 AWG Multi-conductor Stranded (7x22) Bare Copper

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)

NEC: TC, NPLF
CEC: FT4

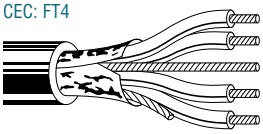


Description	Part No.	No. of Cond.	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Maximum Pull Tension Lbs.	Maximum Pull Tension N	Minimum Bend Radius Inch	Minimum Bend Radius mm
	27080A†	2	E2	10000	3048.0	640.0	290.9	.045	1.14	.21 x .32	5.33 x 8.13	87	387	2.00	50.80
	27636A††	2	E2	Bulk*	Bulk*	—	—	.045	1.14	.33	8.38	87	387	3.70	93.98
	27081A	3	E2	10000	3048.0	830.0	377.3	.045	1.14	.33	8.38	131	583	4.00	101.60
	27082A	4	E2	10000	3048.0	1030.0	468.2	.045	1.14	.36	9.14	174	774	4.25	107.95
	27083A	5	E2	10000	3048.0	1380.0	627.3	.045	1.14	.39	9.91	218	970	4.75	120.65
	27084A	6	E2	Bulk*	Bulk*	—	—	.045	1.14	.43	10.92	262	1166	5.00	127.00
	27085A	7	E2	10000	3048.0	1640.0	745.5	.045	1.14	.43	10.92	306	1361	5.00	127.00
	27086A	8	E2	Bulk*	Bulk*	—	—	.045	1.14	.47	11.94	350	1557	5.75	146.05
	27087A	9	E2	5000	1524.0	1235.0	561.4	.045	1.14	.50	12.70	393	1748	6.25	158.75
	27088A	10	E2	5000	1524.0	1255.0	570.5	.060	1.52	.57	14.48	437	1944	6.75	171.45
	27089A	11	E2	Bulk*	Bulk*	—	—	.060	1.52	.60	15.24	481	2140	6.75	171.45
	27090A	12	E2	5000	1524.0	1480.0	672.7	.060	1.52	.61	15.49	524	2331	7.00	177.80
	27091A	13	E2	Bulk*	Bulk*	—	—	.060	1.52	.64	16.26	568	2527	7.25	184.15
	27092A	14	E2	Bulk*	Bulk*	—	—	.060	1.52	.64	16.26	611	2718	7.25	184.15
	27093A	15	E2	Bulk*	Bulk*	—	—	.060	1.52	.68	17.27	655	2914	7.75	196.85
	27094A	16	E2	5000	1524.0	1920.0	872.7	.060	1.52	.66	16.76	699	3110	7.75	196.85
	27095A	17	E2	Bulk*	Bulk*	—	—	.060	1.52	.70	17.78	742	3301	8.00	203.20
	27096A	18	E2	Bulk*	Bulk*	—	—	.060	1.52	.70	17.78	786	3497	8.00	203.20
	27097A	19	E2	5000	1524.0	2220.0	1009.1	.060	1.52	.70	17.78	830	3692	8.00	203.20
	27098A	20	E2	Bulk*	Bulk*	—	—	.060	1.52	.74	18.80	874	3888	9.00	228.60
	27099A	21	E2	Bulk*	Bulk*	—	—	.060	1.52	.75	19.05	918	4084	9.00	228.60
	27100A	22	E2	Bulk*	Bulk*	—	—	.060	1.52	.78	19.81	961	4725	9.50	241.30
	27101A	23	E2	Bulk*	Bulk*	—	—	.060	1.52	.78	19.81	1005	4471	9.50	241.30
	27102A	24	E2	Bulk*	Bulk*	—	—	.060	1.52	.83	21.08	1048	4662	10.00	254.00
	27103A	25	E2	5000	1524.0	2995.0	1361.4	.060	1.52	.83	21.08	1092	4858	10.00	254.00
	27104A	26	E2	Bulk*	Bulk*	—	—	.060	1.52	.83	21.08	1136	5054	10.00	254.00
	27105A	27	E2	Bulk*	Bulk*	—	—	.080	2.03	.89	22.61	1179	5245	10.00	254.00
	27106A	28	E2	Bulk*	Bulk*	—	—	.080	2.03	.92	23.37	1223	5441	10.50	266.70
	27107A	29	E2	Bulk*	Bulk*	—	—	.080	2.03	.92	23.37	1266	5632	10.50	266.70
	27108A	30	E2	Bulk*	Bulk*	—	—	.080	2.03	.90	22.86	1310	5828	10.50	266.70
	27629A	37	E2	5000	1524.0	4395.0	1997.7	.080	2.03	.96	24.38	1616	7189	11.50	292.10
	27912A	50	E2	Bulk*	Bulk*	—	—	.080	2.03	1.13	28.70	1642	7305	11.70	297.18

14 AWG Multi-conductor Stranded (7x22) Bare Copper • Overall 100% Beldfoil® Shield with Drain Wire

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)

NEC: TC, NPLF
CEC: FT4



	27081AS	3	E2	10000	3048.0	1010.0	459.1	.048	1.22	.362	9.19	218	970	3.60	91.44
	27082AS	4	E2	10000	3048.0	1270.0	577.3	.048	1.22	.391	9.93	273	1214	3.90	99.06

E2 = Refer to Industrial Technical Information section for color code.

† Flat construction; overall shield not available.
†† Twisted Conductors.

*Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:		
12345	**A**	**S**
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil Shield

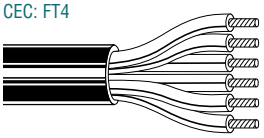
Conductor, Insulation and Jacket Options

Bare	Tinned	Insulation/Jacket
A	B	PVC-Nylon/PVC
C	D	XLPE/PVC
E	F	FRPO/PVC
G	H	XLPE/TPE
K	L	TPE/TPE
M	N	PVC-Nylon/Oil Res II
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

Control Cable

600V Type TC Cables

Description	Part No.	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
12 AWG Multi-conductor Stranded (7x20) Bare Copper															
PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)															
NEC: TC, NPLF CEC: FT4	**27109A**†	2	E2	10000	3048.0	820.0	372.7	.045	1.14	.25 x .42	6.35 x 10.67	122	543	2.20	55.88
	27641A††	2	E2	Bulk*	Bulk*	—	—	.045	1.14	.42	10.67	122	543	4.00	101.60
	27110A	3	E2	10000	3048.0	1050.0	477.3	.045	1.14	.44	11.18	182	810	4.50	114.30
	27111A	4	E2	10000	3048.0	1350.0	613.6	.045	1.14	.48	12.19	243	1081	4.75	120.65
	27112A	5	E2	10000	3048.0	1650.0	750.0	.045	1.14	.53	13.46	304	1352	5.25	133.35
	27113A	6	E2	Bulk*	Bulk*	—	—	.045	1.14	.60	15.24	365	1624	6.00	152.40
	27114A	7	E2	10000	3048.0	2310.0	1050.0	.045	1.14	.60	15.24	426	1895	6.00	152.40
	27115A	8	E2	Bulk*	Bulk*	—	—	.060	1.52	.65	16.51	486	2162	6.50	165.10
	27116A	9	E2	5000	1524.0	1660.0	754.5	.060	1.52	.70	17.78	547	2433	7.00	177.80
	27117A	10	E2	Bulk*	Bulk*	—	—	.060	1.52	.75	19.05	608	2705	7.50	190.50
	27118A	11	E2	Bulk*	Bulk*	—	—	.060	1.52	.75	19.05	669	2976	7.50	190.50
	27119A	12	E2	5000	1524.0	2065.0	938.6	.060	1.52	.78	19.81	729	3243	7.75	196.85
	27120A	13	E2	Bulk*	Bulk*	—	—	.060	1.52	.82	20.83	790	3514	8.25	209.55
	27121A	14	E2	Bulk*	Bulk*	—	—	.060	1.52	.82	20.83	851	3786	8.25	209.55
	27122A	15	E2	Bulk*	Bulk*	—	—	.060	1.52	.91	23.11	911	4053	9.00	228.60
	27123A	16	E2	Bulk*	Bulk*	—	—	.060	1.52	.91	23.11	972	4324	9.00	228.60
	27124A	17	E2	Bulk*	Bulk*	—	—	.060	1.52	.95	24.13	1033	4595	9.50	241.30
	27125A	18	E2	Bulk*	Bulk*	—	—	.060	1.52	.95	24.13	1093	4862	9.50	241.30
	27126A	19	E2	Bulk*	Bulk*	—	—	.060	1.52	.95	24.13	1154	5134	9.50	241.30
	27127A	20	E2	Bulk*	Bulk*	—	—	.080	2.03	.98	24.89	1217	5414	9.75	247.65
	27128A	21	E2	Bulk*	Bulk*	—	—	.080	2.03	1.01	25.65	1276	5676	10.00	254.00
	27129A	22	E2	Bulk*	Bulk*	—	—	.080	2.03	1.05	26.67	1337	5948	10.50	266.70
	27130A	23	E2	Bulk*	Bulk*	—	—	.080	2.03	1.05	26.67	1397	6215	10.50	266.70
	27131A	24	E2	Bulk*	Bulk*	—	—	.080	2.03	1.11	28.19	1458	6486	11.00	279.40
	27132A	25	E2	Bulk*	Bulk*	—	—	.080	2.03	1.11	28.19	1519	6757	11.00	279.40
	27133A	26	E2	Bulk*	Bulk*	—	—	.080	2.03	1.11	28.19	1580	7029	11.00	279.40
	27134A	27	E2	Bulk*	Bulk*	—	—	.080	2.03	1.13	28.70	1641	7300	11.25	285.75
	27135A	28	E2	Bulk*	Bulk*	—	—	.080	2.03	1.17	29.72	1701	7567	11.75	298.45
	27136A	29	E2	Bulk*	Bulk*	—	—	.080	2.03	1.17	29.72	1783	7932	11.75	298.45
	27137A	30	E2	Bulk*	Bulk*	—	—	.080	2.03	1.17	29.72	1823	8110	11.75	298.45
	27630A	37	E2	Bulk*	Bulk*	—	—	.080	2.03	1.27	32.26	2248	10000	12.75	323.85
	27634A	50	E2	Bulk*	Bulk*	—	—	.080	2.03	1.49	37.85	2600	11566	15.50	393.70



E2 = Refer to Industrial Technical Information section for color code.

† Flat construction; overall shield not available.
†† Twisted Conductors.

*Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:		
12345	**A**	**S**
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil® Shield

Conductor, Insulation and Jacket Options

Bare	Tinned	Insulation/Jacket
A	B	PVC-Nylon/PVC
C	D	XLPE/PVC
E	F	FRPO/PVC
G	H	XLPE/TPE
K	L	TPE/TPE
M	N	PVC-Nylon/Oil Res II
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

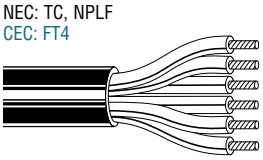
Control Cable

600V Type TC Cables

10 AWG Multi-conductor Stranded (7x18) Bare Copper

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)

NEC: TC, NPLF
CEC: FT4

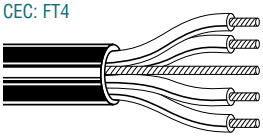


Description	Part No.	No. of Cond.	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Maximum Pull Tension Lbs.	Maximum Pull Tension N	Minimum Bend Radius Inch	Minimum Bend Radius mm
	27138A†	2	E2	10000	3048.0	1240.0	563.6	.045	1.14	.28 x .46	7.11 x 11.68	164	730	.30	7.62
	27643A††	2	E2	Bulk*	Bulk*	—	—	.045	1.14	.46	11.68	164	730	4.30	109.22
	27139A	3	E2	10000	3048.0	1740.0	790.9	.045	1.14	.49	12.45	247	1099	5.00	127.00
	27140A	4	E2	10000	3048.0	2190.0	995.5	.045	1.14	.57	14.48	329	1464	6.00	152.40
	27141A	5	E2	10000	3048.0	2840.0	1290.9	.060	1.52	.62	15.75	412	1833	6.30	160.02
	27142A	6	E2	Bulk*	Bulk*	—	—	.060	1.52	.67	17.02	494	2198	6.80	172.72
	27143A	7	E2	Bulk*	Bulk*	—	—	.060	1.52	.67	17.02	576	2562	6.80	172.72
	27144A	8	E2	Bulk*	Bulk*	—	—	.060	1.52	.73	18.54	659	2932	7.30	185.42
	27145A	9	E2	Bulk*	Bulk*	—	—	.060	1.52	.78	19.81	741	3296	7.80	198.12
	27146A	10	E2	Bulk*	Bulk*	—	—	.060	1.52	.91	23.11	823	3661	9.00	228.60
	27147A	11	E2	Bulk*	Bulk*	—	—	.060	1.52	.91	23.11	905	4026	9.00	228.60
	27148A	12	E2	Bulk*	Bulk*	—	—	.080	2.03	.92	23.37	988	4395	9.30	236.22

8 AWG Multi-conductor Stranded (7x16) Bare Copper

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)

NEC: TC, NPLF
CEC: FT4



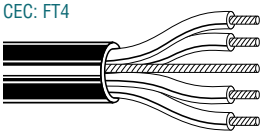
27149A	2	**	Bulk*	Bulk*	—	—	.060	1.52	.62	15.75	262	1166	6.00	152.40
27150A	3	**	5000	1524.0	1855.0	843.2	.060	1.52	.65	16.51	392	1744	6.30	160.02
27151A	4	**	5000	1524.0	2035.0	925.0	.060	1.52	.72	18.29	523	2327	6.80	172.72

**ICEA Method 4 Color Code

6 AWG Multi-conductor Stranded (7x14) Bare Copper

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)

NEC: TC, NPLF
CEC: FT4



27152A	2	**	Bulk*	Bulk*	—	—	.060	1.52	.69	17.53	420	1868	6.80	172.72
27153A	3	**	5000	1524.0	2390.0	1086.4	.060	1.52	.73	18.54	630	2803	7.00	177.80
27154A	4	**	5000	1524.0	2860.0	1300.0	.060	1.52	.80	20.32	840	3737	7.80	198.12

**ICEA Method 4 Color Code

E2 = Refer to Industrial Technical Information section for color code.

† Flat construction; overall shield not available.
†† Twisted Conductors.

**Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:		
12345	**A**	**S**
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil® Shield

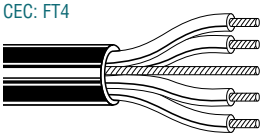
Conductor, Insulation and Jacket Options

Bare	Tinned	Insulation/Jacket
A	B	PVC-Nylon/PVC
C	D	XLPE/PVC
E	F	FRPO/PVC
G	H	XLPE/TPE
K	L	TPE/TPE
M	N	PVC-Nylon/Oil Res II
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

Control Cable

600V Type TC Cables

Description	Part No.	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
4 AWG Multi-conductor Stranded (7x12) Bare Copper															
PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)															
NEC: TC, NPLF CEC: FT4	**27155A**	2	**	Bulk*	Bulk*	—	—	.060	1.52	.77	19.56	664	2954	7.80	198.12
	27156A	3	**	5000	1524.0	3220.0	1463.6	.080	2.03	.82	20.83	995	4426	8.50	215.90
	27157A	4	**	Bulk*	Bulk*	—	—	.080	2.03	.97	24.64	1327	5903	9.50	241.30

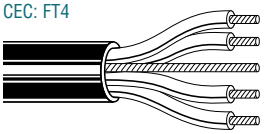


**ICEA Method 4 Color Code

2 AWG Multi-conductor Stranded (7x10) Bare Copper

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)

NEC: TC, NPLF CEC: FT4	**27158A**	2	**	Bulk*	Bulk*	—	—	.080	2.03	.97	24.64	1055	4693	9.30	236.22
	27159A	3	**	5000	1524.0	5255.0	2388.6	.080	2.03	.98	24.89	1582	7038	10.00	254.00
	27160A	4	**	Bulk*	Bulk*	—	—	.080	2.03	1.09	27.69	2110	9387	11.00	279.40

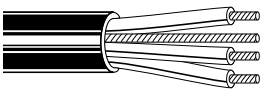


**ICEA Method 4 Color Code

1 AWG Multi-conductor Stranded (19x14) Bare Copper

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)

NEC: TC, NPLF CEC: FT4	**27161A**	3	**	Bulk*	Bulk*	—	—	.080	2.03	1.15	29.21	1950	8675	11.50	292.10



**ICEA Method 4 Color Code

*Bulk = Non-stocked item. Specify length, 1 piece per reel.

To Specify:		
12345	**A**	**S**
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil® Shield

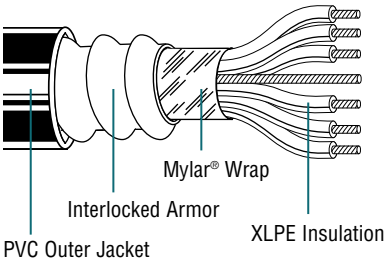
Conductor, Insulation and Jacket Options

Bare	Tinned	Insulation/Jacket
A	B	PVC-Nylon/PVC
C	D	XLPE/PVC
E	F	FRPO/PVC
G	H	XLPE/TPE
K	L	TPE/TPE
M	N	PVC-Nylon/Oil Res II
Q	R	XLPE/CPE
S	T	XLPE/Haloarrest® I

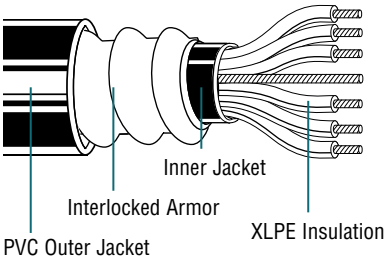
Control Cable

600V Type MC Metal Clad and Teck-Style® Cables — Overview

Metal Clad



Teck-Style



Introduction

Belden® Metal Clad (MC) and Teck-Style cables are designed to meet demanding industrial needs by combining rugged durability and corrosion resistance with flexibility and easy handling.

MC and Teck-Style cables are available in a wide range of in-stock and custom constructions to meet the needs of pulp and paper, chemical, petroleum and other demanding industrial and resource industry environments. They are ideal for use in wet or dry areas; ventilated, non-ventilated or ladder-type cable troughs; ventilated flexible cableways; and for direct burial. Custom cables are available to meet exacting requirements.

Belden Type MC Cable is marked sunlight-resistant for cable tray use in direct burial designations, and cable constructions are listed to NEC Type MC.

Teck-Style cables are price-competitive, high-performance, UL 1569 certified cables with a flame-retardant XHHW insulated conductor and an inner PVC jacket for mechanical moisture and corrosion protection.

Construction

Class B stranded bare copper conductors, cross-linked polyethylene insulation, bare copper ground wire, standard aluminum or optional galvanized steel interlocking armor, PVC outer jacket.

- Thermoset insulation — XHHW-2 conductors
- NEC conductor temperature 90°C dry and 90°C wet

Voltage Rating

14 AWG — 2 AWG: 600 Volt

Application

Type MC Cable is a general-purpose cable used in the pulp and paper, mining, petroleum and chemical industries as well as in commercial buildings.

MC Cable may be used under the following conditions:

- Exposed or concealed wiring in dry or wet conditions
- In ventilated, non-ventilated or ladder-type cable trays in dry or wet conditions
- On walls or beams
- Directly buried
- Class I and II Div. 2 and Class III Div. 1 and 2 hazardous locations

Minimum Bending Radius

12 times the overall cable diameter

Pulling Tensions:

The combined use of Kellems grips and pulling eyes is recommended.

Design Advantages

Insulation Properties

- High tensile strength
- Impact- and crush-resistant
- Heat-resistant
- Excellent elongation
- Moisture-resistant
- Good low temperature properties
- 90°C dry and 90°C wet

Electrical Properties

- High insulation resistance
- Low dielectric loss
- High dielectric strength

Other Features

- Corrosion-resistant
- Versatile and flexible
- Provides cost savings as conduit and ducts are not required

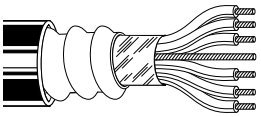
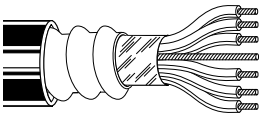
Specifications

- UL 44
- UL 1569
- UL 1581 (70,000 BTU/hr) Vertical Tray Flame Test
- Meets IEEE 1202 Flame Test

Mylar is a DuPont trademark.

Control Cable

600V Type MC Metal Clad Cables

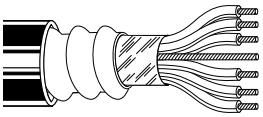
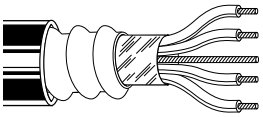
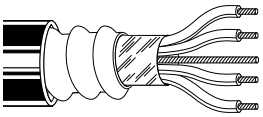
Description	Part Number		No. of Cond.	Insulation Thickness		Outer Jacket Thickness		Armor OD		Nominal OD		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
14 AWG Stranded (7x22) Bare Copper • 14 AWG Bare Copper Ground Wire													
Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket													
NEC: MC 	**27243**	**28243**	2	.030	.76	.050	1.27	.48	12.19	.58	14.73	7.3	185.42
	27244	**28244**	3	.030	.76	.050	1.27	.50	12.70	.61	15.49	7.6	193.04
	27245	**28245**	4	.030	.76	.050	1.27	.54	13.72	.64	16.26	7.9	200.66
	27246	**28246**	5	.030	.76	.050	1.27	.57	14.48	.68	17.27	8.4	213.36
	27247	**28247**	6	.030	.76	.050	1.27	.62	15.75	.72	18.29	8.9	226.06
	27248	**28248**	7	.030	.76	.050	1.27	.62	15.75	.72	18.29	8.9	226.06
	27269	**28269**	8	.030	.76	.050	1.27	.69	17.53	.80	20.32	9.4	238.76
	27535	**28535**	9	.030	.76	.050	1.27	.70	17.78	.80	20.32	10.0	254.00
	27249	**28249**	10	.030	.76	.050	1.27	.75	19.05	.85	21.59	10.5	266.70
	27250	**28250**	12	.030	.76	.050	1.27	.77	19.56	.87	22.10	10.8	274.32
	27251	**28251**	15	.030	.76	.050	1.27	.87	22.10	.98	24.89	11.6	294.64
	27969	**28969**	19	.030	.76	.050	1.27	1.00	25.40	1.11	28.19	12.1	307.34
	27252	**28252**	20	.030	.76	.050	1.27	1.03	26.16	1.14	28.96	13.3	337.82
	27270	**28270**	25	.030	.76	.050	1.27	1.10	27.94	1.21	30.73	14.4	365.76
	27253	**28253**	30	.030	.76	.050	1.27	1.18	29.97	1.29	32.77	15.1	383.54
	27292	**28292**	37	.030	.76	.050	1.27	1.14	28.96	1.24	31.50	16.1	408.94
	27433	**28433**	40	.030	.76	.050	1.27	1.28	32.51	1.40	35.56	16.7	424.18
	27434	**28434**	50	.030	.76	.050	1.27	1.40	35.56	1.52	38.61	18.4	467.36
12 AWG Stranded (7x20) Bare Copper • 12 AWG Bare Copper Ground Wire													
Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket													
NEC: MC 	**27254**	**28254**	2	.030	.76	.050	1.27	.52	13.21	.62	15.75	7.8	198.12
	27255	**28255**	3	.030	.76	.050	1.27	.54	13.72	.64	16.26	8.0	203.20
	27256	**28256**	4	.030	.76	.050	1.27	.58	14.73	.68	17.22	8.5	215.90
	27271	**28271**	5	.030	.76	.050	1.27	.62	15.75	.72	18.29	9.1	231.14
	27272	**28272**	6	.030	.76	.050	1.27	.67	17.02	.77	19.56	9.6	243.84
	27273	**28273**	7	.030	.76	.050	1.27	.67	17.02	.77	19.56	9.6	243.84
	27274	**28274**	8	.030	.76	.050	1.27	.77	19.56	.88	22.35	10.2	259.08
	27538	**28538**	9	.030	.76	.050	1.27	.76	19.30	.86	21.84	10.8	274.32
	27275	**28275**	10	.030	.76	.050	1.27	.80	20.32	.91	23.11	11.5	292.10
	27276	**28276**	12	.030	.76	.050	1.27	.84	21.34	.94	23.88	11.7	297.18
	27277	**28277**	15	.030	.76	.050	1.27	.94	23.88	1.05	26.67	13.4	340.36
	27539	**28539**	19	.030	.76	.055	1.40	1.05	26.67	1.16	29.46	14.0	355.60
	27278	**28278**	20	.030	.76	.055	1.40	1.16	29.46	1.27	32.26	14.6	370.84
	27279	**28279**	25	.030	.76	.055	1.40	1.26	32.00	1.37	34.80	15.8	401.32
	27280	**28280**	30	.030	.76	.055	1.40	1.29	32.77	1.40	35.56	16.8	426.72
	27540	**28540**	37	.030	.76	.055	1.40	1.44	36.58	1.55	39.37	17.8	452.12
	27432	**28432**	40	.030	.76	.055	1.40	1.50	38.10	1.63	41.40	18.4	467.36

Color Code: Use ICEA Table E2 with printed numbers.

Non-stocked items. Specify length, 1 piece per reel.

Control Cable

600V Type MC Metal Clad Cables

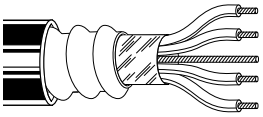
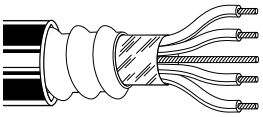
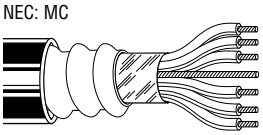
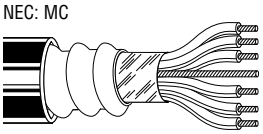
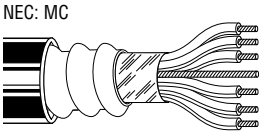
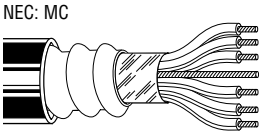
Description	Part Number		No. of Cond.	Insulation Thickness		Outer Jacket Thickness		Armor OD		Nominal OD		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
10 AWG Stranded (7x18) Bare Copper • 10 AWG Bare Copper Ground Wire													
Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket													
NEC: MC 	**27257**	**28257**	2	.030	.76	.050	1.27	.56	14.22	.67	17.02	8.4	213.36
	27258	**28258**	3	.030	.76	.050	1.27	.58	14.73	.69	17.53	8.6	218.44
	27259	**28259**	4	.030	.76	.050	1.27	.62	15.75	.74	18.80	9.2	233.68
	27281	**28281**	5	.030	.76	.050	1.27	.68	17.27	.79	20.07	12.8	325.12
	27282	**28282**	6	.030	.76	.050	1.27	.74	18.80	.84	21.34	10.4	264.16
	27283	**28283**	7	.030	.76	.050	1.27	.74	18.80	.84	21.34	10.4	264.16
	27284	**28284**	8	.030	.76	.050	1.27	.81	20.57	.92	23.37	11.2	284.48
	27541	**28541**	9	.030	.76	.050	1.27	.87	22.10	.98	24.89	11.8	299.72
	27285	**28285**	10	.030	.76	.050	1.27	.89	22.61	1.03	26.16	13.3	337.82
	27286	**28286**	12	.030	.76	.050	1.27	1.01	25.65	1.12	28.45	13.7	347.98
	27287	**28287**	15	.030	.76	.050	1.27	1.09	27.69	1.22	30.99	14.8	375.92
	27288	**28288**	20	.030	.76	.055	1.40	1.22	30.99	1.35	34.24	16.2	411.48
	27289	**28289**	25	.030	.76	.055	1.40	1.32	33.53	1.47	37.34	17.8	452.12
	27290	**28290**	30	.030	.76	.055	1.40	1.42	36.07	1.55	39.37	18.6	472.44
8 AWG Stranded (7x16) Bare Copper • 10 AWG Bare Copper Ground Wire													
Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket													
NEC: MC 	**27291**	**28291**	2	.045	1.14	.050	1.27	.70	17.78	.81	20.57	9.8	248.92
	27260	**28260**	3	.045	1.14	.050	1.27	.72	18.29	.82	20.83	10.2	259.08
	27261	**28261**	4	.045	1.14	.050	1.27	.78	19.81	.88	22.35	10.9	276.86
6 AWG Stranded (7x14) Bare Copper • 8 AWG Bare Copper Ground Wire													
Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket													
NEC: MC 	**27293**	**28293**	2	.045	1.14	.050	1.27	.76	19.30	.87	22.10	10.7	271.78
	27262	**28262**	3	.045	1.14	.050	1.27	.80	20.32	.90	22.86	11.2	284.48
	27263	**28263**	4	.045	1.14	.050	1.27	.87	22.10	.97	24.64	12.1	307.34

Color Code: For sizes 14, 12, 10, use ICEA Table E2 with printed numbers.
For sizes 8 and larger, use ICEA Method 4 with printed numbers.

Non-stocked items. Specify length, 1 piece per reel.

Control Cable

600V Type MC Metal Clad Cables

Description	Part Number		No. of Cond.	Insulation Thickness		Outer Jacket Thickness		Armor OD		Nominal OD		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
4 AWG Stranded (7x12) Bare Copper • 8 AWG Bare Copper Ground Wire													
Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket													
NEC: MC 	**27264**	**28264**	3	.045	1.14	.050	1.27	.90	22.86	1.00	25.40	13.1	332.74
	27265	**28265**	4	.045	1.14	.050	1.27	1.97	50.04	1.08	27.43	14.2	360.68
2 AWG Stranded (7x10) Bare Copper • 6 AWG Bare Copper Ground Wire													
Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket													
NEC: MC 	**27267**	**28267**	3	.045	1.14	.050	1.27	1.02	25.78	1.13	28.58	14.7	373.38
	27268	**28268**	4	.045	1.14	.050	1.27	1.11	28.27	1.22	30.99	15.9	403.86
Composite 14 AWG (7x22) **and 12 AWG** (7x20) Stranded Bare Copper • 12 AWG Bare Copper Ground Wire													
Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket													
NEC: MC 	**27428**	**28428**	3c/14 3c/12	.030 .030	.76 .76	.050	1.27	.70	17.78	.81	20.57	9.7	246.38
Composite 14 AWG (7x22) **and 10 AWG** (7x18) Stranded Bare Copper • 10 AWG Bare Copper Ground Wire													
Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket													
NEC: MC 	**27429**	**28429**	3c/14 3c/10	.030 .030	.76 .76	.050	1.27	.74	18.80	.85	21.39	10.2	259.08
Composite 14 AWG (7x22) **and 8 AWG** (7x16) Stranded Bare Copper • 10 AWG Bare Copper Ground Wire													
Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket													
NEC: MC 	**27430**	**28430**	3c/14 3c/8	.030 .045	.76 1.14	.050	1.27	.83	21.08	.94	23.88	11.2	284.48
Composite 14 AWG (7x22) **and 6 AWG** (7x14) Stranded Bare Copper • 8 AWG Bare Copper Ground Wire													
Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket													
NEC: MC 	**27431**	**28431**	3c/14 3c/6	.030 .045	.76 1.14	.050	1.27	.89	22.61	1.01	25.65	12.0	304.80

Color Code: For sizes 14, 12, 10, use ICEA Table E2 with printed numbers.
For sizes 8 and larger, use ICEA Method 4 with printed numbers.

Non-stocked items. Specify length, 1 piece per reel.

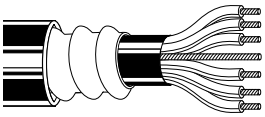
Control Cable

600V Type MC Teck-Style® Cables

14 AWG Stranded (7x22) Bare Copper • 14 AWG Bare Copper Ground Wire

Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket

NEC: MC

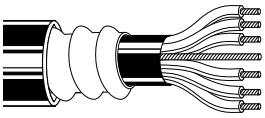


Description	Part Number		No. of Cond.	Insulation Thickness		Inner Jacket OD		Armor OD		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
	27840	**28840**	2	.030	.76	.37	9.40	.56	14.22	.67	17.02	66	294	8.0	203
	27841	**28841**	3	.030	.76	.39	9.91	.58	14.73	.69	17.53	98	436	8.3	211
	27842	**28842**	4	.030	.76	.43	10.92	.62	15.75	.73	18.54	131	583	8.7	221
	27843	**28843**	5	.030	.76	.47	11.94	.66	16.76	.77	19.56	164	730	9.2	234
	27844	**28844**	6	.030	.76	.51	12.95	.70	17.78	.81	20.57	191	850	9.7	246
	27845	**28845**	7	.030	.76	.51	12.95	.70	17.78	.81	20.57	225	1001	9.7	246
	27846	**28846**	8	.030	.76	.58	14.73	.77	19.56	.88	22.35	260	1157	10.5	267
	27847	**28847**	10	.030	.76	.67	17.02	.93	23.62	1.04	26.42	321	1428	12.5	318
	27848	**28848**	12	.030	.76	.69	17.53	.95	24.13	1.06	26.92	388	1726	12.7	323
	27849	**28849**	15	.030	.76	.77	19.56	1.03	26.16	1.14	28.96	481	2140	13.7	348
	27850	**28850**	20	.030	.76	.86	21.84	1.12	28.45	1.23	31.24	649	2887	15.3	389
	27851	**28851**	25	.030	.76	.92	23.37	1.18	29.97	1.30	33.02	810	3603	16.3	414
	27852	**28852**	30	.030	.76	.98	24.89	1.24	31.50	1.36	34.54	975	4337	17.0	432
	27885	**28885**	40	.030	.76	1.09	27.69	1.35	34.29	1.47	37.34	1301	5788	18.5	470
	27886	**28886**	50	.030	.76	1.19	30.23	1.45	36.83	1.57	39.88	1630	7251	19.8	503

12 AWG Stranded (7x20) Bare Copper • 12 AWG Bare Copper Ground Wire

Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket

NEC: MC



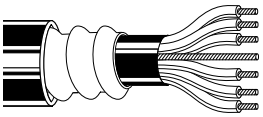
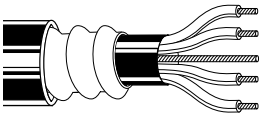
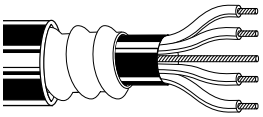
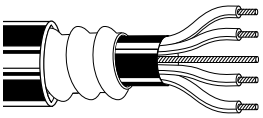
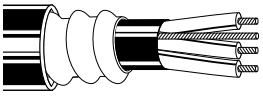
	27853	**28853**	2	.030	.76	.41	10.41	.60	15.24	.71	18.03	104	463	8.5	206
	27854	**28854**	3	.030	.76	.43	10.92	.62	15.75	.73	18.54	156	694	8.8	224
	27855	**28855**	4	.030	.76	.47	11.94	.66	16.76	.77	19.56	207	921	9.2	234
	27856	**28856**	5	.030	.76	.52	13.21	.71	18.03	.82	20.83	260	1157	9.8	249
	27857	**28857**	6	.030	.76	.59	14.99	.78	19.81	.89	22.61	310	1379	10.7	272
	27858	**28858**	7	.030	.76	.59	14.99	.78	19.81	.89	22.61	361	1606	10.7	272
	27859	**28859**	8	.030	.76	.64	16.26	.83	21.08	.94	23.88	415	1846	11.3	287
	27860	**28860**	10	.030	.76	.75	19.05	1.01	25.65	1.12	28.45	520	2313	13.4	340
	27861	**28861**	12	.030	.76	.77	19.56	1.03	26.16	1.14	28.96	619	2754	13.7	348
	27862	**28862**	15	.030	.76	.87	22.10	1.13	28.70	1.25	31.75	718	3194	15.0	381
	27863	**28863**	20	.030	.76	.96	24.38	1.22	30.99	1.33	32.78	1040	4627	15.9	404
	27864	**28864**	25	.030	.76	1.04	26.42	1.30	33.02	1.42	36.07	1301	5788	17.0	432
	27865	**28865**	30	.030	.76	1.15	29.21	1.41	35.81	1.53	38.86	1560	6940	18.3	465
	27887	**28887**	40	.030	.76	1.20	30.48	1.54	39.12	1.67	42.42	2020	8986	20.0	508

Color Code: Use ICEA Table E2 with printed numbers.

Non-stocked items. Specify length, 1 piece per reel.

Control Cable

600V Type MC Teck-Style® Cables

Description	Part Number		No. of Cond.	Insulation Thickness		Inner Jacket OD		Armor OD		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
10 AWG Stranded (7x18) Bare Copper • 10 AWG Bare Copper Ground Wire															
Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket															
NEC: MC 	**27866**	**28866**	2	.030	.76	.46	11.68	.65	16.51	.74	18.80	166	738	9.1	231
	27867	**28867**	3	.030	.76	.48	12.19	.67	17.02	.77	16.56	249	1108	9.4	239
	27868	**28868**	4	.030	.76	.56	14.22	.75	19.05	.84	21.34	330	1468	10.3	262
	27869	**28869**	5	.030	.76	.67	17.02	.86	21.84	.96	24.38	415	1846	11.6	295
	27870	**28870**	6	.030	.76	.67	17.02	.86	21.84	.96	24.38	491	2184	11.6	295
	27877	**28877**	7	.030	.76	.70	17.78	.90	22.86	1.00	25.40	560	2491	12.1	307
	27878	**28878**	8	.030	.76	.75	19.05	.95	24.13	1.05	26.67	640	2847	12.7	323
	27879	**28879**	10	.030	.76	.78	19.81	1.04	26.42	1.15	29.21	801	3563	13.8	351
	27880	**28880**	12	.030	.76	.89	22.61	1.15	29.21	1.26	32.00	960	4271	15.1	384
	27881	**28881**	15	.030	.76	.93	23.62	1.19	30.23	1.30	33.02	1195	5316	15.6	396
	27882	**28882**	20	.030	.76	1.06	26.92	1.32	33.53	1.44	36.58	1600	7118	17.3	439
	27883	**28883**	25	.030	.76	1.12	28.45	1.44	36.58	1.58	40.13	1990	8853	19.0	483
	27884	**28884**	30	.030	.76	1.28	32.51	1.54	39.12	1.67	42.42	2355	10477	20.0	508
8 AWG Stranded (7x16) Bare Copper • 10 AWG Bare Copper Ground Wire															
Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket															
NEC: MC 	**27871**	**28871**	2	.045	1.14	.59	14.99	.78	19.81	.89	22.61	264	1174	10.7	272
	27872	**28872**	3	.045	1.14	.62	15.75	.81	20.57	.91	23.11	396	1762	10.9	277
	27873	**28873**	4	.045	1.14	.68	17.27	.94	23.88	1.05	26.67	528	2349	12.6	320
6 AWG Stranded (7x14) Bare Copper • 8 AWG Bare Copper Ground Wire															
Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket															
NEC: MC 	**27874**	**28874**	2	.060	1.52	.71	18.03	.97	24.64	1.08	27.43	420	1868	13.0	330
	27875	**28875**	3	.060	1.52	.76	19.30	1.02	25.91	1.13	28.70	630	2803	13.5	343
	27876	**28876**	4	.060	1.52	.88	23.35	1.14	28.96	1.25	31.75	840	3737	15.0	381
4 AWG Stranded (7x12) Bare Copper • 8 AWG Bare Copper Ground Wire															
Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket															
NEC: MC 	**27894**	**28894**	3	.060	1.52	.91	23.11	1.17	29.72	1.29	32.77	1002	4458	15.5	394
	27895	**28895**	4	.060	1.52	.99	25.15	1.25	31.75	1.37	34.80	1335	5939	16.4	417
3 AWG Stranded (7x11) Bare Copper • 6 AWG Bare Copper Ground Wire															
Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket															
NEC: MC 	**27896**	**28896**	3	.060	1.52	.96	24.38	1.22	30.99	1.33	33.78	1263	5619	16.0	406

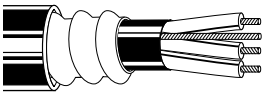
Color Code: For sizes 14, 12, 10, use ICEA Table E2 with printed numbers.
For sizes 8 and larger, use ICEA Method 4 with printed numbers.

Non-stocked items. Specify length, 1 piece per reel.

Control Cable

600V Type MC Teck-Style® Cables

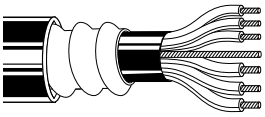
Description	Part Number		No. of Cond.	Insulation Thickness		Inner Jacket OD		Armor OD		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
2 AWG Stranded (7x10) Bare Copper • 6 AWG Bare Copper Ground Wire															
Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket															
NEC: MC	**27888**	**28888**	3	.060	1.52	1.08	27.43	1.28	32.51	1.40	35.56	1593	7087	16.8	427
	27889	**28889**	4	.060	1.52	1.12	28.45	1.38	35.05	1.50	38.10	2124	9449	18.0	457



Composite 14 AWG (7x22) **and 12 AWG** (7x20) • 12 AWG Bare Copper Ground Wire

Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket

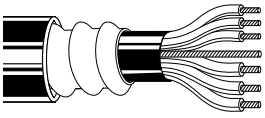
NEC: MC	**27890**	**28890**	3c/14	.030	.76	.56	14.22	.75	19.05	.86	21.84	202	899	10.3	262
			3c/12	.030	.76										



Composite 14 AWG (7x22) **and 10 AWG** (7x18) • 10 AWG Bare Copper Ground Wire

Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket

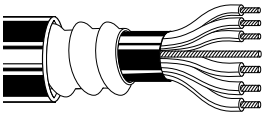
NEC: MC	**27891**	**28891**	3c/14	.030	.76	.61	15.49	.80	20.32	.91	23.11	305	1357	10.9	277
			3c/10	.030	.76										



Composite 14 AWG (7x22) **and 8 AWG** (7x16) • 10 AWG Bare Copper Ground Wire

Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket

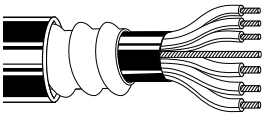
NEC: MC	**27892**	**28892**	3c/14	.045	1.14	.70	17.78	.96	24.38	1.07	27.18	435	1935	12.8	325
			3c/8	.030	.76										



Composite 14 AWG (7x22) **and 6 AWG** (7x14) • 8 AWG Bare Copper Ground Wire

Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket

NEC: MC	**27893**	**28893**	3c/14	.060	1.52	.90	22.86	1.15	29.21	1.26	32.00	655	2914	15.1	384
			3c/6	.030	.76										



Color Code: For sizes 14, 12, 10, use ICEA Table E2 with printed numbers.
For sizes 8 and larger, use ICEA Method 4 with printed numbers.

Non-stocked items. Specify length, 1 piece per reel.

CSA Instrumentation Cable

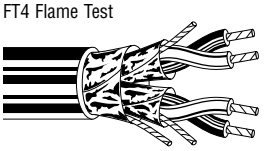
300V CIC

Belden offers a complete line of high performance and high quality CSA certified instrumentation cables (300V/600V and CIC/ACIC). These cables are designed to minimize noise and signal interference to deliver clean signals in harsh petrochemical, pulp and paper and process industry environments, as well as for use in general manufacturing operations.

Contact Belden Customer Service for other options:

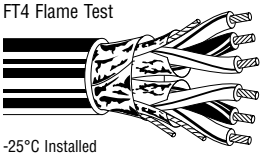
- 150V
- XLPE insulation
- Thermocouple alloy conductors
- Overall foil shield only
- Other pair and triad counts

Description	Part Number	No. of Pairs or Triads	Cable Weight		Jacket Thickness		Nominal OD	
			Lbs./1000 Ft.	kg/km	Inch	mm	Inch	mm
20 AWG Pairs Stranded (7x28) Tinned Copper • Individual Beldfoil® + Polyester Isolation Tape • Overall Beldfoil Shield • Drain Wires								
PVC Insulation • Black PVC Jacket (Color Code: Black and White with Numbers)								
CSA C22.2#239, Type CIC CSA C22.2 #0.3 Clause 4.31 Low Acid Test FT4 Flame Test	**22671**	1	71	48	.045	1.14	.260	6.60
	22638	2	143	96	.045	1.14	.400	10.16
	22639	4	217	146	.045	1.14	.460	11.68
	22640	6	320	215	.045	1.14	.570	14.48
	22641	8	405	272	.060	1.52	.610	15.49
	22676	12	573	385	.060	1.52	.730	18.54
	22643	16	722	485	.060	1.52	.810	20.57
-25°C Installed	**22647**	24	1103	741	.080	2.03	1.040	26.42
-40°C to +105°C (Dry) (75°C Wet)	**22670**	36	1548	1040	.080	2.03	1.190	30.23



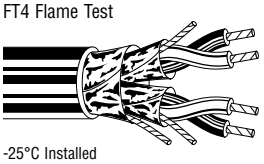
20 AWG Triads Stranded (7x28) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil Shield • Drain Wires

PVC Insulation • Black PVC Jacket (Color Code: Black, White and Red with Numbers)								
CSA C22.2#239, Type CIC CSA C22.2 #0.3 Clause 4.31 Low Acid Test FT4 Flame Test	**22660**	1	89	60	.045	1.14	.270	6.86
	22662	2	177	119	.045	1.14	.420	10.67
	22663	4	277	186	.045	1.14	.490	12.47
	22672	8	521	350	.060	1.52	.650	16.51
	22673	16	1000	672	.080	2.03	.910	23.11
-25°C Installed -40°C to +105°C (Dry) (75°C Wet)	**22674**	24	1414	950	.080	2.03	1.110	28.19



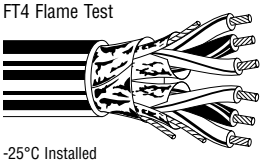
18 AWG Pairs Stranded (7x26) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil Shield • Drain Wires

PVC Insulation • Black PVC Jacket (Color Code: Black and White with Numbers)								
CSA C22.2#239, Type CIC CSA C22.2 #0.3 Clause 4.31 Low Acid Test FT4 Flame Test	**22645**	1	97	65	.045	1.14	.300	7.62
	22633	2	196	132	.045	1.14	.480	12.45
	22648	4	338	227	.045	1.14	.580	14.73
	22634	6	473	318	.060	1.52	.670	17.02
	22635	8	570	283	.060	1.52	.730	18.54
	22636	12	869	584	.060	1.52	.920	23.37
-25°C Installed	**22654**	16	1095	736	.080	2.03	1.020	25.91
-40°C to +105°C (Dry) (75°C Wet)	**22637**	24	1552	1045	.080	2.03	1.260	32.00



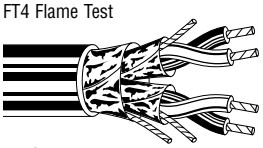
18 AWG Triads Stranded (7x26) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil Shield • Drain Wires

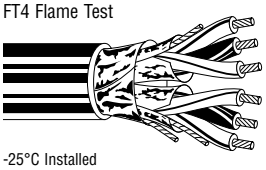
PVC Insulation • Black PVC Jacket (Color Code: Black, White and Red with Numbers)								
CSA C22.2#239, Type CIC CSA C22.2 #0.3 Clause 4.31 Low Acid Test FT4 Flame Test	**22677**	1	121	81	.045	1.14	.303	7.70
	22678	2	256	172	.045	1.14	.480	12.19
	22679	4	427	287	.060	1.52	.620	15.75
	22680	8	597	401	.060	1.52	.710	18.03
	22681	16	740	497	.060	1.52	.770	19.56
	22682	24	1130	759	.080	2.03	.980	24.89
	22683	16	1436	965	.080	2.03	1.090	27.69
-25°C Installed -40°C to +105°C (Dry) (75°C Wet)	**22684**	24	2049	1377	.080	2.03	1.340	34.04



CSA Instrumentation Cable

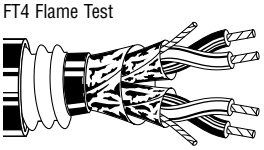
300V CIC

Description	Part Number	No. of Pairs or Triads	Cable Weight		Jacket Thickness		Nominal OD	
			Lbs./1000 Ft.	kg/km	Inch	mm	Inch	mm
16 AWG Pairs Stranded (7x24) Tinned Copper • Individual Beldfoil® + Polyester Isolation Tape • Overall Beldfoil Shield • Drain Wires								
PVC Insulation • Black PVC Jacket (Color Code: Black and White with Numbers)								
CSA C22.2#239, Type CIC CSA C22.2 #0.3 Clause 4.31 Low Acid Test FT4 Flame Test	**22646**	1	122	82	.045	1.14	.320	8.13
	22628	2	262	176	.045	1.14	.520	13.21
	**22629**	4	438	294	.060	1.52	.628	15.95
	22630	6	603	405	.060	1.52	.740	18.80
	22631	8	752	505	.060	1.52	.800	20.32
	22632	12	350	771	.080	2.03	1.010	25.65
-25°C Installed -40°C to +105°C (Dry) (75°C Wet)	**22685**	16	1461	982	.080	2.03	1.120	28.45
	22686	24	2091	1405	.080	2.03	1.380	35.05

16 AWG Triads Stranded (7x24) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil Shield • Drain Wires								
PVC Insulation • Black PVC Jacket (Color Code: Black, White and Red with Numbers)								
CSA C22.2#239, Type CIC CSA C22.2 #0.3 Clause 4.31 Low Acid Test FT4 Flame Test	**22603**	1	152	102	.045	1.14	.329	8.36
	22687	2	344	231	.045	1.14	.580	14.73
	**22675**	4	564	379	.060	1.52	.670	17.02
	22688	6	819	550	.060	1.52	.780	19.81
	22689	8	1063	714	.080	2.03	.940	23.90
-25°C Installed -40°C to +105°C (Dry) (75°C Wet)	**22690**	12	1524	1024	.080	2.03	1.080	27.43

CSA Instrumentation Cable

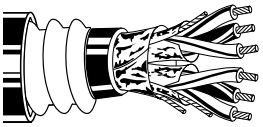
300V ACIC Armored Cables

Description	Part No. Aluminum Armor	Part No. Steel Armor	No. of Pairs/ Triads	Cable Weight Aluminum Armor Lbs./ 1000 Ft.	Cable Weight Aluminum Armor kg/km	Cable Weight Steel Armor Lbs./ 1000 Ft.	Cable Weight Steel Armor kg/km	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inner Jacket Inch	Nominal OD Inner Jacket mm	Nominal OD Outer Jacket Inch	Nominal OD Outer Jacket mm
20 AWG Pairs Stranded (7x28) Tinned Copper • Individual Beldfoil® + Polyester Isolation Tape • Overall Beldfoil • Drain Wires													
Interlocked Armor • PVC Insulation • PVC Inner Jacket • Chrome PVC Outer Jacket													
CSA C22.2#239, Type ACIC CSA C22.2#174, HLABCD CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test	**23543**	**26530**	1	140	208	230	342	.020	.51	.26	6.6	.56	14.2
	23534	**26531**	2	206	306	325	483	.020	.51	.40	10.2	.70	17.8
	23514	**26532**	4	255	379	390	580	.020	.51	.46	11.7	.76	19.3
	23513	**26533**	6	297	441	494	734	.020	.51	.57	14.5	.88	22.4
	**23503**	**26534**	8	361	537	565	840	.020	.51	.63	16.0	.92	23.5
	23521	**26535**	12	480	713	682	1010	.020	.51	.75	19.1	1.06	26.9
	23532	**26536**	16	600	891	900	1337	.020	.51	.79	20.1	1.16	29.5
	23506	**26537**	24	800	1188	1175	1745	.020	.51	1.05	26.7	1.42	36.1
-25°C Installed	**23544**	**26538**	36	1050	1559	1500	2228	.020	.51	1.14	29.0	1.57	39.8
-40°C to +105°C (Dry) (75°C Wet)	**23575**	**26546**	50	1468	2180	2010	2985	.020	.51	1.37	34.8	1.75	44.5

20 AWG Triads Stranded (7x28) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil • Drain Wires

Interlocked Armor • PVC Insulation • PVC Inner Jacket • Chrome PVC Outer Jacket

CSA C22.2#239, Type ACIC
CSA C22.2#174, HLBCD
CSA C22.2#0.3, Clause 4.31
Low Acid Test
FT4 Flame Test



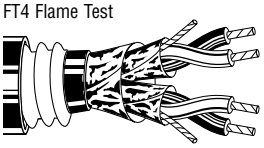
-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

23545	**26539**	1	139	207	235	350	.020	.51	.27	6.9	.57	14.5
23546	**26540**	2	210	312	345	513	.020	.51	.43	10.9	.73	18.5
23547	**26541**	4	270	401	425	631	.020	.51	.50	12.7	.80	20.3
23548	**26542**	8	444	660	650	965	.020	.51	.69	17.5	1.00	25.4
23571	**26553**	12	632	940	970	1440	.020	.51	.82	20.8	1.24	31.5
23549	**26543**	16	740	1100	1090	1619	.020	.51	.91	23.1	1.28	32.5
23550	**26544**	24	990	1410	1360	2020	.020	.51	1.11	28.2	1.48	37.6

18 AWG Pairs Stranded (7x26) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil • Drain Wires

Interlocked Armor • PVC Insulation • PVC Inner Jacket • Chrome PVC Outer Jacket

CSA C22.2#239, Type ACIC
CSA C22.2#174, HLABCD
CSA C22.2#0.3, Clause 4.31
Low Acid Test
FT4 Flame Test



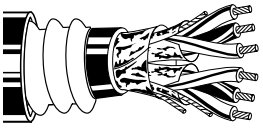
-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

23533	**26514**	1	160	237	258	383	.025	.64	.30	7.6	.60	15.2
23511	**26515**	2	247	367	384	570	.025	.64	.48	12.2	.78	19.8
23530	**26516**	4	340	505	500	745	.025	.64	.58	14.7	.88	22.4
23528	**26517**	6	420	625	610	906	.025	.64	.67	17.0	.98	24.9
23531	**26518**	8	543	808	827	1230	.025	.64	.73	18.5	1.03	26.1
23524	**26519**	12	717	1065	1045	1555	.025	.64	.90	22.9	1.28	32.6
23519	**26520**	16	850	1265	1210	1800	.025	.64	.99	25.1	1.37	34.8
23542	**26521**	24	1100	1632	1510	2245	.025	.64	1.24	31.5	1.63	41.4
23554	**26555**	36	1465	2180	1960	2910	.025	.64	1.41	35.8	1.80	45.7

18 AWG Triads Stranded (7x26) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil • Drain Wires

Interlocked Armor • PVC Insulation • PVC Inner Jacket • Chrome PVC Outer Jacket

CSA C22.2#239, Type ACIC
CSA C22.2#174, HLBCD
CSA C22.2#0.3, Clause 4.31
Low Acid Test
FT4 Flame Test



-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

23505	**26522**	1	175	260	275	410	.025	.64	.33	8.4	.61	15.4
23516	**26523**	2	275	407	417	620	.025	.64	.51	13.0	.81	20.6
23515	**26524**	4	385	572	555	825	.025	.64	.62	15.7	.93	23.6
23508	**26525**	6	535	790	780	1160	.025	.64	.75	19.1	1.11	28.2
23523	**26526**	8	680	1010	995	1476	.025	.64	.81	20.6	1.18	30.0
23512	**26527**	12	916	1360	1215	1805	.025	.64	1.03	26.2	1.40	35.6
23537	**26528**	16	1020	1515	1400	2080	.025	.64	1.13	28.7	1.50	38.1
23536	**26529**	24	1335	1985	1775	2340	.025	.64	1.37	34.8	1.80	45.7

Color Code: Pairs — Black and White with Numbers.
Triads — Black, White and Red with Numbers.

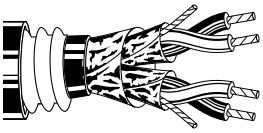
CSA Instrumentation Cable

300V ACIC Armored Cables

16 AWG Pairs Stranded (7x24) Tinned Copper • Individual Beldfoil® + Polyester Isolation Tape • Overall Beldfoil • Drain Wires

Interlocked Armor • PVC Insulation • PVC Inner Jacket • Chrome PVC Outer Jacket

CSA C22.2#239, Type ACIC
CSA C22.2#174, HLABCD
CSA C22.2#0.3, Clause 4.31
Low Acid Test
FT4 Flame Test



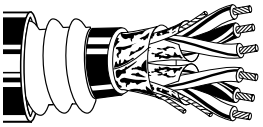
-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

Description	Part No. Aluminum Armor	Part No. Steel Armor	No. of Pairs/ Triads	Cable Weight Aluminum Armor Lbs./ 1000 Ft.	Cable Weight Aluminum Armor kg/km	Cable Weight Steel Armor Lbs./ 1000 Ft.	Cable Weight Steel Armor kg/km	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inner Jacket Inch	Nominal OD Inner Jacket mm	Nominal OD Outer Jacket Inch	Nominal OD Outer Jacket mm
	23501	**26500**	1	175	262	280	417	.025	.64	.33	8.4	.62	15.7
	23527	**26501**	2	280	418	425	635	.025	.64	.52	13.2	.81	20.5
	23509	**26503**	4	395	590	570	848	.025	.64	.63	16.0	.93	23.6
	23500	**26504**	6	510	755	715	1065	.025	.64	.73	18.5	1.03	26.2
	23510	**26505**	8	625	930	910	1354	.025	.64	.79	20.1	1.16	29.5
	23525	**26506**	12	875	1300	1230	1828	.025	.64	1.00	25.4	1.37	34.8
	23539	**26507**	16	1054	1570	1445	2150	.025	.64	1.11	28.2	1.48	37.6
	23538	**26508**	24	1397	2080	1840	2739	.025	.64	1.36	34.5	1.75	44.5
	23568	**26551**	36	1920	2856	2460	3658	.025	.64	1.60	40.6	1.97	49.9

16 AWG Triads Stranded (7x24) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil • Drain Wires

Interlocked Armor • PVC Insulation • PVC Inner Jacket • Chrome PVC Outer Jacket

CSA C22.2#239, Type ACIC
CSA C22.2#174, HLBCD
CSA C22.2#0.3, Clause 4.31
Low Acid Test
FT4 Flame Test



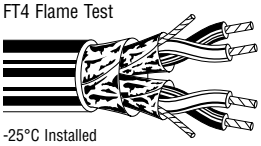
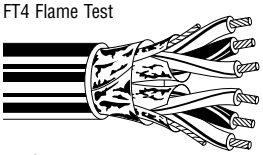
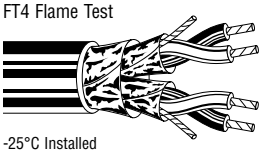
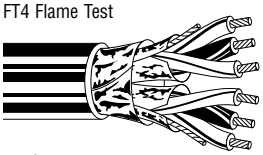
-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

Description	Part No. Aluminum Armor	Part No. Steel Armor	No. of Pairs/ Triads	Cable Weight Aluminum Armor Lbs./ 1000 Ft.	Cable Weight Aluminum Armor kg/km	Cable Weight Steel Armor Lbs./ 1000 Ft.	Cable Weight Steel Armor kg/km	Insulation Thickness Inch	Insulation Thickness mm	Nominal OD Inner Jacket Inch	Nominal OD Inner Jacket mm	Nominal OD Outer Jacket Inch	Nominal OD Outer Jacket mm
	23507	**26502**	1	190	280	295	438	.025	.64	.35	8.9	.63	16.1
	23522	**26509**	2	342	508	500	746	.025	.64	.58	14.7	.90	22.9
	23520	**26510**	4	450	677	640	954	.025	.64	.68	17.3	.95	25.2
	23529	**26511**	6	650	967	928	1375	.025	.64	.78	19.8	1.19	30.2
	23526	**26512**	8	825	1227	1130	1676	.025	.64	.93	23.6	1.30	33.0
	23541	**26513**	12	1082	1610	1511	2250	.025	.64	1.13	28.7	1.50	38.1
	23567	**26545**	16	1285	1912	1705	2530	.025	.64	1.25	31.8	1.64	41.7
	23578	**26547**	24	1725	2560	2200	3268	.025	.64	1.58	40.1	1.95	49.4

Color Code: Pairs — Black and White with Numbers.
Triads — Black, White and Red with Numbers.

CSA Instrumentation Cable

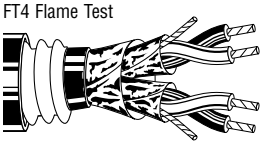
600V CIC

Description	Part Number	No. of Pairs or Triads	Cable Weight		Jacket Thickness		Nominal OD	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm
18 AWG Pairs Stranded (7x26) Tinned Copper • Individual Beldfoil® + Polyester Isolation Tape • Overall Beldfoil Shield • Drain Wires								
PVC Insulation • Black PVC Jacket (Color Code: Black and White with Numbers)								
CSA C22.2#239, Type CIC CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test  -25°C Installed -40°C to +105°C (Dry) (75°C Wet)	**22417**	1	109	73	.045	1.14	.32	8.13
	22405	2	229	154	.045	1.14	.51	12.95
	22404	4	374	251	.060	1.52	.63	16.00
	22418	8	632	425	.060	1.52	.79	20.07
	22421	12	970	652	.080	2.03	1.00	25.40
	22419	24	1741	1170	.080	2.03	1.36	34.54
18 AWG Triads Stranded (7x26) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil Shield • Drain Wires								
PVC Insulation • Black PVC Jacket (Color Code: Black, White and Red with Numbers)								
CSA C22.2#239, Type CIC CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test  -25°C Installed -40°C to +105°C (Dry) (75°C Wet)	**22442**	1	131	88	.045	1.14	.34	8.64
	22443	2	299	201	.060	1.52	.58	14.73
	22444	4	476	320	.060	1.52	.68	16.73
	22445	8	893	600	.080	2.03	.88	22.35
16 AWG Pairs Stranded (7x24) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil Shield • Drain Wires								
PVC Insulation • Black PVC Jacket (Color Code: Black and White with Numbers)								
CSA C22.2#239, Type CIC CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test  -25°C Installed -40°C to +105°C (Dry) (75°C Wet)	**22416**	1	129	87	.045	1.14	.34	8.64
	22409	2	229	201	.045	1.14	.59	14.99
	22410	4	469	315	.060	1.52	.68	17.27
	22446	6	667	448	.060	1.52	.79	20.07
	22411	8	841	565	.080	2.03	.90	22.86
	22412	12	1235	830	.080	2.03	1.09	27.69
	22447	24	2250	1512	.080	2.03	1.49	37.85
16 AWG Triads Stranded (7x24) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil Shield • Drain Wires								
PVC Insulation • Black PVC Jacket (Color Code: Black, White and Red with Numbers)								
CSA C22.2#239, Type CIC CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test  -25°C Installed -40°C to +105°C (Dry) (75°C Wet)	**22413**	1	167	112	.045	1.14	.36	9.14
	22448	2	372	250	.045	1.14	.62	15.75
	22414	4	606	407	.060	1.52	.72	18.29
	22415	8	1144	769	.080	2.03	.96	24.38

CSA Instrumentation Cable

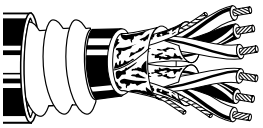
600V ACIC Armored Cables

Description	Part No.		No. of Pairs/ Triads	Cable Weight Aluminum Armor		Cable Weight Steel Armor		Insulation Thickness		Nominal OD Inner Jacket		Nominal OD Outer Jacket	
	Aluminum Armor	Steel Armor		Lbs./ 1000 Ft.	kg/km	Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm	Inch	mm
18 AWG Pairs Stranded (7x26) Tinned Copper • Individual Beldfoil® + Polyester Isolation Tape • Overall Beldfoil • Mylar® Separator • Drain Wires													
Interlocked Armor • PVC Insulation • PVC Inner Jacket • Chrome PVC Outer Jacket													
CSA C22.2#239, Type ACIC CSA C22.2#174, HLABCD CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test	**24511**	**25506**	1	154	229	257	382	.030	.76	.32	8.13	.61	15.49
	24512	**25514**	2	238	354	387	575	.030	.76	.51	12.95	.82	20.83
	24513	**25503**	4	335	499	504	750	.030	.76	.63	16.00	.93	23.62
	24514	**25505**	8	536	798	829	1233	.030	.76	.79	20.27	1.15	29.21
	24515	**25501**	12	739	1100	1092	1624	.030	.76	1.00	25.40	1.36	34.54
	24520	**25517**	24	1169	1740	1674	2490	.030	.76	1.36	34.54	1.75	44.45



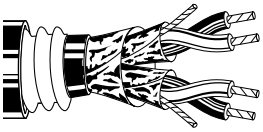
-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

18 AWG Triads Stranded (7x26) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil • Drain Wires													
Interlocked Armor • PVC Insulation • PVC Inner Jacket • Chrome PVC Outer Jacket													
CSA C22.2#239, Type ACIC CSA C22.2#174, HLBCD CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test	**24516**	**25500**	1	166	246	276	410	.030	.76	.34	8.64	.63	16.00
	24517	**25522**	2	293	435	455	676	.030	.76	.58	14.73	.89	22.61
	24518	**25520**	4	391	583	572	851	.030	.76	.66	16.76	.99	25.15
	24519	**25523**	8	673	1002	988	1470	.030	.76	.88	22.35	1.29	32.77



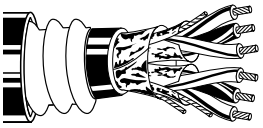
-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

16 AWG Pairs Stranded (7x24) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil • Mylar Separator • Drain Wires													
Interlocked Armor • PVC Insulation • PVC Inner Jacket • Chrome PVC Outer Jacket													
CSA C22.2#239, Type ACIC CSA C22.2#174, HLABCD CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test	**24500**	**25504**	1	171	254	279	415	.030	.76	.34	8.64	.64	16.26
	24505	**25510**	2	299	445	455	677	.030	.76	.59	14.99	.89	22.61
	24502	**25511**	4	450	669	583	868	.030	.76	.68	17.27	.98	24.89
	24506	**25512**	6	576	857	880	1310	.030	.76	.79	20.07	1.16	29.46
	24503	**25513**	8	679	1010	1005	1495	.030	.76	.90	22.86	1.27	32.26
	24504	**25518**	12	908	1351	1280	1905	.030	.76	1.09	27.69	1.46	37.08
	24510	**25519**	24	1502	2235	2030	3020	.030	.76	1.49	37.85	1.88	47.75



-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

16 AWG Triads Stranded (7x24) Tinned Copper • Individual Beldfoil + Polyester Isolation Tape • Overall Beldfoil • Drain Wires													
Interlocked Armor • PVC Insulation • PVC Inner Jacket • Chrome PVC Outer Jacket													
CSA C22.2#239, Type ACIC CSA C22.2#174, HLBCD CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test	**24501**	**25502**	1	195	289	309	460	.030	.76	.36	9.14	.66	16.76
	24507	**25507**	2	339	504	465	691	.030	.76	.62	15.75	.94	23.88
	24508	**25509**	4	464	690	793	1180	.030	.76	.72	18.29	1.05	26.67
	24509	**25508**	8	807	1201	1250	1860	.030	.76	.96	24.38	1.33	33.78



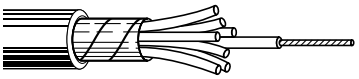
-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

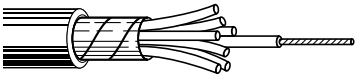
Color Code: Pairs — Black and White with Numbers.
Triads — Black, White and Red with Numbers.

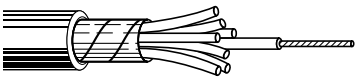
Mylar is DuPont trademark.

CSA Control Cable

600V CIC Multi-conductor Cables

Description	Part Number	No. of Cond.	Cable Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm	Inch	mm
14 AWG Stranded (7x22) Bare Copper Conductors										
Cross-linked Polyethylene Insulation • Black PVC Jacket (Color Code: Black and Numbered)										
CSA C22.2#239, Type CIC CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test	**22100**	2	62	92	.030	.76	.045	1.14	.367	9.32
	22101	3	81	120	.030	.76	.045	1.14	.388	9.86
	22102	4	101	150	.030	.76	.045	1.14	.423	10.74
	**22103**	5	122	181	.030	.76	.045	1.14	.462	11.73
	22104	6	143	213	.030	.76	.045	1.14	.504	12.80
	22105	7	160	238	.030	.76	.045	1.14	.504	12.80
	22106	8	197	293	.030	.76	.060	1.52	.576	14.63
	22107	9	220	326	.030	.76	.060	1.52	.618	15.70
	22108	10	226	336	.030	.76	.060	1.52	.669	17.00
	22110	12	279	415	.030	.76	.060	1.52	.689	17.50
-25°C Installed	**22114**	16	357	531	.030	.76	.060	1.52	.764	19.41
-40°C to +105°C (Dry) (75°C Wet)	**22118**	20	467	695	.030	.76	.080	2.03	.886	22.50

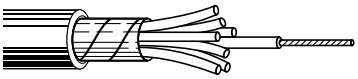
12 AWG Stranded (7x20) Bare Copper Conductors										
Cross-linked Polyethylene Insulation • Black PVC Jacket (Color Code: Black and Numbered)										
CSA C22.2#239, Type CIC CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test	**22120**	2	82	122	.030	.76	.045	1.14	.405	10.29
	22121	3	109	162	.030	.76	.045	1.14	.429	10.90
	22122	4	140	207	.030	.76	.045	1.14	.469	11.91
	**22123**	5	170	252	.030	.76	.045	1.14	.515	13.08
	22124	6	214	318	.030	.76	.060	1.52	.591	15.01
	22125	7	240	357	.030	.76	.060	1.52	.591	15.01
	22126	8	270	402	.030	.76	.060	1.52	.639	16.23
	22127	9	302	449	.030	.76	.060	1.52	.687	17.45
	22128	10	336	499	.030	.76	.060	1.52	.745	18.92
	22130	12	390	579	.030	.76	.060	1.52	.768	19.51
-25°C Installed	**22134**	16	584	794	.030	.76	.080	2.03	.893	22.68
-40°C to +105°C (Dry) (75°C Wet)	**22138**	20	655	975	.030	.76	.080	2.03	.992	25.20

10 AWG Stranded (7x18) Bare Copper Conductors										
Cross-linked Polyethylene Insulation • Black PVC Jacket (Color Code: Black and Numbered)										
CSA C22.2#239, Type CIC CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test	**22140**	2	148	219	.030	.76	.045	1.14	.736	18.69
	22141	3	189	281	.030	.76	.045	1.14	.763	19.38
	22142	4	248	368	.030	.76	.060	1.52	.839	21.31
	**22143**	5	293	436	.030	.76	.060	1.52	.891	22.63
	22144	6	338	503	.030	.76	.060	1.52	.944	23.98
	22145	7	378	562	.030	.76	.060	1.52	.944	23.98
	22146	8	424	630	.030	.76	.060	1.52	.999	25.37
	22147	9	469	698	.030	.76	.060	1.52	1.074	29.28
	22148	10	548	816	.030	.76	.080	2.03	1.182	30.02
	22150	12	631	939	.030	.76	.080	2.03	1.209	30.71
-25°C Installed	**22152**	14	717	1067	.030	.76	.080	2.03	1.255	31.88
-40°C to +105°C (Dry) (75°C Wet)	**22154**	16	805	1197	.030	.76	.080	2.03	1.307	33.20

CSA Control Cable

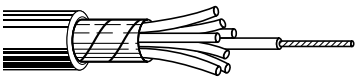
600V CIC Multi-conductor Cables

Description	Part Number	No. of Cond.	Cable Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm	Inch	mm
8 AWG Stranded (7x16) Bare Copper Conductors										
Cross-linked Polyethylene Insulation • Black PVC Jacket (Color Code: Black and Numbered)										
CSA C22.2#239, Type CIC CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test	**22160**	2	240	357	.045	1.14	.060	1.52	.863	21.08
	22161	3	308	458	.045	1.14	.060	1.52	.898	22.81
	22162	4	379	564	.045	1.14	.060	1.52	.957	24.31



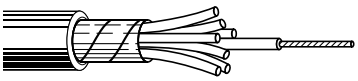
-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

6 AWG Stranded (7x14) Bare Copper Conductors										
Cross-linked Polyethylene Insulation • Black PVC Jacket (Color Code: Black and Numbered)										
CSA C22.2#239, Type CIC CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test	**22170**	2	279	414	.060	1.52	.060	1.52	.711	18.06
	22171	3	383	570	.060	1.52	.060	1.52	.756	19.22



-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

4 AWG Stranded (7x12) Bare Copper Conductors										
Cross-linked Polyethylene Insulation • Black PVC Jacket (Color Code: Black and Numbered)										
CSA C22.2#239, Type CIC CSA C22.2#0.3, Clause 4.31 Low Acid Test FT4 Flame Test	**22180**	2	390	580	.060	1.52	.060	1.52	.800	20.32
	22181	3	580	863	.060	1.52	.080	2.03	.891	22.63

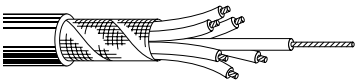


-25°C Installed
-40°C to +105°C (Dry) (75°C Wet)

CSA Control Cable

600V Type TC/CIC Cables

Description	Part Number	No. of Cond.	Cable Weight		Jacket Thickness		Nominal OD	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm
14 AWG Stranded (7x22) Bare Copper • Separator Tape								
Cross-linked Polyethylene Insulation • Black PVC Jacket								
CSA C22.2#230 Type TC CSA C22.2#239 Type CIC FT4 Flame Test	**27000**	2	110	164	.045	1.14	.368	9.35
	27001	3	127	189	.045	1.14	.388	9.86
	27002	4	151	224	.045	1.14	.420	10.67
	27003	5	175	260	.045	1.14	.460	11.68
	27004	6	198	295	.045	1.14	.500	12.70
	27005	7	218	324	.045	1.14	.500	12.70
	27006	8	249	370	.060	1.52	.610	15.49
	27007	9	276	411	.060	1.52	.630	16.00
	27008	10	328	488	.060	1.52	.630	16.00
	27009	11	333	495	.060	1.52	.650	16.51
	27010	12	359	535	.060	1.52	.650	16.51
	27011	13	390	580	.060	1.52	.755	19.18
	27012	14	409	609	.060	1.52	.755	19.18
	27013	15	434	646	.060	1.52	.755	19.18
	27014	16	454	675	.070	1.78	.810	20.57
	27015	17	485	722	.075	1.91	.860	21.84
	27016	18	505	751	.075	1.91	.860	21.84
	27017	19	525	781	.075	1.91	.860	21.84
	27018	20	558	831	.080	2.03	.887	22.53
	27019	21	578	860	.080	2.03	.920	23.37
	27020	22	614	914	.085	2.16	.970	24.64
	27021	23	634	944	.085	2.16	.970	24.64
	27022	24	716	1065	.090	2.29	1.040	26.42
	27023	25	735	1094	.090	2.29	1.040	26.42
	27024	26	755	1124	.090	2.29	1.040	26.42
	27025	27	773	1151	.095	2.41	1.070	26.42
	27026	28	795	1183	.095	2.41	1.100	27.94
	27027	29	815	1213	.095	2.41	1.100	27.94
	27028	30	832	1238	.095	2.41	1.100	27.94
-25°C Installed -40°C to +90°C (Wet/Dry)	**27830**	37	997	1484	.095	2.41	1.190	30.23

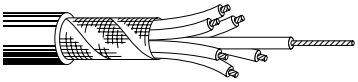


Color Code: 2 conductors — Black, White (If required, a Red conductor can be used in place of White.)
3 conductors — Black, Red, Blue (If required, a White conductor can be used in place of Blue.)
4 conductors — Black, Red, Blue, White
5 or more conductors — number coded

CSA Control Cable

600V Type TC/CIC Cables

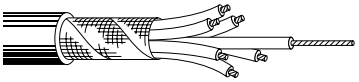
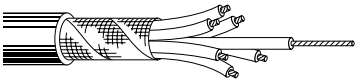
Description	Part Number	No. of Cond.	Cable Weight		Jacket Thickness		Nominal OD	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm
12 AWG Stranded (7x20) Bare Copper • Separator Tape								
Cross-linked Polyethylene Insulation • Black PVC Jacket								
CSA C22.2#230 Type TC CSA C22.2#239 Type CIC FT4 Flame Test	**27029**	2	138	205	.045	1.14	.404	10.26
	27030	3	163	242	.045	1.14	.427	10.85
	27031	4	194	288	.045	1.14	.466	11.84
	27032	5	227	338	.045	1.14	.509	12.93
	27033	6	266	396	.060	1.52	.554	14.07
	27034	7	294	438	.060	1.52	.554	14.07
	27035	8	319	475	.060	1.52	.680	17.27
	27036	9	376	546	.060	1.52	.730	18.54
	27037	10	444	661	.060	1.52	.757	19.23
	27038	11	447	665	.060	1.52	.757	19.23
	27039	12	491	731	.060	1.52	.757	19.23
	27040	13	529	787	.075	1.91	.870	22.10
	27041	14	557	829	.075	1.91	.870	22.10
	27042	15	592	881	.075	1.91	.920	23.37
	27043	16	620	923	.075	1.91	.920	23.37
	27044	17	665	990	.080	2.03	.970	24.64
	27045	18	693	1032	.080	2.03	.970	24.64
	27046	19	722	1075	.080	2.03	.970	24.64
	27047	20	769	1145	.080	2.03	1.020	25.91
	27048	21	798	1187	.080	2.03	1.020	25.91
	27049	22	846	1259	.080	2.03	1.070	27.18
	27050	23	875	1302	.080	2.03	1.070	27.18
	27051	24	976	1452	.080	2.03	1.130	28.70
	27052	25	1004	1495	.080	2.03	1.130	28.70
	27053	26	1033	1538	.080	2.03	1.130	28.70
	27054	27	1049	1561	.080	2.03	1.130	28.70
	27055	28	1078	1605	.080	2.03	1.200	30.48
	27056	29	1107	1648	.080	2.03	1.200	30.48
	27057	30	1143	1701	.080	2.03	1.200	30.48
-25°C Installed -40°C to +90°C (Wet/Dry)	**27831**	37	1377	2049	.080	2.03	1.227	31.17



Color Code: 2 conductors — Black, White (If required, a Red conductor can be used in place of White.)
3 conductors — Black, Red, Blue (If required, a White conductor can be used in place of Blue.)
4 conductors — Black, Red, Blue, White
5 or more conductors — number coded

CSA Control Cable

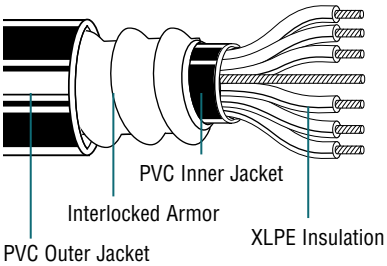
600V Type TC/CIC Cables

Description	Part Number	No. of Cond.	Cable Weight		Jacket Thickness		Nominal OD	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm
10 AWG Stranded (7x18) Bare Copper • Separator Tape								
Cross-linked Polyethylene Insulation • Black PVC Jacket								
CSA C22.2#230 Type TC CSA C22.2#239 Type CIC FT4 Flame Test	**27058**	2	185	276	.045	1.14	.440	11.18
	27059	3	227	338	.045	1.14	.478	12.14
	27060	4	273	406	.060	1.52	.554	14.07
	**27061**	5	323	480	.060	1.52	.640	16.26
	27062	6	370	551	.060	1.52	.657	16.69
	27063	7	413	615	.065	1.65	.700	17.78
	27064	8	472	703	.070	1.78	.770	19.56
	27065	9	523	778	.070	1.78	.820	20.83
	27066	10	619	921	.070	1.78	.890	22.61
	27067	11	661	984	.070	1.78	.890	22.61
	27068	12	691	1029	.070	1.78	.920	23.37
	27069	13	744	1108	.075	1.91	.980	24.89
	27070	14	787	1171	.075	1.91	.980	24.89
	27071	15	847	1260	.080	2.03	1.040	26.42
	27072	16	889	1323	.080	2.03	1.040	26.42
	27073	17	951	1416	.085	2.16	1.100	27.94
	27074	18	994	1480	.085	2.16	1.100	27.94
-25°C Installed	**27075**	19	1037	1543	.085	2.16	1.100	27.94
-40°C to +90°C (Wet/Dry)	**27076**	20	1128	1679	.095	2.41	1.190	30.23
8 AWG Stranded (7x16) Bare Copper • Separator Tape								
Cross-linked Polyethylene Insulation • Black PVC Jacket								
CSA C22.2#230 Type TC CSA C22.2#239 Type CIC FT4 Flame Test	**27077**	2	283	421	.060	1.52	.600	15.24
	27078	3	341	508	.060	1.52	.619	15.72
	**27079**	4	419	623	.075	1.91	.730	18.54
-25°C Installed -40°C to +90°C (Wet/Dry)								

Color Code: 2 conductors — Black, White (If required, a Red conductor can be used in place of White.)
3 conductors — Black, Red, Blue (If required, a White conductor can be used in place of Blue.)
4 conductors — Black, Red, Blue, White
5 or more conductors — number coded

CSA Control Cable

600V ACIC and Teck90 Cables — Overview



Introduction

Belden® Teck90 and ACIC cables are designed to meet demanding industrial needs by combining rugged durability and corrosion resistance with flexibility and easy handling.

Teck90 and ACIC Cables are available in a wide range of in-stock and custom constructions to meet the needs of pulp and paper, chemical, petroleum and other demanding industrial and resource industry environments. They are ideal for use in wet or dry areas; ventilated, non-ventilated or ladder-type cable troughs; ventilated flexible cableways; and for direct burial.

Belden Teck90 Cable is marked with “FT4,” “HL” designations, and cable constructions are certified to CSA Standard C22.2#131 and C22.2#174 for use in a wide range of hazardous locations. Both inner and outer jackets meet the acid gas evolution requirement of 14% maximum required by CSA Standard C22.2#0.3 Clause 4.31.

Custom cables are available upon request.

Construction

Class B stranded bare copper conductors, cross-link polyethylene insulation, bare copper ground wire, PVC inner jacket, aluminum steel interlocking armor, PVC outer jacket.

- Galvanized steel interlocking armor available as an option.

Voltage Rating

18 to 16 AWG — 600V ACIC

14 to 8 AWG — 600 Volts

14 to 4/0 AWG — 1000 Volts

Temperature Rating

-40°C to 90°C (Dry/Wet)

-25°C installed

Application

Teck90 and ACIC are general-purpose cables used in the pulp and paper, mining, petroleum and chemical industries as well as in commercial buildings.

Teck90 and ACIC may be used under the following conditions:

- Exposed or concealed wiring in dry or wet conditions
- In ventilated, non-ventilated or ladder-type cable trays in dry or wet conditions
- On walls or beams
- Directly buried
- CEC Class I, Division I locations

Minimum Bending Radius:

12 times the overall cable diameter

Pulling Tensions

The combined use of Kellems grips and pulling eyes is recommended.

Design Advantages

Insulation Properties

- High tensile strength
- Impact- and crush-resistant
- Heat-resistant
- Excellent elongation
- Moisture-resistant
- Good low temperature properties

Electrical Properties

- High insulation resistance
- Low dielectric loss
- High dielectric strength

Other Features

- Corrosion-resistant
- Versatile and flexible
- Provides cost savings as conduit and ducts are not required
- ACIC has a blue jacket

Specifications

- CSA Standard C22.2#131
- CSA Standard C22.2#174 “Cables and Cable Glands for Use in Hazardous Locations”
- CSA Standard C22.2#0.3 Clause 4.31 “Low Acid Gas”
- CSA Standard C22.2#0.3 Clause 4.11.4 “Cables with FT4 Marking”

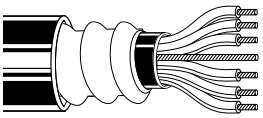
CSA Control Cable

600V ACIC Cables

18 AWG (7x26) Bare Copper • 18 AWG Bare Copper Ground Wire

Aluminum Interlocked Armor • .030″ (.76mm) XLPE Insulation • PVC Inner Jacket • Blue PVC Outer Jacket

CSA C22.2#239
FT4 Flame Test

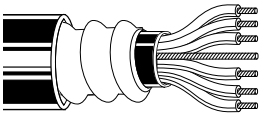


Description	Part No.	No. of Cond.	Cable Weight Lbs./1000 Ft.	Cable Weight kg/km	Inner Jacket OD Inch	Inner Jacket OD mm	Armor OD Inch	Armor OD mm	Outer Jacket Inch	Outer Jacket mm	Maximum Pull Tension Lbs.	Maximum Pull Tension N	Minimum Bend Radius Inch	Minimum Bend Radius mm
	29030	2	163	244	.32	8.13	.52	13.21	.62	15.75	26	116	7.4	187.96
	29031	3	177	264	.34	8.64	.54	13.72	.64	16.26	39	173	7.6	193.04
	29032	4	195	291	.37	9.40	.57	14.48	.67	17.02	52	231	8.0	203.20
	29033	5	219	327	.41	10.41	.61	15.49	.71	18.03	65	289	8.5	215.90
	29034	6	239	357	.45	11.43	.65	16.51	.75	19.05	78	347	9.0	228.60
	29035	7	245	366	.45	11.43	.65	16.51	.75	19.05	91	405	9.0	228.60
	29036	8	266	397	.48	12.19	.68	17.27	.78	19.81	104	463	9.3	236.22
	29038	10	331	494	.56	14.22	.76	19.30	.87	22.10	130	578	10.6	269.24
	29040	12	353	527	.62	15.75	.82	20.83	.93	23.62	156	694	11.1	281.94
	29043	15	401	599	.65	16.51	.85	21.59	.96	24.38	190	845	11.5	292.10
	29048	20	466	696	.73	18.54	.93	23.62	1.04	26.42	250	1112	12.4	314.96
	29053	25	589	879	.79	20.07	1.05	26.67	1.16	29.46	295	1312	13.9	353.06
	29058	30	698	1042	.88	22.35	1.14	28.96	1.25	31.75	350	1557	15.0	381.00
HAZ LOC	**29068**	40	827	1234	.97	24.64	1.23	31.24	1.35	34.29	470	2091	16.2	411.48
CSA C22.2#0.3 Clause 4.31 Low Acid Gas	**29078**	50	965	1440	1.09	27.69	1.35	34.29	1.47	37.34	590	2625	17.6	447.04

16 AWG (7x24) Bare Copper • 16 AWG Bare Copper Ground Wire

Aluminum Interlocked Armor • .030″ (.76mm) XLPE Insulation • PVC Inner Jacket • Blue PVC Outer Jacket

CSA C22.2#239
FT4 Flame Test



Description	Part No.	No. of Cond.	Cable Weight Lbs./1000 Ft.	Cable Weight kg/km	Inner Jacket OD Inch	Inner Jacket OD mm	Armor OD Inch	Armor OD mm	Outer Jacket Inch	Outer Jacket mm	Maximum Pull Tension Lbs.	Maximum Pull Tension N	Minimum Bend Radius Inch	Minimum Bend Radius mm
	29017	2	202	301	.34	8.64	.54	13.72	.65	16.51	62	276	7.7	195.58
	29004	3	221	330	.36	9.14	.56	14.22	.66	16.76	66	294	7.9	200.66
	29018	4	242	361	.39	9.91	.59	14.99	.70	17.78	82	365	8.3	210.82
	29019	5	264	394	.42	10.67	.62	15.75	.73	18.54	99	440	8.6	218.44
	29005	6	292	435	.46	11.68	.66	16.76	.77	19.56	115	512	9.1	231.14
	29020	7	314	469	.47	11.94	.67	17.02	.77	19.56	132	587	9.2	233.68
	29021	8	364	543	.50	12.70	.70	17.78	.80	20.32	149	663	9.6	243.84
	29022	10	412	615	.61	15.49	.81	20.57	.92	23.37	182	810	10.9	276.86
	29006	12	441	658	.63	16.00	.83	21.08	.94	23.88	215	956	11.2	284.48
	29023	15	502	749	.68	17.27	.88	22.35	1.00	25.40	264	1174	11.9	302.26
	29007	20	636	949	.77	19.56	1.03	26.16	1.13	28.70	347	1544	13.7	347.98
	29024	25	845	1261	.89	22.61	1.15	29.21	1.26	32.00	430	1913	15.1	383.54
	29008	30	922	1376	.94	23.88	1.20	30.48	1.30	33.02	512	2278	15.8	401.32
	29009	40	1109	1655	1.06	26.92	1.32	33.53	1.41	35.81	678	3016	17.3	439.42
HAZ LOC	**29016**	50	1306	1949	1.19	30.23	1.45	36.83	1.54	39.12	843	3750	18.8	477.52
CSA C22.2#0.3 Clause 4.31 Low Acid Gas	**29025**	60	1390	2075	1.27	32.26	1.53	38.86	1.66	42.16	1015	4515	19.9	505.46

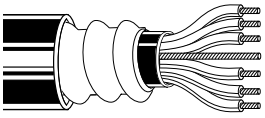
XLPE = Cross-linked Polyethylene

Color Code: #1 conductor is white; remaining conductors are black with number coding. Other color codes available upon request.

CSA Control Cable

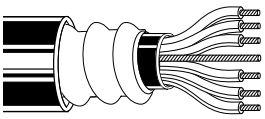
600V Teck90 Cables

Description	Part No.	No. of Cond.	Cable Weight		Inner Jacket OD		Armor OD		Outer Jacket		Maximum Pull Tension		Minimum Bend Radius	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
14 AWG (7x22) Bare Copper • 14 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .030″ (.76mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5500**	2	198	296	.36	9.14	.56	14.22	.66	16.76	66	294	7.8	198.12
	C5501	3	222	331	.39	9.91	.58	14.73	.66	16.76	98	436	8.2	208.28
	C5502	4	251	375	.42	10.67	.62	15.75	.71	18.03	131	583	8.5	215.90
	C5503	5	284	424	.47	11.94	.66	16.76	.74	18.80	164	730	9.0	228.60
	C5504	6	317	473	.51	12.95	.70	17.78	.78	19.81	191	850	9.5	241.30
	C5505	7	331	494	.51	12.95	.70	17.78	.78	19.81	225	1001	9.5	241.30
	C5506	8	414	618	.58	14.73	.77	19.56	.86	21.84	260	1157	10.4	264.16
	C5508	10	510	761	.67	17.02	.93	23.62	.95	24.13	321	1428	12.3	312.42
	C5510	12	551	822	.69	17.53	.95	24.13	.97	24.64	388	1726	12.6	320.04
	C5513	15	636	949	.77	19.56	1.03	26.16	1.11	28.19	481	2140	14.1	358.14
	C5518	20	810	1209	.90	22.86	1.16	29.46	1.24	31.50	649	2887	15.1	383.54
	C5523	25	948	1415	.90	22.86	1.24	31.50	1.33	33.78	810	3603	16.1	408.94
	C5528	30	1047	1563	1.05	26.67	1.30	33.02	1.40	35.56	975	4337	16.8	426.72
	C5529	40	1310	1955	1.20	30.48	1.42	36.07	1.51	38.35	1301	5788	18.3	464.82
HAZ LOC CSA C22.2#0.3 Clause 4.31 Low Acid Gas	**C6064**	50	1620	2418	1.35	34.29	1.60	40.64	1.66	42.16	1630	7251	20.5	520.70



12 AWG (7x20) Bare Copper • 14 AWG Bare Copper Ground Wire

Aluminum Interlocked Armor • .030″ (.76mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5530**	2	225	336	.41	10.41	.60	15.24	.69	17.53	104	463	8.3	210.82
	C5531	3	261	390	.43	10.92	.62	15.75	.70	17.78	156	694	8.6	218.44
	C5532	4	301	449	.47	11.94	.66	16.76	.73	18.54	207	921	9.1	231.14
	C5533	5	348	519	.52	13.21	.71	18.03	.78	19.81	260	1157	9.1	231.14
	C5534	6	435	649	.59	14.99	.78	19.81	.86	21.84	310	1379	10.5	266.70
	C5535	7	450	672	.59	14.99	.78	19.81	.86	21.84	361	1606	10.5	266.70
	C5536	8	506	755	.64	16.26	.83	21.08	.92	23.37	415	1846	11.1	281.94
	C5538	10	633	945	.75	19.05	1.01	25.65	1.02	25.91	520	2313	13.3	337.82
	C5540	12	696	1039	.77	19.56	1.03	26.16	1.12	28.45	619	2754	13.5	342.90
	C5543	15	823	1228	.90	22.86	1.16	29.46	1.24	31.50	779	3465	15.1	383.54
	C5548	20	1035	1545	.99	25.15	1.25	31.75	1.34	34.04	1040	4627	16.5	419.10
	C5553	25	1230	1836	1.10	27.94	1.36	34.54	1.45	36.83	1301	5788	17.6	447.04
HAZ LOC CSA C22.2#0.3 Clause 4.31 Low Acid Gas	**C5558**	30	1390	2075	1.20	30.48	1.46	37.08	1.51	38.35	1560	6940	17.6	447.04



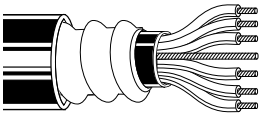
XLPE = Cross-linked Polyethylene

Color Code: 2 conductors — Black, White (If required, a Red conductor can be used in place of White.)
3 conductors — Black, Red, Blue (If required, a White conductor can be used in place of Blue.)
4 conductors — Black, Red, Blue, White
5 or more conductors — number coded

CSA Control Cable

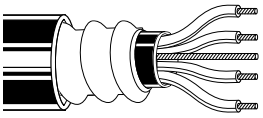
600V Teck90 Cables

Description	Part No.	No. of Cond.	Cable Weight		Inner Jacket OD		Armor OD		Outer Jacket		Maximum Pull Tension		Minimum Bend Radius	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
10 AWG (7x18) Bare Copper • 12 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .030″ (.76mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5560**	2	278	415	.48	12.19	.66	16.76	.72	18.29	166	738	8.9	226.06
	C5561	3	327	488	.50	12.70	.70	17.78	.75	19.05	249	1108	9.2	233.68
	C5562	4	405	604	.57	14.48	.77	19.56	.79	20.07	330	1468	10.1	256.64
	C5563	5	487	727	.63	16.00	.83	21.08	.93	23.62	415	1846	11.5	292.10
	C5564	6	556	830	.68	17.27	.88	22.35	.93	23.62	491	2184	11.5	292.10
	C5565	7	627	936	.69	17.53	.89	22.61	.99	25.15	550	2447	11.8	299.72
	C5566	8	739	1103	.74	18.80	.94	23.88	1.00	25.40	600	2669	12.4	314.96
	C5568	10	964	1439	.84	21.34	1.10	27.94	1.24	31.50	705	3136	14.4	365.76
	C5570	12	1067	1593	.93	23.62	1.19	30.23	1.26	32.00	809	3599	15.6	396.24
	C5573	15	1297	1936	.99	25.15	1.25	31.75	1.37	34.80	996	4431	16.3	414.02
	C5578	20	1546	2307	1.13	28.70	1.39	35.31	1.47	37.34	1328	5908	16.9	429.26
HAZ LOC CSA C22.2#0.3 Clause 4.31 Low Acid Gas	**C5579**	25	1802	2690	1.26	32.00	1.52	38.61	1.60	40.64	1661	7389	19.7	500.38
	C5580	30	2142	3197	1.34	34.04	1.60	40.64	1.66	42.16	1992	8862	20.6	523.24



8 AWG (7x16) Bare Copper • 10 AWG Bare Copper Ground Wire

Aluminum Interlocked Armor • .045″ (1.14mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5583**	2	407	607	.59	14.99	.78	19.81	.86	21.84	264	1174	10.6	269.24
	C5581	3	471	703	.63	16.00	.83	21.08	.90	22.86	396	1762	10.8	274.32
	C5582	4	606	904	.69	17.53	.89	22.61	.97	24.64	528	2349	12.5	317.50



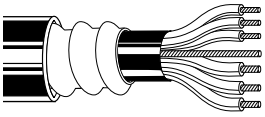
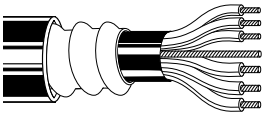
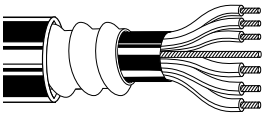
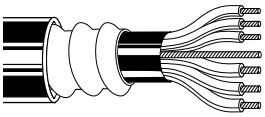
Dual Rated 600V, 1000V
HAZ LOC
CSA C22.2#0.3 Clause 4.31 Low Acid Gas

XLPE = Cross-linked Polyethylene

Color Code: 2 conductors — Black, White (If required, a Red conductor can be used in place of White.)
3 conductors — Black, Red, Blue (If required, a White conductor can be used in place of Blue.)
4 conductors — Black, Red, Blue, White
5 or more conductors — number coded

CSA Control Cable

600V Teck90 Cables

Description	Part No.	No. of Cond.	Cable Weight		Inner Jacket OD		Armor OD		Outer Jacket		Maximum Pull Tension		Minimum Bend Radius	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
Composite 14 AWG (7x22) **and 12 AWG** (7x20) Bare Copper • 14 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .031″ (.79mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**6054**	3c/14 3c/12	369	551	.58	14.73	.75	19.05	.89	22.61	202	899	10.2	259.08
 HAZ LOC CSA C22.2#0.3 Clause 4.31 Low Acid Gas														
Composite 14 AWG (7x22) **and 10 AWG** (7x18) Bare Copper • 12 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .031″ (.79mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**6051**	3c/14 3c/10	432	645	.63	16.00	.80	20.32	.94	23.88	305	1357	10.8	274.32
 HAZ LOC CSA C22.2#0.3 Clause 4.31 Low Acid Gas														
Composite 14 AWG (7x22) **and 8 AWG** (7x16) Bare Copper • 10 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .046″ (1.17mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**6059**	3c/14 3c/8	608	907	.70	17.78	.87	22.10	1.07	27.18	435	1935	12.7	322.58
 HAZ LOC CSA C22.2#0.3 Clause 4.31 Low Acid Gas														
Composite 14 AWG (7x22) **and 6 AWG** (7x14) Bare Copper • 8 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .061″ (1.55mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**6060**	3c/14 3c/6	849	1267	.89	22.61	1.15	29.21	1.27	32.26	655	2914	15.0	381.00
 HAZ LOC CSA C22.2#0.3 Clause 4.31 Low Acid Gas														

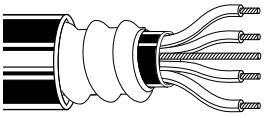
XLPE = Cross-linked Polyethylene

Color Code: 2 conductors — Black, White (If required, a Red conductor can be used in place of White.)
3 conductors — Black, Red, Blue (If required, a White conductor can be used in place of Blue.)
4 conductors — Black, Red, Blue, White
5 or more conductors — number coded

CSA Control Cable

1000V Teck90 Cables

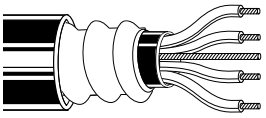
Description	Part No.	No. of Cond.	Cable Weight		Inner Jacket OD		Armor OD		Outer Jacket		Maximum Pull Tension		Minimum Bend Radius	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
14 AWG (7x22) Bare Copper • 14 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .045″ (1.14mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5701**	3	251	375	.47	11.94	.67	17.02	.73	18.54	98	436	9.2	233.68
	C5702	4	301	449	.51	12.95	.71	18.03	.81	20.57	131	583	9.7	246.38



HAZ LOC
CSA C22.2#0.3 Clause 4.31 Low Acid Gas

12 AWG (7x20) Bare Copper • 14 AWG Bare Copper Ground Wire

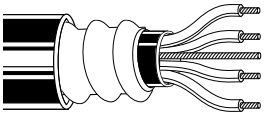
Aluminum Interlocked Armor • .045″ (1.14mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5730**	2	253	378	.48	12.19	.68	17.27	.74	18.80	104	463	9.3	236.22
	C5731	3	291	434	.51	12.95	.71	18.03	.76	19.30	156	694	9.7	246.38
	C5732	4	368	549	.59	14.99	.79	20.07	.85	21.59	207	921	10.8	274.32



HAZ LOC
CSA C22.2#0.3 Clause 4.31 Low Acid Gas

10 AWG (7x18) Bare Copper • 12 AWG Bare Copper Ground Wire

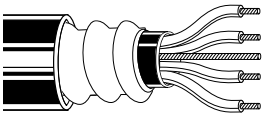
Aluminum Interlocked Armor • .045″ (1.14mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5760**	2	285	425	.56	14.22	.76	19.30	.79	20.07	166	738	10.3	261.62
	C5761	3	389	581	.59	14.99	.79	20.07	.85	21.59	249	1108	10.8	274.32
	C5762	4	460	687	.65	16.51	.85	21.59	.90	22.86	330	1468	11.5	292.10



HAZ LOC
CSA C22.2#0.3 Clause 4.31 Low Acid Gas

8 AWG (7x16) Bare Copper • 10 AWG Bare Copper Ground Wire

Aluminum Interlocked Armor • .045″ (1.14mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5583**	2	407	607	.59	14.99	.78	19.81	.86	21.84	264	1174	10.6	269.24
	C5581	3	471	703	.63	16.00	.83	21.08	.90	22.86	396	1762	10.8	274.32
	C5582	4	606	905	.69	17.53	.89	22.61	.97	24.64	528	2349	12.5	317.50



Dual Rated 600V, 100V
HAZ LOC
CSA C22.2#0.3 Clause 4.31 Low Acid Gas

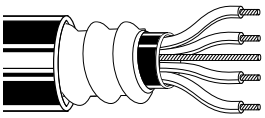
XLPE = Cross-linked Polyethylene

Color Code: 2 conductors — Black, White (If required, a Red conductor can be used in place of White.)
3 conductors — Black, Red, Blue (If required, a White conductor can be used in place of Blue.)
4 conductors — Black, Red, Blue, White
5 or more conductors — number coded

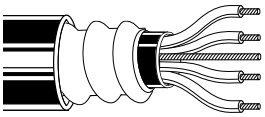
CSA Control Cable

1000V Teck90 Cables

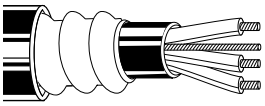
Description	Part No.	No. of Cond.	Cable Weight		Inner Jacket OD		Armor OD		Outer Jacket		Maximum Pull Tension		Minimum Bend Radius	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
6 AWG (7x14) Bare Copper • 8 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .060″ (1.53mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5590**	2	567	846	.73	18.54	.99	25.15	1.10	27.94	420	1868	12.8	325.12
	C5591	3	714	1066	.78	19.81	1.04	26.42	1.15	29.21	630	2803	13.4	340.36
	C5592	4	927	1384	.89	22.61	1.15	29.21	1.24	31.50	840	3737	14.9	378.46
4 AWG (7x12) Bare Copper • 8 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .060″ (1.53mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5601**	3	961	1434	.91	23.11	1.17	29.72	1.23	31.24	1002	4458	15.2	386.08
	C5602	4	1202	1794	.99	25.15	1.25	31.75	1.33	33.78	1236	5498	16.2	411.48
3 AWG (7x11) Bare Copper • 6 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .060″ (1.53mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5611**	3	1126	1681	.97	24.64	1.23	31.24	1.30	33.02	1263	5619	15.8	401.32
2 AWG (7x10) Bare Copper • 6 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .060″ (1.53mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5621**	3	1291	1927	1.02	25.91	1.28	32.51	1.37	34.80	1593	7087	16.5	419.10
	C5622	4	1691	2524	1.12	28.45	1.38	35.05	1.48	37.59	2124	9449	17.7	449.58



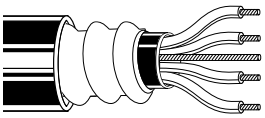
HAZ LOC
CSA C22.2#0.3 Clause 4.31 Low Acid Gas



HAZ LOC
CSA C22.2#0.3 Clause 4.31 Low Acid Gas



HAZ LOC
CSA C22.2#0.3 Clause 4.31 Low Acid Gas



HAZ LOC
CSA C22.2#0.3 Clause 4.31 Low Acid Gas

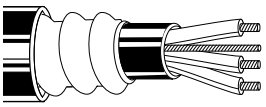
XLPE = Cross-linked Polyethylene

Color Code: 2 conductors — Black, White (If required, a Red conductor can be used in place of White.)
3 conductors — Black, Red, Blue (If required, a White conductor can be used in place of Blue.)
4 conductors — Black, Red, Blue, White
5 or more conductors — number coded

CSA Control Cable

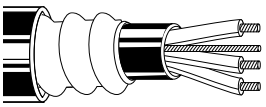
1000V Teck90 Cables

Description	Part No.	No. of Cond.	Cable Weight		Inner Jacket OD		Armor OD		Outer Jacket		Maximum Pull Tension		Minimum Bend Radius	
			Lbs./ 1000 Ft.	kg/km	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm
1 AWG (19x14) Bare Copper • 6 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .080″ (2.03mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5625**	3	1620	2418	1.25	31.75	1.51	38.35	1.59	40.39	1980	8808	19.5	495.30



HAZ LOC
CSA C22.2#0.3 Clause 4.31 Low Acid Gas

1/0 AWG (19x12) Bare Copper • 6 AWG Bare Copper Ground Wire														
Aluminum Interlocked Armor • .080″ (2.03mm) XLPE Insulation • PVC Inner Jacket • Black PVC Outer Jacket														
CSA C22.2#239 FT4 Flame Test	**C5627**	3	1912	2854	1.34	34.04	1.60	40.64	1.67	42.42	2500	11122	20.6	523.24



HAZ LOC
CSA C22.2#0.3 Clause 4.31 Low Acid Gas

XLPE = Cross-linked Polyethylene

Color Code: 2 conductors — Black, White (If required, a Red conductor can be used in place of White.)
3 conductors — Black, Red, Blue (If required, a White conductor can be used in place of Blue.)
4 conductors — Black, Red, Blue, White
5 or more conductors — number coded

Technical Information

Color Code Tables

ICEA Table E1*

Cond. No.	Base Color	Tracer	Tracer	Cond. No.	Base Color	Tracer	Tracer
1	Black	—	—	26	Orange	Black	White
2	White	—	—	27	Blue	Black	White
3	Red	—	—	28	Black	Red	Green
4	Green	—	—	29	White	Red	Green
5	Orange	—	—	30	Red	Black	Green
6	Blue	—	—	31	Green	Black	Orange
7	White	Black	—	32	Orange	Black	Green
8	Red	Black	—	33	Blue	White	Orange
9	Green	Black	—	34	Black	White	Orange
10	Orange	Black	—	35	White	Red	Orange
11	Blue	Black	—	36	Orange	White	Blue
12	Black	White	—	37	White	Red	Blue
13	Red	White	—	38	Black	White	Green
14	Green	White	—	39	White	Black	Green
15	Blue	White	—	40	Red	White	Green
16	Black	Red	—	41	Green	White	Blue
17	White	Red	—	42	Orange	Red	Green
18	Orange	Red	—	43	Blue	Red	Green
19	Blue	Red	—	44	Black	White	Blue
20	Red	Green	—	45	White	Black	Blue
21	Orange	Green	—	46	Red	White	Blue
22	Black	White	Red	47	Green	Orange	Red
23	White	Black	Red	48	Orange	Red	Blue
24	Red	Black	White	49	Blue	Red	Orange
25	Green	Black	White	50	Black	Orange	Red

Pair cables are Black, White and numbered. Triad cables are Black, White, Red and numbered.

ICEA Table E2*

Cond. No.	Base Color	Tracer	Cond. No.	Base Color	Tracer
1	Black	—	19	Orange	Blue
2	Red	—	20	Yellow	Blue
3	Blue	—	21	Brown	Blue
4	Orange	—	22	Black	Orange
5	Yellow	—	23	Red	Orange
6	Brown	—	24	Blue	Orange
7	Red	Black	25	Yellow	Orange
8	Blue	Black	26	Brown	Orange
9	Orange	Black	27	Black	Yellow
10	Yellow	Black	28	Red	Yellow
11	Brown	Black	29	Blue	Yellow
12	Black	Red	30	Orange	Yellow
13	Blue	Red	31	Brown	Yellow
14	Orange	Red	32	Black	Brown
15	Yellow	Red	33	Red	Brown
16	Brown	Red	34	Blue	Brown
17	Black	Blue	35	Orange	Brown
18	Red	Blue	36	Yellow	Brown

Pair cables are Black, Red and numbered. Triad cables are Black, Red, Blue and numbered.
Colors repeat after 36 conductors. There are no Green or White conductors or stripes.

*Reference ICEA S-73-532

ICEA Method 4: All conductors Black*

Cond.	Conductor Printing	Cond.	Conductor Printing
1st	"1–ONE–1"	26th	"26–TWENTY-SIX–26"
2nd	"2–TWO–2"	27th	"27–TWENTY-SEVEN–27"
3rd	"3–THREE–3"	28th	"28–TWENTY-EIGHT–28"
4th	"4–FOUR–4"	29th	"29–TWENTY-NINE–29"
5th	"5–FIVE–5"	30th	"30–THIRTY–30"
6th	"6–SIX–6"	31st	"31–THIRTY-ONE–31"
7th	"7–SEVEN–7"	32nd	"32–THIRTY-TWO–32"
8th	"8–EIGHT–8"	33rd	"33–THIRTY-THREE–33"
9th	"9–NINE–9"	34th	"34–THIRTY-FOUR–34"
10th	"10–TEN–10"	35th	"35–THIRTY-FIVE–35"
11th	"11–ELEVEN–11"	36th	"36–THIRTY-SIX–36"
12th	"12–TWELVE–12"	37th	"37–THIRTY-SEVEN–37"
13th	"13–THIRTEEN–13"	38th	"38–THIRTY-EIGHT–38"
14th	"14–FOURTEEN–14"	39th	"39–THIRTY-NINE–39"
15th	"15–FIFTEEN–15"	40th	"40–FORTY–40"
16th	"16–SIXTEEN–16"	41st	"41–FORTY-ONE–41"
17th	"17–SEVENTEEN–17"	42nd	"42–FORTY-TWO–42"
18th	"18–EIGHTEEN–18"	43rd	"43–FORTY-THREE–43"
19th	"19–NINETEEN–19"	44th	"44–FORTY-FOUR–44"
20th	"20–TWENTY–20"	45th	"45–FORTY-FIVE–45"
21st	"21–TWENTY-ONE–21"	46th	"46–FORTY-SIX–46"
22nd	"22–TWENTY-TWO–22"	47th	"47–FORTY-SEVEN–47"
23rd	"23–TWENTY-THREE–23"	48th	"48–FORTY-EIGHT–48"
24th	"24–TWENTY-FOUR–24"	49th	"49–FORTY-NINE–49"
25th	"25–TWENTY-FIVE–25"	50th	"50–FIFTY–50"

Technical Information

Gland Information for Armored Cables

Thomas and Betts

Part No.	Hub Size NPT	Range Over Jacket			
		Minimum		Maximum	
		Inch	mm	Inch	mm
ST050-462	1/2	.525	13.34	.650	16.51
ST050-464	1/2	.600	15.24	.760	19.30
ST050-465	1/2	.725	18.42	.885	22.48
ST050-466	1/2	.825	20.96	.985	25.02
ST075-467	3/4	.880	22.35	1.065	27.05
ST075-468	3/4	1.025	26.04	1.205	30.61
ST100-469	1	1.187	30.15	1.375	34.93
ST125-470	1-1/4	1.350	34.29	1.625	41.28
ST125-550	1-1/4	1.500	38.10	1.625	41.28
ST125-471	1-1/4	1.600	40.64	1.875	47.63
ST150-472	1-1/2	1.700	43.18	1.965	49.91
ST150-473	1-1/2	1.900	48.26	2.187	55.55
ST200-551	2	1.900	48.26	2.187	55.55
ST200-474	2	2.100	53.34	2.375	60.33
ST200-475	2	2.300	58.42	2.565	65.15
ST200-476	2	2.500	63.50	2.750	69.85
ST250-477	2-1/2	2.380	60.45	2.640	67.06
ST250-478	2-1/2	2.580	65.53	2.840	72.14
ST300-479	3	2.790	70.87	3.060	77.72
ST300-480	3	3.000	76.20	3.270	83.06
ST300-481	3	3.210	81.53	3.480	88.39
ST350-482	3-1/2	3.420	86.67	3.690	93.73
ST350-483	3-1/2	3.610	91.69	3.870	98.30
ST400-484	4	3.810	96.77	4.030	102.36
ST400-485	4	3.965	100.71	4.185	106.30
ST400-486	4	4.120	104.65	4.340	110.24

Crouse Hinds

NPT Thread Size	Armor OD Range (Inch)	Non-Hazardous Part No.	Hazardous Part No.
1/2	.440 to .650	TMC165	TMCX165*
3/4	.600 to .850	TMC285	TMCX285*
1	.800 to 1.120	TMC3112	TMCX3112*
1-1/4	1.100 to 1.400	TMC4140	TMCX4140*
1-1/2	1.330 to 1.610	TMC5161	TMCX5161*
2	1.570 to 2.060	TMC6206	TMCX6206*
2-1/2	1.930 to 2.470	TMC7247	TMCX7247*
3	2.450 to 3.020	TMC8302	TMCX8302
3-1/2	2.950 to 3.520	TMC9352	TMCX9352
4	3.500 to 4.020	TMC10402	TMCX10402

*TMCX Catalog numbers listed are suitable for use with Type TC tray cable in hazardous locations when installed in accordance with NEC Articles 501-5(e) and 502-5. TMCX series is not suitable for use in Class III locations when used with tray cable.

Hawke

Hawke Size Ref.	Standard Seal 1348 Diameter				Alternative Seal 1498 Diameter				NPT Size
	Minimum		Maximum		Minimum		Maximum		
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	
711-A	.590	14.99	.820	20.83	.470	11.94	.610	15.49	1/2
711-B	.790	20.07	.060	26.92	.630	16.00	.840	21.34	3/4
711-C	.930	23.62	1.310	33.27	.830	21.08	1.090	27.69	1
711-C2	1.260	32.00	1.690	42.93	1.100	27.94	1.340	34.04	1-1/4
711-D	1.690	42.93	2.060	52.32	1.300	33.02	1.610	40.89	2
711-E	2.050	52.07	2.560	65.02	1.810	45.97	2.160	54.86	2-1/2
711-F	2.560	65.02	3.070	77.98	2.240	56.90	2.640	67.06	3
711-H	2.990	75.95	3.520	89.41	Special Order				3-1/2
711-J	3.500	88.90	4.110	104.39	Special Order				4

Adalet — PLM

Part No.**	Diameter Over Jacket				Conduit Size
	Minimum		Maximum		
	Inch	mm	Inch	mm	
PS/PSX 45-05	.350	8.89	.450	11.43	1/2
PS/PSX 55-05	.450	11.43	.550	13.97	1/2
PS/PSX 65-05	.550	13.97	.650	16.51	1/2
PS/PSX 75-05	.650	16.51	.750	19.05	1/2
PS/PSX 85-05	.750	19.05	.850	21.59	1/2
PS/PSX 95-05	.850	21.59	.950	24.13	1/2
PS/PSX 99-07	.850	21.59	.990	25.15	3/4
PS/PSX 107-07	.920	23.37	1.070	27.18	3/4
PS/PSX 113-07	.980	24.89	1.130	28.70	3/4
PS/PSX 121-07	1.070	27.18	1.210	30.73	3/4
PS/PSX 112-10	1.000	25.40	1.120	28.45	1
PS/PSX 125-10	1.120	28.45	1.250	31.25	1
PS/PSX 138-10	1.220	30.99	1.380	35.05	1
PS/PSX 138-12	1.280	32.51	1.380	35.05	1-1/4
PS/PSX 156-12	1.380	35.05	1.560	39.62	1-1/4
PS/PSX 174-12	1.560	39.62	1.740	44.20	1-1/4
PS/PSX 188-12	1.740	44.20	1.880	47.75	1-1/4
PS/PSX 174-15	1.600	40.64	1.740	44.20	1-1/2
PS/PSX 188-15	1.740	44.20	1.880	47.75	1-1/2
PS/PSX 200-15	1.880	47.75	2.000	50.80	1-1/2
PS/PSX 218-15	2.000	50.80	2.180	55.37	1-1/2
PS/PSX 219-20	2.050	52.07	2.190	55.63	2
PS/PSX 236-20	2.190	55.63	2.360	59.94	2
PS/PSX 247-20	2.350	59.69	2.470	62.74	2
PS/PSX 261-20	2.470	62.74	2.610	66.29	2
PS/PSX 263-25	2.460	62.48	2.630	66.80	2-1/2
PS/PSX 280-25	2.620	66.55	2.800	71.12	2-1/2
PS/PSX 296-25	2.800	71.12	2.960	75.18	2-1/2
PS/PSX 297-30	2.800	71.12	2.970	75.44	3
PS/PSX 311-30	2.950	74.93	3.110	78.99	3
PS/PSX 327-30	3.100	78.74	3.270	83.06	3
PS/PSX 343-30	3.260	82.80	3.430	87.12	3
PS/PSX 359-30	3.420	86.87	3.590	91.19	3
PS/PSX 375-35	3.520	89.41	3.750	95.25	3-1/2
PS/PSX 392-35	3.750	95.25	3.920	99.57	3-1/2
PS/PSX 412-35	3.900	99.06	4.120	104.65	3-1/2
PS/PSX 423-40	4.050	102.87	4.230	107.44	4
PS/PSX 437-40	4.200	106.68	4.370	111.00	4
PS/PSX 451-40	4.340	110.24	4.510	114.55	4
PS/PSX 462-40	4.430	112.52	4.620	117.35	4

** Use PS for non-hazardous locations and PSX for hazardous locations.

Technical Information

Approvals and Standards/Performance Data for Halogen Free/Low Smoke Cable

XLPE Insulation	
Physical: (per UL-44)	
Tensile (min)	1500 psi
Elongation (min)	150%
Deformation (max)	3.35
LOI	27
Halogen content by weight	<0.2%
NBS Smoke Chamber (.035″ wall)	
Flaming Mode	66 D_m corrected typical
Smoldering Mode	183 D_m corrected typical

Haloarrest® I Jacket	
Physical	
Tensile (min)	1500 psi
Elongation (min)	100%
Tear resistance	74 lbs/inch
LOI	38
Halogen Content	
IEC 754-1	0%
BS6425	0%
MIL-C-24643	<0.2%
NBS Smoke Chamber (.100″ wall)	
Flaming Mode	141 D_m corrected typical
Smoldering Mode	311 D_m corrected typical
Acid Gas	
IEC 754-2	4.3 pH, 28 µS/cm
VDE 0472 Part 813	4.3 pH, 27 µS/cm
Toxicity Index	
NES 713	1

Halogen Free/Low Smoke Cable Specifications

300V, 90°C PLTC-LS
NEC 725/UL 13 & 1685

Instrumentation
- 22 to 12 AWG, BC or TC
- 90°C XLPE insulation
- Unshielded or shielded
- Haloarrest I jacket

600V, 90°C TC-LS
NEC 340/UL 1277 & 1685

Instrumentation
- 18 to 12 AWG, BC or TC
- 90°C XLPE insulation
- UL 44 RH or RHH – 90°C dry
- Shielded or unshielded
- Haloarrest I jacket

Control or Power
- 14 to 2 AWG, BC or TC
- 90°C XLPE insulation
- UL 44 RH or RHH — 90°C dry
- Shielded or unshielded
- Haloarrest I jacket

Hazardous Locations Cable Reference

Article 500

Class I Division 1 Hazards
- Locations where flammable gases or vapors may exist under normal operating conditions, under frequent repair or maintenance operations, or where breakdown or faulty operation of process equipment might also cause simultaneous failure of electrical equipment.
- Use conduit or MI cable with approved termination fittings.

Class I Division 2 Hazards
- Locations where flammable gases, vapors or volatile liquids are handled either in a closed system, or confined within suitable enclosures, or where hazardous concentrations are normally prevented by positive mechanical ventilation. Areas adjacent to Division 1 areas belong in Division 2.
- Use PLTC, ITC, TC, MC, MV, MI with approved termination fittings.

Class II Division 1
- Locations where combustible dusts exist under normal conditions.
- Use conduit or MI with approved termination fittings.

Class II Division 2
- Locations where combustible dusts exist under abnormal conditions.
- Use conduit or PLTC, ITC, TC, MC with ventilated channel cable trays.
- Use conduit or MC, MI with approved termination fittings.

Class III Division 1
- Locations where easily ignitible fibers and flyings exist under normal conditions.
- Use conduit or MC, MI with approved termination fittings.

Class III Division 2
- Locations where easily ignitible fibers and flyings exist under abnormal conditions.
- Use conduit or MC, MI with approved termination fittings.

Article 504

Intrinsically Safe
- Equipment and wiring that are incapable of releasing sufficient electrical energy under normal or abnormal conditions to cause ignition of a specific hazardous atmospheric mixture in its most easily ignited concentration.

Technical Information

UL Approved Insulation/Jacketing Options

UL Listed for PLTC	
Insulation/Jacket	**Max. Temp Rating**
XLPE/PVC	90°C
XLPE/CPE	90°C
PVC/PVC	105°C
PVC/CPE	105°C
PE/PVC	75°C
FPE/PVC	75°C
TPE/TPE	105°C
XLPE/Haloarrest® I	90°C
XLPE/Hypalon®	90°C
FEP/FEP	200°C

UL Listed for MC and TC			
Insulation/Jacket	**Max. Temp Rating**		**Flame Tests**
	Wet	**Dry**	
PVC-Nylon/PVC (THHN or THWN) 14 AWG & larger	75°C	90°C	UL 1581 FT4/ IEEE 1202
PVC-Nylon/PVC (TFN or TFFN) 16 & 18 AWG	NA	90°C	UL 1581 FT4/ IEEE 1202
XLPE (XHHW–2)/ **PVC or CPE** 14 AWG & larger	90°C	90°C	UL 1581 FT4/ IEEE 1202 VW-1 rated singles
XLPE (RFH–2)/ **PVC or CPE** 16 & 18 AWG	75°C	75°C	UL 1581 FT4/ IEEE 1202 VW-1 rated singles
FRPO/PVC 18 AWG & larger	—	75°C	UL 1581
TPE/TPE	75°C	90°C	UL 1581
FRPO/PVC	75°C	90°C	UL 1581
XLPE/Haloarrest I (XHHW-2) 14 AWG & larger	90°C	90°C	UL 1581 VW-1 rated singles
XLPE/Haloarrest I 16 & 18 AWG (RFH-2)	75°C	75°C	UL 1581
FEP/PVC	90°C	90°C	UL 1581
XLPE/Hypalon (XHHW-2) 14 AWG & larger	90°C	90°C	UL 1581 VW-1 rated singles
XLPE/Hypalon (RFH-2) 16 & 18 AWG	75°C	75°C	UL 1581 VW-1 rated singles

Abbreviations Key	
CPE	**Chlorinated Polyethylene**
FEP	**Fluorinated Ethylene-propylene**
FPE	**Foam Polyethylene**
FRPO	**Flame-Retardant Polyolefin**
PE	**Polyethylene**
PVC	**Polyvinyl Chloride** Nylon insulated singles are type THHN or THWN for conductors 14 AWG or larger. Conductor sizes 16 and 18 AWG are Type TFN or TFFN singles.
TPE	**Thermoplastic Elastomer**
XLPE	**Cross-Linked Polyethylene** Cross-Linked Polyethylene (XLPE) insulated singles are type XHHW-2 for conductors 14 AWG or larger. Conductor sizes 16 and 18 AWG are RFH-2.

Vertical Tray Flame Test Comparison

Test	UL-1581	FT4/IEEE 1202	IEEE 383	IEC 323-3	ICEA T-29-520
Flame Test Chamber	Vertical Tray	Vertical Tray	Vertical Tray	Vertical Tray	Vertical Tray
Burner Type	Ribbon gas burner	Ribbon gas burner	Ribbon gas burner	Ribbon gas burner	Ribbon gas burner
Theoretical Heat Input	70,000 BTU/hr	70,000 BTU/hr	70,000 BTU/hr	70,000 BTU/hr	210,000 BTU/hr
Burner Positioning	horizontal 3″ from samples 18″ from tray base	20° up from horizontal 2.95″ from cable surface 11.8" above floor	horizontal 3″ from samples 18″ above tray bottom	horizontal 2.95″ from cable surface 23.6″ above floor	horizontal 8-1/4″ from cable surface 12-1/4″ above tray base
Tray Dimensions	8′ length 12″ width 3″ side flanges	9.84′ length 11.81″ width 2.85″ side flanges	8′ length 12″ width 3″ side flanges	11.5′ length 19.7″ width none	8′ length 12″ width 3″ side flanges
Sample Spacing	1/2 cable diameter	1/2 cable diameter	1/2 cable diameter	lesser of 1/2 cable diameter and .78″	1/2 cable diameter
Duration of Flame Application	20 minutes	20 minutes	20 minutes	20 minutes	20 minutes
Mode of Failure	Cable blistering or charring has reached the top of the sample after the cable has self-extinguished.	Cable char has exceeded a length of 4.92′.	Cable blistering or charring has reached the top of the sample after the cable has self-extinguished.	Cable charring has reached a height of 98.4″ above the bottom of the burner.	Cable blistering or charring has reached the top of the sample after the cable has self-extinguished.

Hypalon is DuPont trademark.

16 Technical Information

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The information, graphs, tables and illustrations presented in this section are provided to assist Belden customers with the selection of the most appropriate cable for their application.

For further assistance, contact Belden Technical Support at: **1-800-BELDEN-1**.

Conductors

Table 1: Solid Copper Wire, American Wire Gage

Gage (AWG)	Nominal OD		Nominal Circular MIL Area	Nominal Weight (Lbs. per 1000 Ft.)	Nominal Resistance @ 68°F (Ω/1000 Ft.)
	Inches	mm			
10	.1019	2.60	10380.0	31.43	.9989
11	.0907	2.30	8234.0	24.92	1.260
12	.0808	2.05	6530.0	19.77	1.588
13	.0720	1.83	5178.0	15.68	2.003
14	.0641	1.63	4107.0	12.43	2.525
15	.0571	1.45	3260.0	9.858	3.184
16	.0508	1.29	2583.0	7.818	4.016
17	.0453	1.15	2050.0	6.200	5.064
18	.0403	1.02	1620.0	4.917	6.385
19	.0359	.912	1200.0	3.899	8.051
20	.0320	.813	1020.0	3.092	10.15
21	.0285	.724	812.1	2.452	12.80
22	.0253	.643	640.4	1.945	16.14
23	.0226	.574	511.5	1.542	20.36
24	.0201	.511	404.0	1.223	25.67
25	.0179	.455	320.4	.9699	32.37
26	.0159	.404	253.0	.7692	40.81
27	.0142	.361	201.5	.6100	51.47
28	.0126	.320	159.8	.4837	64.90
29	.0113	.287	126.7	.3836	81.83
30	.0100	.254	100.5	.3042	103.2
31	.0089	.226	79.7	.2413	130.1
32	.0080	.203	63.21	.1913	164.1
33	.0071	.180	50.13	.1517	206.9
34	.0063	.160	39.75	.1203	260.9
35	.0056	.142	31.52	.09542	331.0
36	.0050	.127	25.00	.07568	414.8
37	.0045	.114	19.83	.0613	512.1
38	.0040	.102	15.72	.04759	648.6
39	.0035	.089	12.20	.03774	847.8
40	.0031	.079	9.61	.02993	1080.0

Information from National Bureau of Standards Copper Wire Tables — Handbook 100.

Unparalleled Performance

Belden is one of only a very few cable manufacturers to draw and anneal its own conductors. This is a time-consuming process, but it allows us to ensure signal integrity, as well as proper physical characteristics.

In addition, the standards under which we design and manufacture our fiber optic cabling are among the strictest in the industry. The result is a comprehensive offering of products which give unparalleled performance and can satisfy your most demanding operating and environmental challenges.

Conductors

Table 2: Stranded Copper Wire, American Wire Gage

Gage (AWG)	Stranding (Nom. AWG)	Min. Average OD of Strand	Approximate OD		ASTM Min. Circular MIL Area	Min. Weight (Lbs./1000 Ft.)	Max. Resistance* @ 68°F (Ω/1000 Ft.)
			Inches	mm			
36	7x44	.0019	.006	.152	25	.076	414.8
34	7x42	.0024	.0075	.191	39.7	.121	260.9
32	7x40	.0030	.0093	.236	64	.195	164.1
32	19x44	.0018	.010	.254	64	.195	164.1
30 ◆	7x38	.0038	.012	.305	100	.304	112.0
30	19x42	.0023	.012	.305	100	.304	112.0
28 ◆	7x36	.0048	.015	.381	159	.484	70.7
28 ◆	19x40	.0029	.016	.406	159	.484	70.7
27	7x35	.0054	.017	.432	202	.614	55.6
26 ◆	7x34	.0060	.019	.483	253	.770	44.4
26	10x36	.0050	.021	.533	253	.770	44.4
26 ◆	19x38	.0036	.020	.508	253	.770	44.4
24 ◆	7x32	.0076	.024	.610	404	1.229	27.7
24	10x34	.0064	.024	.610	404	1.229	27.7
24 ◆	19x36	.0046	.024	.610	404	1.229	27.7
24 ◆	42x40	.0031	.023	.584	404	1.229	27.7
22 ◆	7x30	.0096	.030	.762	640	1.947	17.5
22 ◆	19x34	.0058	.031	.787	640	1.947	17.5
22	26x36	.0050	.030	.762	640	1.947	17.5
20 ◆	7x28	.0126	.038	.965	1020	3.103	10.9
20	10x30	.0101	.037	.940	1020	3.103	10.9
20 ◆	19x32	.0073	.037	.940	1020	3.103	10.9
20	26x34	.0063	.036	.914	1020	3.103	10.9
20 ◆	42x36	.0049	.038	.965	1020	3.103	10.9
18 ◆	7x26	.0152	.048	1.22	1620	4.93	6.92
18	16x30	.0101	.047	1.19	1620	4.93	6.92
18 ◆	19x30	.0092	.049	1.24	1620	4.93	6.92
18 ◆	42x34	.0062	.047	1.19	1620	4.93	6.92
18 ◆	65x36	.0050	.047	1.19	1620	4.93	6.92
16 ◆	7x24	.0192	.060	1.52	2580	7.85	4.35
16 ◆	19x29	.0117	.058	1.47	2580	7.85	4.35
16	26x30	.0100	.059	1.50	2580	7.85	4.35
16 ◆	65x34	.0063	.059	1.50	2580	7.85	4.35
16	105x36	.0050	.059	1.50	2580	7.85	4.35
14 ◆	7x22	.0242	.076	1.93	4110	12.50	2.73
14 ◆	19x26	.0147	.071	1.80	4110	12.50	2.73
14 ◆	42x30	.0099	.075	1.91	4110	12.50	2.73
14	105x34	.0063	.075	1.91	4110	12.50	2.73
12 ◆	7x20	.0305	.096	2.44	6530	19.86	1.71
12 ◆	19x25	.0185	.093	2.36	6530	19.86	1.71
12 ◆	65x30	.0100	.095	2.41	6530	19.86	1.71
12	165x34	.0063	.095	2.41	6530	31.58	1.71
10	37x26	.0167	.115	2.92	10380	31.58	1.08
10	65x28	.0126	.120	3.05	10380	31.58	1.08
10	105x30	.0099	.118	3.00	10380	31.58	1.08

*AWG 10 through 30 per UL Subject 13.

Belden has standardized on the stranded conductors used in the production of all Belden® products. These preferred constructions, based on standard industry practices, are marked with a ◆ symbol.

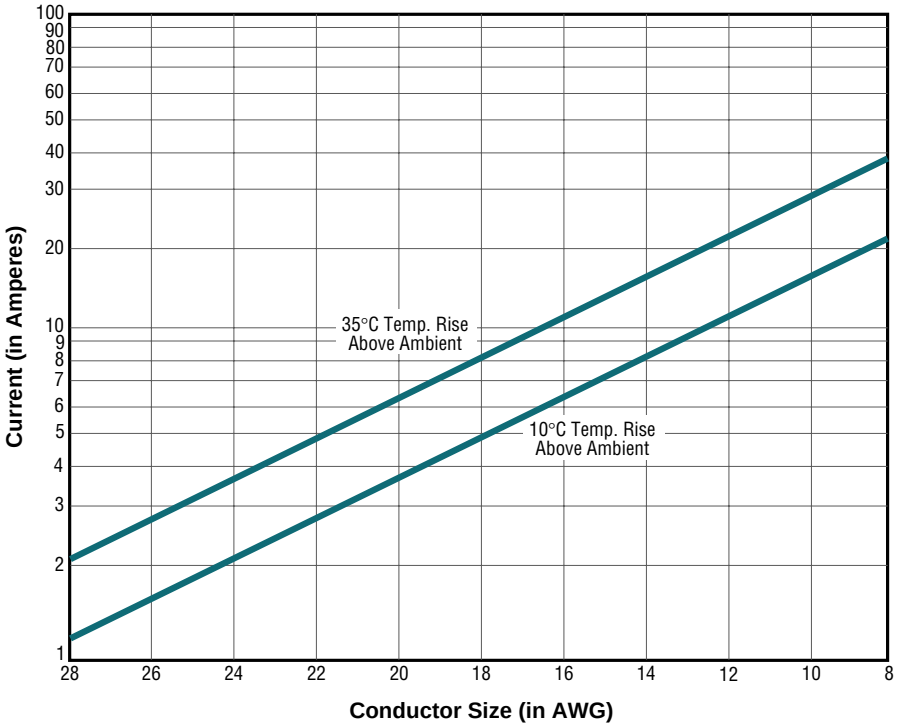
Conductors

Table 3: Current Ratings for Belden® Electronic Cables

The maximum continuous current rating for an electronic cable is limited by conductor size, number of conductors contained within the cable, maximum temperature rating of the cable, and environmental conditions such as ambient temperature and air flow. To use the current capacity chart, first determine conductor size, temperature rating, and number of conductors from the applicable product description for the cable of interest.

Next, find the current value on the chart for the proper temperature rating and conductor size. To calculate the maximum current rating/conductor, multiply the chart value by the appropriate conductor factor. The chart assumes cable is surrounded by still air at an ambient temperature of 25°C. Current values are in RMS Amperes and are valid for copper conductors only. For conditions other than specified, contact Belden Technical Support at: **1-800-BELDEN-1**.

Note: Current ratings are intended as general guidelines for low power electronic communications and control applications. Current ratings for power applications generally are set by regulatory agencies such as UL, CSA, NEC, and others.



Current Ratings

No. of Conductors*	Factor
1	1.6
2 to 3	1.0
4 to 5	.8
6 to 15	.7
16 to 30	.5

*Do not count shields unless used as conductor.

Insulations and Jackets

Overview

Insulations

Belden expends a great amount of time and effort to formulate its own insulations. As a result, Belden® insulations provide superior performance under a variety of hostile environmental conditions. Belden cables are available in UL Listed and CSA Approved insulation compounds.

Among the insulations we utilize are:

- **Polyethylene**
- **Polyvinyl-chloride (PVC)**
- **Polypropylene**

Also available are:

- **Datalene® —** For computer and data transmission. Datalene is crush resistant, lightweight, and offers good performance characteristics over a wide range of temperatures.
- **Teflon® Insulated Plenum & High-Temperature Cables —** For data communications, instrumentation/control, and other commercial and industrial applications. Plenum cables eliminate the need for conduit and reduce installation time.

Jackets

Belden electronic cables are manufactured in a wide selection of jacketing materials.

- **Flamarrest® —** A Belden jacketing innovation, Flamarrest is a low-smoke, flame retardant compound that is five times more flexible than fluorocopolymer. Cables jacketed with Flamarrest are cost efficient and easy to install.

Also included in our wide selection of jacketing compounds are:

- **Polyvinyl-chloride**
- **Polyethylene**
- **Polyurethane**
- **Teflon**
- **Tefzel®**
- **Halar®**
- **Neoprene**
- **EPDM**
- **Hypalon®**
- **Silicone rubber**
- **Natural rubber**

Special compounds and variations of standard compounds are used as well.

Teflon, Tefzel and Hypalon are DuPont trademarks.
Halar is an Ausimont Corporation trademark.

Insulations and Jackets

Typical Characteristics of Popular Insulation and Jacketing Compounds

EPDM

EPDM (ethylene-propylene-diene elastomer) is a chemically cross-linked elastomer with excellent flexibility at high and low temperatures (150° to –55°C). It has good insulation resistance and dielectric strength, as well as excellent abrasion resistance and mechanical properties. EPDM also has better cut-through resistance than Silicone rubber, which it replaces in some applications.

EPDM is compatible with most varnishes, but after the dip and bake cycle varnish tends to adhere to the insulation (because EPDM, unlike some rubber insulations, does not exude oils or waxes). As lead wires are pulled apart for termination, the varnish cracks, sometimes breaking the insulation.

To resolve this problem, a stearic solution is applied to the lead wire during the put-up process. This ensures that rigid varnish does not cause EPDM insulation to rupture when the wire is terminated.

Field evaluations by numerous users reveal that the coated EPDM has excellent varnish resistance at least equal to synthetic elastomers, cross-link polyethylene, or Silicone glass braid in dip and bake systems.

Flamarrest®

Flamarrest is a plenum grade chloride-based jacketing material with low smoke and low flame spread properties. Cables jacketed with Flamarrest meet the UL Standard 910, Plenum Cable Flame Test.

Halar®

Thermoplastic fluoropolymer material with excellent chemical resistance, electrical properties, thermal characteristics, and impact resistance. The temperature rating is –70°C to 150°C.

Neoprene

The temperature range of this material can vary from –55°C to 90°C. The actual range would depend on the formulation used. Neoprene is both oil-resistant and sunlight-resistant, making it ideal for many outdoor applications. The most stable colors are Black, Dark Brown, and Gray. The electrical properties are not as good as other insulation materials. Because of this, thicker insulation should be used. Typical designs where this material is used are lead wire insulation and cable jackets.

Polyethylene (Solid and Foamed)

A very good insulation in terms of electrical properties. Low dielectric constant, a stable dielectric constant over all frequencies, very high insulation resistance. In terms of flexibility, polyethylene can be rated stiff to very hard, depending on molecular weight and density—low density being the most flexible, with high-density, high-molecular weight formulation being very hard. Moisture resistance is rated excellent. Correct Brown and Black formulations have excellent weather resistance. The dielectric constant is 2.3 for solid insulation and typically 1.64 for foam designs. Flame retardant formulations are available with dielectric constants ranging from about 1.7 for foam flame retardant to 2.58 for solid flame retardant polyethylene.

Polypropylene (Solid and Foam)

Similar in electrical properties to polyethylene. This material is primarily used as an insulation material. Typically, it is harder than polyethylene. This makes it suitable for thin wall insulations. UL maximum temperature rating may be 60°C or 80°C. Most UL styles call for 60°C maximum. The dielectric constant is 2.25 for solid and typically 1.55 for foam designs.

Polyurethane

This material is used primarily as a cable jacket material. It has excellent oxidation, oil, and ozone resistance. Some formations also have good flame resistance. It is a hard material with excellent abrasion resistance. It has outstanding “memory” properties, making it an ideal jacket material for retractile cords.

PVC

Sometimes referred to as vinyl or polyvinylchloride. Extremely high or low temperature properties cannot be found in one formulation. Certain formulations may have –55°C to 105°C rating. Other common vinyls may have –20°C to 60°C. There are many formulations for the variety of different applications. The many varieties of PVC also differ in pliability and electrical properties. The price range can vary accordingly. Typical dielectric constant values can vary from 3.5 to 6.5.

Rubber

The description of rubber normally includes natural rubber and SBR compounds. Both of these materials can be used for insulations and jackets. There are many formulations of these basic materials. Each formulation is for a specific application. Some formulations are suitable for –55°C minimum, while others are suitable for 75°C maximum.

Silicone

This is a very soft insulation which has a temperature range from –80°C to 200°C. It has excellent electrical properties plus ozone resistance, low moisture absorption, weather resistance, and radiation resistance. It typically has low mechanical strength and poor scuff resistance.

Teflon®

This material has excellent electrical properties, temperature range and chemical resistance. It is not suitable where subjected to nuclear radiation and does not have good high voltage characteristics. FEP Teflon is extrudable in a manner similar to PVC and polyethylene. This means that long wire and cable lengths are available. TFE Teflon is extrudable in a hydraulic ram type process. Lengths are limited due to amount of material in the ram, thickness of the insulation, and preform size. TFE must be extruded over a silver- or nickel-coated wire. The nickel- and silver-coated designs are rated 260°C and 200°C maximum, respectively. The cost of Teflon is approximately 8 to 10 times more per pound than PVC compounds.

Tefzel®

Fluorocopolymer thermoplastic material having excellent electrical properties, heat resistance, chemical resistance, toughness, radiation resistance, and flame resistance. The temperature rating is –65°C to 150°C.

Teflon and Tefzel are DuPont trademarks.
Halar is an Ausimont Corporation trademark.

Insulations and Jackets

Table 4: Comparative Properties of Plastic Insulating and Jacketing Compounds

Properties	PVC	LDPE	Cellular Polyethylene	HDPE	Polypropylene	Cellular Polypropylene	PUR	Nylon	CPE	Flamarrest®
Oxidation Resistance	E	E	E	E	E	E	E	E	E	E
Heat Resistance	G–E	G	G	E	E	E	G	E	E	G–E
Oil Resistance	F	G–E	G	G–E	F	F	E	E	E	F
Low-Temperature Flexibility	P–G	E	E	E	P	P	G	G	E	P–G
Weather, Sun Resistance	G–E	E	E	E	E	E	G	E	E	G
Ozone Resistance	E	E	E	E	E	E	E	E	E	E
Abrasion Resistance	F–G	G	F	E	F–G	F–G	O	E	E–O	F–G
Electrical Properties	F–G	E	E	E	E	E	P	P	E	G
Flame Resistance	E	P	P	P	P	P	P	P	E	E
Nuclear Radiation Resistance	F	G–E	G	G–E	F	F	G	F–G	O	F
Water Resistance	F–G	E	E	E	E	E	P–G	P–F	O	F
Acid Resistance	G–E	G–E	G–E	E	E	E	F	P–F	E	G
Alkali Resistance	G–E	G–E	G–E	E	E	E	F	E	E	G
Aliphatic Hydrocarbons Resistance (Gasoline, Kerosene, etc.)	P	G–E	G	G–E	P–F	P	P–G	G	E	P
Aromatic Hydrocarbons Resistance (Benzol, Toluol, etc.)	P–F	P	P	P	P–F	P	P–G	G	G–E	P–F
Halogenated Hydrocarbons Resistance (Degreaser Solvents)	P–F	G	G	G	P	P	P–G	G	E	P–F
Alcohol Resistance	P–F	E	E	E	E	E	P–G	P	E	G
Underground Burial	P–G	G	N/A	E	N/A	N/A	G	P	E–O	P

CPE = Chlorinated Polyethylene • HDPE = High-density Polyethylene • LDPE = Low-density Polyethylene • PUR = Polyurethane

These ratings are based on average performance of general purpose compounds.
Any given property can usually be improved by the use of selective compounding.

Legend	
P	Poor
F	Fair
G	Good
E	Excellent
O	Outstanding

Insulations and Jackets

Table 5: Comparative Properties of Fluoropolymer Insulating and Jacketing Compounds

Properties	FEP Teflon®	Tefzel® (ETFE)	TFE Teflon	Solef® / Kynar® (PVDF) / PVF	Halar® (E-CTFE)
Oxidation Resistance	O	E	O	O	O
Heat Resistance	O	E	O	O	O
Oil Resistance	O	E	E–O	E	O
Low-Temperature Flexibility	O	E	O	F	O
Weather, Sun Resistance	O	E	O	E–O	O
Ozone Resistance	E	E	O	E	E
Abrasion Resistance	E	E	O	E	E
Electrical Properties	E	E	E	G–E	E
Flame Resistance	O	G	E	E	E–O
Nuclear Radiation Resistance	P–G	E	P	E	E
Water Resistance	E	E	E	E	E
Acid Resistance	E	E	E	G–E	E
Alkali Resistance	E	E	E	E	E
Aliphatic Hydrocarbons Resistance (Gasoline, Kerosene, etc.)	E	E	E	E	E
Aromatic Hydrocarbons Resistance (Benzol, Toluol, etc.)	E	E	E	G–E	E
Halogenated Hydrocarbons Resistance (Degreaser Solvents)	E	E	E	G	E
Alcohol Resistance	E	E	E	E	E
Underground Burial	E	E	E	E	E

These ratings are based on average performance of general purpose compounds.
Any given property can usually be improved by the use of selective compounding.

Legend	
P	Poor
F	Fair
G	Good
E	Excellent
O	Outstanding

Teflon and Tefzel are DuPont trademarks.
Halar is an Ausimont Corporation trademark.
Solef is a Solvay trademark.
Kynar is a Pennwalt Corporation trademark.

Insulations and Jackets

Table 6: Comparative Properties of Rubber Insulations

Properties	Rubber	Neoprene	Hypalon® (Chlorosulfonated Polyethylene)	EPDM (Ethylene-Propylene-Diene Elastomer)	Silicone
Oxidation Resistance	F	G	E	E	E
Heat Resistance	F	G	E	E	O
Oil Resistance	P	G	G	P	F–G
Low-Temperature Flexibility	G	F–G	F	G-E	O
Weather, Sun Resistance	F	G	E	E	O
Ozone Resistance	P	G	E	E	O
Abrasion Resistance	E	G–E	G	G	P
Electrical Properties	G	P	G	E	G
Flame Resistance	P	G	G	P	F–G
Nuclear Radiation Resistance	F	F–G	E	G	E
Water Resistance	G	E	E	G–E	G-E
Acid Resistance	F–G	G	E	G–E	F–G
Alkali Resistance	F–G	G	E	G–E	F–G
Aliphatic Hydrocarbons Resistance (Gasoline, Kerosene, etc.)	P	G	F	P	P–F
Aromatic Hydrocarbons Resistance (Benzol, Toluol, etc.)	P	P-F	F	F	P
Halogenated Hydrocarbons Resistance (Degreaser Solvents)	P	P	P–F	P	P–G
Alcohol Resistance	G	F	G	P	G

These ratings are based on average performance of general purpose compounds.
Any given property can usually be improved by the use of selective compounding.

Legend	
P	Poor
F	Fair
G	Good
E	Excellent
O	Outstanding

Hypalon is a DuPont trademark.

Insulations and Jackets

Table 7: Nominal Temperature Range for Various Insulating and Jacketing Compounds
Table 8: Temperature Conversion Chart

Compound	Normal Low	Normal High	Special Low	Special High
Chlorosulfonated Polyethylene (Hypalon®)	–20°C	90°C	–40°C	105°C
EPDM (Ethylene-Propylene-Diene Monomer)	–55°C	105°C	—	150°C
Neoprene	–20°C	60°C	–55°C	90°C
Polyethylene (Solid and Foamed)	–60°C	80°C	—	—
Polypropylene (Solid and Foamed)	–40°C	105°C	—	—
Rubber	–30°C	60°C	–55°C	75°C
FEP Teflon®	–70°C	200°C	—	—
PVC	–20°C	80°C	–55°C	105°C
Silicone	–80°C	150°C	—	200°C
Halar®	–70°C	150°C	—	—
Tefzel®	–65°C	150°C	—	—
TFE Teflon	–70°C	260°C	—	—
CPE	–35°C	90°C	–45°C	105°C
Solef® / Kynar®	–20°C	150°/125°C	–40°C	150°/150°C
Flamarrest®	–20°C	75°C	—	—

Table 8: Temperature Conversion Chart

°C ⟷	°F	°C ⟷	°F	°C ⟷	°F
210	410	125	257	40	104
205	401	120	248	35	95
200	392	115	239	30	86
195	383	110	230	25	77
190	374	105	221	20	68
185	365	100	212	15	59
180	356	95	203	10	50
175	347	90	194	5	41
170	338	85	185	0	32
165	329	80	176	-5	23
160	320	75	167	-10	14
155	311	70	158	-15	5
150	302	65	149	-20	-4
145	293	60	140	-25	-13
140	284	55	131	-30	-22
135	275	50	122	-35	-31
130	266	45	113	-40	-40

Conversion Formulas

$$°C = \frac{5}{9}(°F - 32)$$

$$°F = \frac{9}{5}°C + 32$$

Hypalon, Teflon and Tefzel are DuPont trademarks.
Halar is an Ausimont Corporation trademark.
Solef is a Solvay trademark.
Kynar is a Pennwalt Corporation trademark.

Shielding
Overview

Innovative Leadership

The evolution of technology maintains steady demand for sophisticated cable shielding. Belden meets that demand with innovative shielding and shield effectiveness testing methods to supply you with high quality, dependable cable.

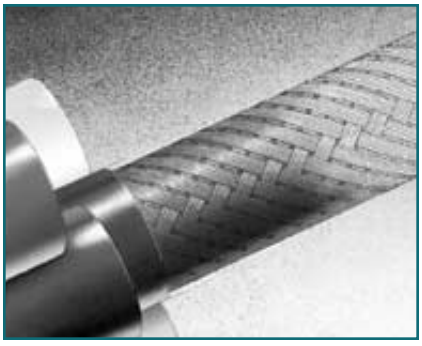
With the creation of trademarked shield designs and patented test methods, Belden has earned a reputation for innovation and leadership that is unequaled in the wire and cable industry. In addition, Belden offers the broadest line of shielded multi-conductor, coaxial and flat cable in the industry.

Several unique Belden innovations are utilized across a wide range of shielding applications:

- **Beldfoil® —** The first aluminum/polyester foil developed for use as a cable shield. Provides 100% shield coverage for optimum protection.
- **Duofoil® —** Consists of an aluminum-polyester-aluminum laminate wrapped around the cable's dielectric core. Provides 100% physical coverage, and improves shield reliability and flex life.

Belden also utilizes a number of innovative techniques to apply shielding to multi-conductor and paired cables:

- **"French Braid" Shields —** Belden's patented "French Braid" shield is a double spiral (double serve bare copper shield) with the two spirals tied together by one weave.



Belden's patented "French Braid" shield.

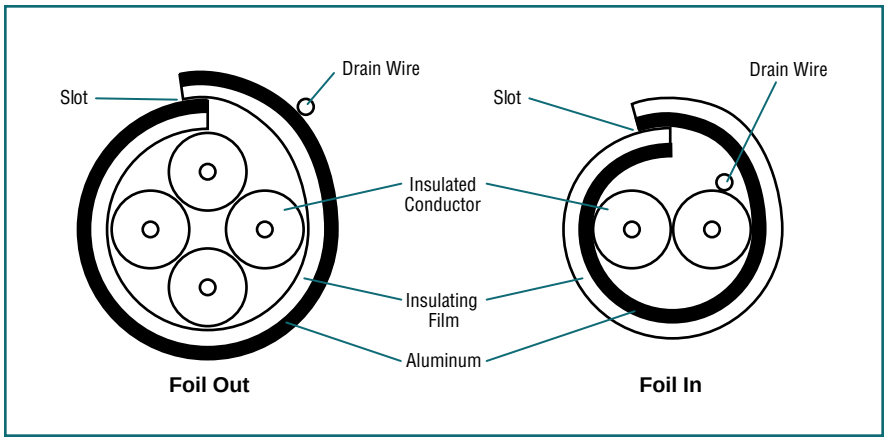


Figure 1: Foil shield configurations without shorting folds.

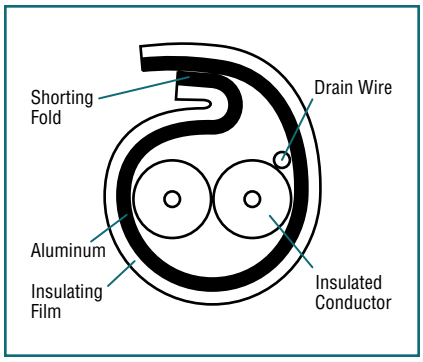


Figure 2: Foil shield configuration with shorting fold.

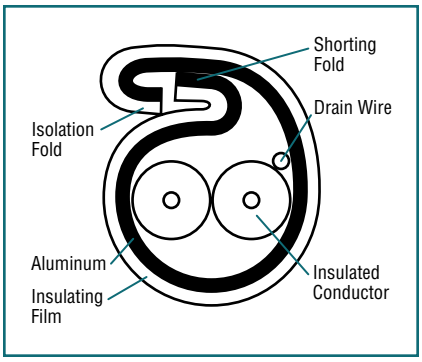


Figure 3: Foil shield with Z-Fold reduces crosstalk in multi-pair applications.

- **Shorting Fold —** Belden uses a shorting fold technique to maintain metal-to-metal contact for improved high frequency performance. Without the shorting fold, a slot is created through which signals can leak and cause interference. (See Figures 1 and 2 above.)

- **Z-Fold® —** Belden improves on the traditional shorting fold by employing a Z-Fold designed for use in multi-pair applications to reduce crosstalk. The Z-Fold (see Figure 3) combines an isolation and a shorting fold. The shorting fold provides metal-to-metal contact while the isolation fold keeps shields from shorting to one another in multi-pair, individually shielded cables.

The use of either a shorting fold or a Z-Fold increases the foil shield's range of effectiveness to higher frequencies.

Shielding

Characteristics of Belden® Shield Types

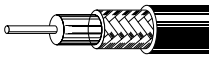
Foil Shields

Foil shields consist of aluminum foil laminated to a polyester or polypropylene film. The film gives the shield mechanical strength and bonus insulation. Foil shields provide 100% cable coverage, necessary for electrostatic shield protection. Because of their small size, foil shields are commonly used to shield individual pairs of multi-pair data cables to reduce crosstalk. They have less weight, bulk and cost less than spiral or braid shields and are generally more effective than braid shields in RF ranges. Foil shields are more flexible than braid but have a shorter flex life than spiral or braid.

Drain wires are used with foil shields to make termination easier and to ground electrostatic discharges. The shortcomings in using the foil shield include higher DC resistance and lower mechanical strength than braid or spiral shields.

Braid Shields

A braid shield consists of groups of tinned or bare copper or aluminum strands, one set woven in a clockwise direction and interwoven with another set in a counter-clockwise direction.

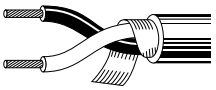


Braid shields provide superior structural integrity, while maintaining good flexibility and flex life. These shields are ideal for minimizing low frequency interference and have lower DC resistance than foil. Braid shields are effective at audio, as well as RF ranges. Generally, the higher the braid coverage, the more effective the shield. However, the trade-off between cost and braid coverage must be considered. Typical braid coverages are between 80% and 95%. Coverage of 100% is unattainable with a braid shield. Other features to consider when choosing a braid shield are the weave angle, strand diameter, number of carriers (strand groups) and the number of ends (strands).

Braid shields are generally bulkier and heavier than other shields and, in some cases, harder to terminate because the braid must be combed out and pigtailed.

Spiral/Serve Shields

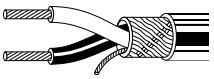
A spiral/serve shield consists of wire (usually copper) wrapped in a spiral around the inner cable core.



Superior flexibility and flex life, ease of termination and up to 97% coverage are the advantages of spiral shields. They are best suited for audio applications. As a rule, spiral shields are not effective above the audio frequency range due to the coil effect produced by the inductance of served wire strands.

"French Braid" Shields

Belden's patented "French Braid" shield is a double spiral (double serve bare copper shield) with the two spirals tied together by one weave. This construction provides improved flex life over standard spiral shields, improved flexibility over conventional braid shields, and lower levels of microphonic or triboelectric noise than either spiral or conventional braid shields.



Combination Shields

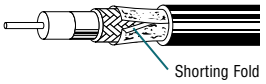
Combination shields consist of more than one layer of shielding. They provide maximum shield efficiency across the frequency spectrum. The combination foil/braid shield combines the advantages of 100% foil coverage, plus the strength and low DC resistance of the braid.

Belden has also developed a number of shielding configurations for use with broadband coaxial cables.

- **Duobond®**
  Duobond is essentially the same construction as Duofoil® (a laminated tape of foil/film/foil), but with an extra layer of adhesive bonding the foil shield to the dielectric core. This foil shield provides 100% coverage and insures maximum shield protection.
- **Duobond II (Foil/Braid)**
  Combines Duobond with an outer braid, applied for greater protection against interference and to increase the overall tensile strength.

- **Duobond III (Tri-Shield)**
  Utilizes the Duobond II design (foil/braid) plus a surrounding layer of Duofoil. The extra foil layer improves shield reliability and provides an additional interference barrier.

- **Duobond Plus® —** Features foil/braid/foil construction with a shorting fold in the outermost foil. This fold prevents a slot opening from being created in the shield, thereby preventing signal egress or ingress.



- **Duobond IV (Quad Shield)**
  Offers an extra layer of braid shield (foil/braid/foil/braid) for improved strength and durability.

Other combination shields are available such as the foil/braid/foil/braid used on the Ethernet cables, braid/braid or foil/spiral.

Shielding and Armoring

Shield Types Application Guide and Relative Cost Comparison
Table 9: Relative Cost Comparison of Shield Types • Table 10: Shield Performance Ratings

Shield Types Application Guide

Choose a Foil Shield...

- For protection against capacitive (electric field) coupling where shield coverage is more important than low DC resistance.
- When possible sources of interference include TV signals, crosstalk from other circuits, radio transmitters, fluorescent lights or computing equipment.
- For MATV, CATV, video, networking, computer I/O cables in office, industrial or commercial environments where ambient EMI levels are low.

Choose a Braid Shield...

- For superior performance against diffusion coupling, where low DC resistance is important, and to a lesser extent, capacitive and inductive coupling.
- When possible sources of interference exhibit low impedance characteristics, such as motor control circuits and switches which operate inductive loads.
- For computer to terminal interconnect for process, instrumentation or control applications.

Choose a Spiral Shield...

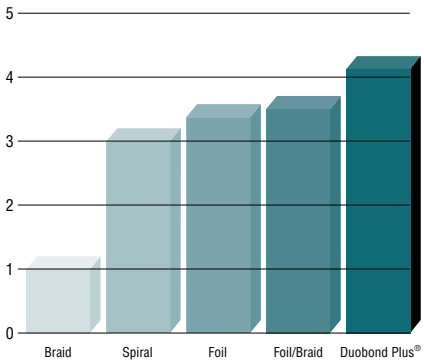
- For functional shielding against diffusion and capacitive coupling at audio frequencies only.
- When possible sources of interference are power lines and fluorescent lights.
- For applications when flexibility and flex life are major concerns, such as microphone and audio cables and retractile cords.

Choose a Combination Shield...

- For shielding against high frequency radiated emissions coupling and ESD. Combines the low resistance of braid and 100% coverage of foil shields.
- When possible sources of interference include radio transmitters, TV stations, printed circuit boards, back planes, motor control circuits and computing equipment.
- For Video, CATV, MATV, networking, computer I/O cables and computer-aided manufacturing applications.

Table 9: Relative Cost Comparison

Relative cost comparisons are based on **coaxial** cable. Chart shows relative shield cost as one component of the total cost of the cable. *These cost ratings may change depending on the physical construction of the cable.*



Armoring

Belden's innovative technology delivers maximum effectiveness to meet the performance requirements of a wide range of applications.

Belden also has the capability to protect electronic, instrumentation, and control cables with interlocking steel or aluminum armor and cables with Verlok® inner jackets.

- **Interlocking —** Traditional armoring available in steel or aluminum.
- **Verlok —** Cables with Verlok inner jackets feature extruded ribs on the cable jacket to ensure a strong mechanical grip between the armor and jacket. Cables with Verlok jackets can replace steel wire armored cables in many mining, commercial, and industrial applications.

Table 10: Shield Performance Comparison Chart

Frequency Range and Types of Interference Anticipated	Cable Shield Ratings*				
	Braid (95% Coverage)	Spiral	Foil	Foil/Braid	Foil/Braid/Foil Duobond Plus®
Frequency: DC					
Capacitive	A	AA	AAA	AAA	AAA
Diffusion	AAA	A	C	AAA	AAA
Diffusion/Inductive	—	—	—	—	—
Diffusion/Inductive/Capacitive	—	—	—	—	—
Frequency: 15 kHz					
Capacitive	A	AA	AAA	AAA	AAA
Diffusion	AAA	B	C	AAA	AAA
Diffusion/Inductive	AA	C	A	AA	AAA
Diffusion/Inductive/Capacitive	—	—	—	—	—
Frequency: 10 MHz to 1000 MHz					
Capacitive	A	AA	AAA	AAA	AAA
Diffusion	—	—	—	—	—
Diffusion/Inductive	B	C	A	AA	AAA
Diffusion/Inductive/Capacitive	B	C	A	AA	AAA

*Although ratings shown in Table 10 are based on shielded coaxial cable test results, these ratings also pertain to shielded multi-conductor and flat cable where shield types are available.

Note: Shield effectiveness decreases as frequency increases. Therefore, ratings in one frequency category do not imply equal shield effectiveness in other frequency categories.

Shield Rating Key	
AAA	Best
AA	Better
A	Good
B	Functional
C	Unsatisfactory
—	Not Applicable

Verlok is a patent and trademark of United Wire and Cable Canada, Inc.

Packaging

Belden, a recognized leader in state-of-the-art packaging design, has introduced a variety of packaging styles and options for the convenience of our customers:

UnReel®

A wide variety of Belden cable and plenum cable is available in Belden's UnReel cardboard dispenser.

Belden UnReel is a unique packaging/dispensing system developed to save time, cut costs and labor, and eliminate the need for dereeling equipment.

Lightweight and more economical than conventional drums or reels, UnReel dispensers have pre-punched handles for easy, individual transport as well as rectangular boxes for easy pallet delivery and storage. Unreeled cable pays out smoothly and evenly with no kinking, twisting, or backlashing. It also rolls out 60% faster per hour than conventionally packaged cable.

UnReel ships, stores and dispenses in one carton, which — since its introduction — has always been fully recyclable and biodegradable. Look for the letter "U" in the put-up ("Length") description.

Reel-In-A-Box

Belden's Reel-In-A-Box facilitates cable payout, making installations quicker and easier. And because it's primarily corrugated fiberboard material with plastic inserts, it weighs less than wooden crate reels. That makes it easier to handle and dispose of, as well as less costly to ship.

A 5″ barrel, standard on every Belden® Reel-In-A-Box, helps eliminate memory — a typical problem encountered with 3″ barrels used by other manufacturers.

The new Reel-In-A-Box is extremely durable. It has passed cold drop tests to –30°C, which translates to maximum protection on the job as well as in shipping. Look for the letter "A" in the put-up description.

Belden® Color Code Charts

Color Code Chart No. 1

Cond. No.	Color
1	Black
2	White
3	Red
4	Green
5	Brown
6	Blue
7	Orange
8	Yellow
9	Purple
10	Gray
11	Pink
12	Tan

18 Gage conductors in cables 8446 through 8449 are Black and White.

Color Code Chart Nos. 2 and 2R — ICEA (Insulated Cable Engineers Association) Standard*

Cond. No.	Color	Cond. No.	Color	Cond. No.	Color	Cond. No.	Color
1	Black	14	Green/White Stripe	27	Blue/Black/White	40	Red/White/Green
2	White	15	Blue/White Stripe	28	Black/Red/Green	41	Green/White/Blue
3	Red	16	Black/Red Stripe	29	White/Red/Green	42	Orange/Red/Green
4	Green	17	White/Red Stripe	30	Red/Black/Green	43	Blue/Red/Green
5	Orange	18	Orange/Red Stripe	31	Green/Black/Orange	44	Black/White/Blue
6	Blue	19	Blue/Red Stripe	32	Orange/Black/Green	45	White/Black/Blue
7	White/Black Stripe	20	Red/Green Stripe	33	Blue/White/Orange	46	Red/White/Blue
8	Red/Black Stripe	21	Orange/Green Stripe	34	Black/White/Orange	47	Green/Orange/Red
9	Green/Black Stripe	22	Black/White/Red	35	White/Red/Orange	48	Orange/Red/Blue
10	Orange/Black Stripe	23	White/Black/Red	36	Orange/White/Blue	49	Blue/Orange/Red
11	Blue/Black Stripe	24	Red/Black/White	37	White/Red/Blue	50	Black/Orange/Red
12	Black/White Stripe	25	Green/Black/White	38	Black/White/Green		
13	Red/White Stripe	26	Orange/Black/White	39	White/Black/Green		

* 2 = Spiral Stripe
2R = Ring Band Striping

Color Code Chart No. 3 for Paired Cables (Belden Standard)

Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	Black & Red	11	Red & Yellow	21	White & Brown	31	Purple & White
2	Black & White	12	Red & Brown	22	White & Orange	32	Purple & Dark Green
3	Black & Green	13	Red & Orange	23	Blue & Yellow	33	Purple & Light Blue
4	Black & Blue	14	Green & White	24	Blue & Brown	34	Purple & Yellow
5	Black & Yellow	15	Green & Blue	25	Blue & Orange	35	Purple & Brown
6	Black & Brown	16	Green & Yellow	26	Brown & Yellow	36	Purple & Black
7	Black & Orange	17	Green & Brown	27	Brown & Orange	37	Gray & White
8	Red & White	18	Green & Orange	28	Orange & Yellow		
9	Red & Green	19	White & Blue	29	Purple & Orange		
10	Red & Blue	20	White & Yellow	30	Purple & Red		

Color Code Chart No. 4 for Paired Cables

Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	White & Blue	6	Red & Blue	11	Black & Blue	16	Yellow & Blue	21	Violet & Blue
2	White & Orange	7	Red & Orange	12	Black & Orange	17	Yellow & Orange	22	Violet & Orange
3	White & Green	8	Red & Green	13	Black & Green	18	Yellow & Green	23	Violet & Green
4	White & Brown	9	Red & Brown	14	Black & Brown	19	Yellow & Brown	24	Violet & Brown
5	White & Gray	10	Red & Gray	15	Black & Gray	20	Yellow & Gray	25	Violet & Gray

Color Code Chart No. 5 for Paired Cables (Western Electric Standard)

Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	White/Blue Stripe & Blue/White Stripe	6	Red/Blue Stripe & Blue/Red Stripe	11	Black/Blue Stripe & Blue/Black Stripe	16	Yellow/Blue Stripe & Blue/Yellow Stripe	21	Purple/Blue Stripe & Blue/Purple Stripe
2	White/Orange Stripe & Orange/White Stripe	7	Red/Orange Stripe & Orange/Red Stripe	12	Black/Orange Stripe & Orange/Black Stripe	17	Yellow/Orange Stripe & Orange/Yellow Stripe	22	Purple/Orange Stripe & Orange/Purple Stripe
3	White/Green Stripe & Green/White Stripe	8	Red/Green Stripe & Green/Red Stripe	13	Black/Green Stripe & Green/Black Stripe	18	Yellow/Green Stripe & Green/Yellow Stripe	23	Purple/Green Stripe & Green/Purple Stripe
4	White/Brown Stripe & Brown/White Stripe	9	Red/Brown Stripe & Brown/Red Stripe	14	Black/Brown Stripe & Brown/Black Stripe	19	Yellow/Brown Stripe & Brown/Yellow Stripe	24	Purple/Brown Stripe & Brown/Purple Stripe
5	White/Gray Stripe & Gray/White Stripe	10	Red/Gray Stripe & Gray/Red Stripe	15	Black/Gray Stripe & Gray/Black Stripe	20	Yellow/Gray Stripe & Gray/Yellow Stripe	25	Purple/Gray Stripe & Gray/Purple Stripe

Belden® Color Code Charts

Color Code Chart No. 6

Position No.	Color	Position No.	Color
1	Brown	13	White/Orange
2	Red	14	White/Yellow
3	Orange	15	White/Green
4	Yellow	16	White/Blue
5	Green	17	White/Purple
6	Blue	18	White/Gray
7	Purple	19	White/Black/Brown
8	Gray	20	White/Black/Red
9	White	21	White/Black/Orange
10	White/Black	22	White/Black/Yellow
11	White/Brown	23	White/Brown/Green
12	White/Red	24	White/Black/Blue

Chart No. 9: IBM RISC System/6000

Cond. No.	Color
1	White over Blue
2	White over Orange
3	White over Green
4	White over Brown
5	White over Gray
6	White over Red
7	White over Yellow

Pair No.	Color Combination
1	White over Blue & Blue over White
2	White over Orange & Orange over White
3	White over Green & Green over White

Chart No. 10: Fiber Optics*

Fiber/ Tube No.	Color
1	Blue
2	Orange
3	Green
4	Brown
5	Slate
6	White
7	Red
8	Black
9	Yellow
10	Violet
11	Rose
12	Aqua

*Per TIA/EIA 598-A

Color Code Chart No. 7 for Snake Cables

Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	Brown	16	Lt.Gray/Yellow Stripe	31	Lt.Blue/Violet Stripe	46	Lime/Black Stripe
2	Red	17	Lt.Gray/Green Stripe	32	Lt.Blue/Gray Stripe	47	Lime/Tan Stripe
3	Orange	18	Lt.Gray/Blue Stripe	33	Lt.Blue/White Stripe	48	Lime/Pink Stripe
4	Yellow	19	Lt.Gray/Violet Stripe	34	Lt.Blue/Black Stripe	49	Aqua/Brown Stripe
5	Green	20	Lt.Gray/Gray Stripe	35	Lt.Blue/Tan Stripe	50	Aqua/Red Stripe
6	Blue	21	Lt.Gray/White Stripe	36	Lt.Blue/Pink Stripe	51	Aqua/Orange Stripe
7	Violet	22	Lt.Gray/Black Stripe	37	Lime/Brown Stripe	52	Aqua/Yellow Stripe
8	Gray	23	Lt.Gray/Tan Stripe	38	Lime/Red Stripe	53	Aqua/Green Stripe
9	White	24	Lt.Gray/Pink Stripe	39	Lime/Orange Stripe	54	Aqua/Blue Stripe
10	Black	25	Lt.Blue/Brown Stripe	40	Lime/Yellow Stripe	55	Aqua/Violet Stripe
11	Tan	26	Lt.Blue/Red Stripe	41	Lime/Green Stripe	56	Aqua/Gray Stripe
12	Pink	27	Lt.Blue/Orange Stripe	42	Lime/Blue Stripe	57	Aqua/White Stripe
13	Lt.Gray/Brown Stripe	28	Lt.Blue/Yellow Stripe	43	Lime/Violet Stripe	58	Aqua/Black Stripe
14	Lt.Gray/Red Stripe	29	Lt.Blue/Green Stripe	44	Lime/Gray Stripe	59	Aqua/Tan Stripe
15	Lt.Gray/Orange Stripe	30	Lt.Blue/Blue Stripe	45	Lime/White Stripe	60	Aqua/Pink Stripe

Color Code Chart No. 8 for DataTwist® Cables (Modified Western Electric)

Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	White/Blue Stripe & Blue	6	Red/Blue Stripe & Blue/Red Stripe	11	Black/Blue Stripe & Blue/Black Stripe	16	Yellow/Blue Stripe & Blue/Yellow Stripe	21	Purple/Blue Stripe & Blue/Purple Stripe
2	White/Orange Stripe & Orange	7	Red/Orange Stripe & Orange/Red Stripe	12	Black/Orange Stripe & Orange/Black Stripe	17	Yellow/Orange Stripe & Orange/Yellow Stripe	22	Purple/Orange Stripe & Orange/Purple Stripe
3	White/Green Stripe & Green	8	Red/Green Stripe & Green/Red Stripe	13	Black/Green Stripe & Green/Black Stripe	18	Yellow/Green Stripe & Green/Yellow Stripe	23	Purple/Green Stripe & Green/Purple Stripe
4	White/Brown Stripe & Brown	9	Red/Brown Stripe & Brown/Red Stripe	14	Black/Brown Stripe & Brown/Black Stripe	19	Yellow/Brown Stripe & Brown/Yellow Stripe	24	Purple/Brown Stripe & Brown/Purple Stripe
5	White/Gray Stripe & Gray/White Stripe	10	Red/Gray Stripe & Gray/Red Stripe	15	Black/Gray Stripe & Gray/Black Stripe	20	Yellow/Gray Stripe & Gray/Yellow Stripe	25	Purple/Gray Stripe & Gray/Purple Stripe

Standards Reference Guide

National Electrical Code (NEC)® Catalog Reference Information

The National Electrical Code is a set of guidelines describing procedures which minimize the hazards of electrical shock, fires, and explosions caused by electrical installation. The text of the NEC is contained in nine chapters, each chapter broken into individual articles.

NEC types are acronyms consisting of a prefix describing cable type (e.g. coax, CATV, fiber optic) and a suffix indicating the type of flame test it has passed and where it can be installed. Articles describing wire and cable products — including required cable markings — are listed in the chart to the right.

NEC Article/Type		Description	Plenum	Riser	Commercial	Residential
725	**CL2**	Class 2 cables	CL2P	CL2R	CL2	CL2X*
	CL3	Class 3 cables	CL3P	CL3R	CL3	CL3X*
	PLTC	A stand-alone class. This is a power limited tray cable — a CL3-type cable which can be used outdoors. Is sunlight- and moisture-resistant and must pass the Vertical Tray flame test.	(none)	(none)	PLTC	(none)
760	**FPL**	Power limited, fire protective signaling circuit cable	FPLP	FPLR	FPL	(none)
770	**OFC**	Fiber cable also containing metallic conductors	OFCP	OFCR	OFCG, OFC	(none)
	OFN	Fiber cable only containing optical fibers	OFNP	OFNR	OFNG, OFN	(none)
800	**CM**	Communications	CMP	CMR	CMG, CM	CMX*
	MP	Multi-Purpose Cables	MPP	MPR	MPG, MP	(none)
820	**CATV**	Community antenna television and radio distribution system	CATVP	CATVR	CATV	CATVX**
830	**BM**	Network-powered broadband communications cable	BLP	BMR	BM	BLX

*Cable diameter must be less than 0.250″ **Cable diameter must be less than 0.375″

Impact of the NEC

Almost everyone involved with wire and cable is affected by the National Electrical Code. In particular, the following groups must incorporate NEC guidelines into their work: OEM engineers, wire product engineers, distributors, installers, and architects.

Although NEC covers wire and cable installed in factories, office buildings, hotels, motels, apartment buildings, residences, and all cables which pass through any floor, wall, ceiling, or which travel in ducts, plenums, and other air handling spaces, each individual municipality, city, county, or state can decide whether or not they wish to adopt the 1996 NEC as law. Local authorities having jurisdiction enforce their own codes. They have the right to accept or refuse any installation in accordance with their own local laws. One of the organizations local inspectors rely on to test wire and cable is Underwriters Laboratories (UL).

Intended Uses of Appliance Wiring Materials (AWM)

In the past, AWM cable was incorrectly used to wire buildings—this was never its intended use.

AWM cable is intended for internal wiring of factory-assembled, listed appliances such as computers, business machines, ranges, washers, dryers, radios, and televisions.

In some cases, AWM cable may be used for external connection. In these situations, the user should be aware that AWM cable temperatures and voltage ratings may differ from NEC ratings.

C(UL) Certifications

UL/NEC-Approved cables may also be C(UL)/CEC-Approved as communications cables meeting the requirements of the Bi-National Standard CSA C22.2 No. 214/ UL 444 and Section 60 of the Canadian Electrical Code, Part I (CEC). The C(UL) cable designation (and its meaning) would be one of the following:

1. **CMP** — Cable meeting CSA FT6 or UL 910;
2. **CMR** — Cable meeting UL 1666;
3. **CMG** — Cable meeting CSA FT4;
4. **CM** — Cable meeting UL 1581, Sec. 1160 (Vertical-Tray);
5. **CMX** — meeting UL 1581, Sec. 1080 (VW-1);
6. **CMH** — Cable meeting CSA FT1.

NOTE: The CSA flame tests are defined in CSA C22.2 No. 0.3 as follows:

FT1 Vertical Flame Test — per C.S.A. C22.2 No. 0.3-92 Para 4.11.1

A finished cable shall not propagate a flame or continue to burn for more than one (1) minute after five (5) fifteen (15) second applications of the test flame. There is an interval of fifteen (15) seconds between flame applications. The flame test shall be performed in accordance with Para 4.11.1 of Canadian Standards Association (CSA) Standard C22.2 No. 0.3. In addition, if more than 25% of the indicator flag is burned, the test cable fails.

FT4 Vertical Flame Test — Cables in Cable Trays per C.S.A. C22.2 No. 0.3-92 Para 4.11.4

The FT4 Vertical Flame Test — Cables in Cable Trays is similar to the UL-1581 Vertical Tray Flame Test, but is more severe. The FT4 test has its burner mounted at 20° from the horizontal with the burner ports facing up. The UL-1581 Vertical Tray has its burner at 0° from the horizontal. The FT4 samples must be larger than 13mm (.512″) in diameter.

If not, then the cable samples are grouped in units of at least three (3) to obtain a grouped overall diameter of 13mm. The UL-1581 Vertical Tray does not distinguish on cable size. The FT4 has a maximum char height of 1.5 m (59″) measured from the lower edge of the burner face. The UL-1581 has a flame height allowable up to approximately 78″ measured from the burner.

FT6 Horizontal Flame & Smoke Test — per C.S.A. C22.2 No. 0.3-92 Appendix B

Belden® products passing the FT6 Horizontal Flame and Smoke Test are designated FT6 in the column where the trade number appears. This test is for cables which must pass a Horizontal Flame and Smoke Test in accordance with ANSI/NFPA Standard 262-1985 (UL-910). The maximum flame spread shall be 1.50 meters (4.92 ft.). The smoke density shall be 0.5 at peak optical density and 0.15 at maximum average optical density.

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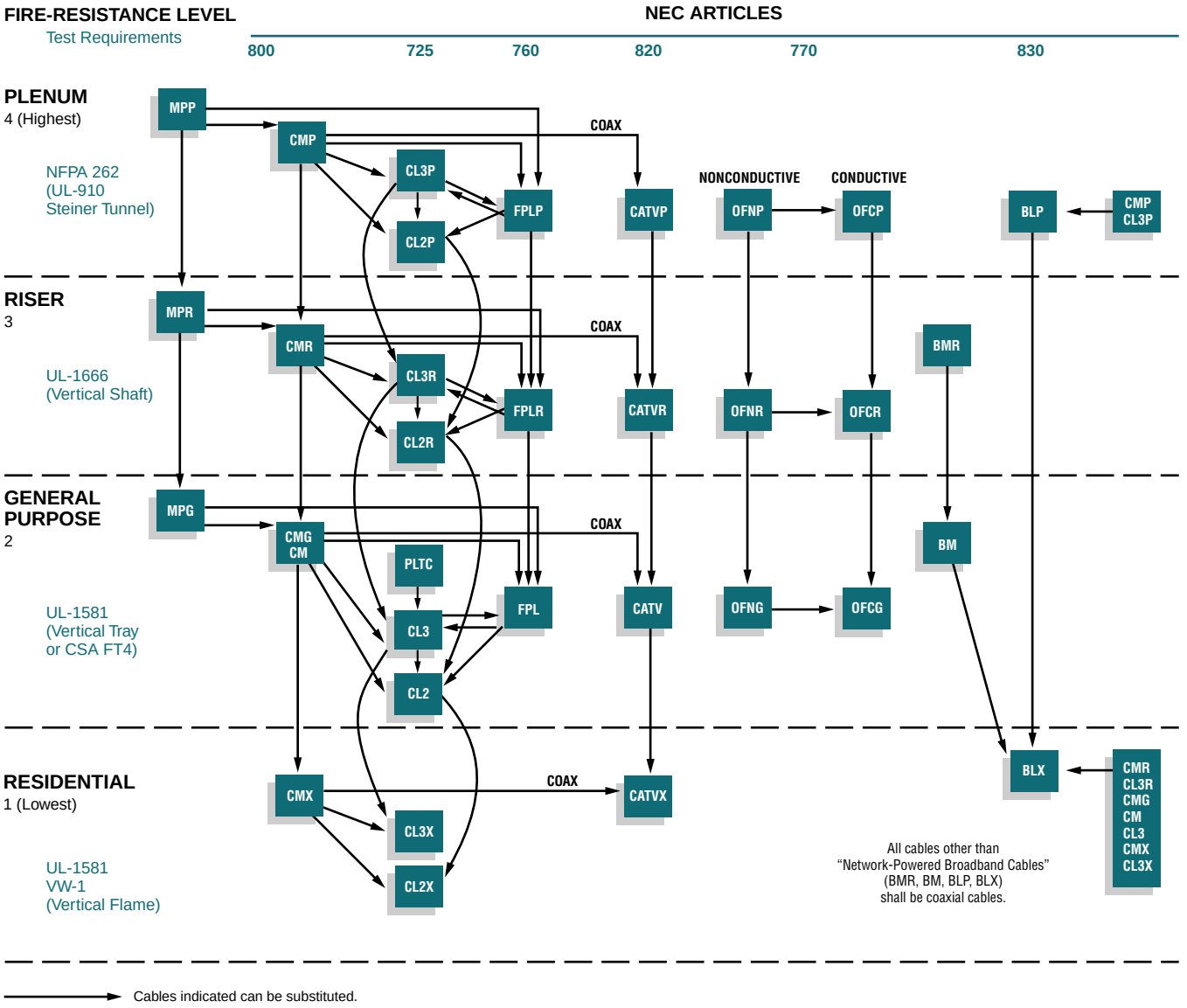
Cable Substitution Chart

Per 2002 NEC®



NEC Type	Definition
MPP, MPR, MPG, MP	Multipurpose Cables
CMP, CMR, CMG, CM, CMX	Communications Cables
CL3P, CL3R, CL3, CL3X, CL2P, CL2R, CL2, CL2X	Class 2 and Class 3 Remote-Control, Signaling and Power Limited Cables
FPLP, FPLR, FPL	Power Limited Fire Alarm Cables
CATVP, CATVR, CATV, CATVX	Community Antenna Television and Radio Distribution Cables
OFNP, OFNR, OFNG, OFN	Nonconductive Optical Fiber Cables
OFCP, OFCR, OFCG, OFC	Conductive Optical Fiber Cables
PLTC	Power Limited Tray Cables
BMR, BM, BLP, BLX	Network-powered Broadband Communications Cable

National Electrical Code and NEC are registered trademarks of the National Fire Protection Association, Inc., Quincy, MA.

Glossary of Terms

5-Mil Copper — Solid Copper Shield. Provides added electrical protection.

802.14 — IEEE's Cable TV MAC and PHY Protocol Working Group.

A — Ampere.

ABR — Available Bit Rate.

Abrasion Resistance — Ability of a wire, cable or material to resist surface wear.

Abrasion Stripper — More accurately described as "buffing stripper," which is a motorized device for removing flat cable insulation by means of one or two buffing wheels that melt the insulation and brush it away from the conductors.

AC — Alternating current. Electric current that alternates or reverses polarity in a cyclical manner (e.g. 60 Hz AC power).

Accelerated Aging — A test that simulates long time environmental conditions in a relatively short time.

ACR — Attenuation Crosstalk Ratio. The difference between attenuation and crosstalk, measured in dB, at a given frequency. Important characteristic in networking transmission to assure that signal sent down a twisted pair is stronger at the receiving end of the cable than are any interference signals imposed on that same pair by crosstalk from other pairs.

ADSL — Asymmetric Digital Subscriber Line.

AES/EBU — Informal name of a digital audio standard established jointly by the AES (Audio Engineering Society) and EBU (European Broadcast Union) organizations.

AF — Audio frequency.

Air Core — Cables that are not gel filled.

Air-Gap Dielectric — A coaxial design in which a monofilament of plastic holds the center conductor in place in a hollow plastic tube allowing the remainder of the dielectric to be air. Typical velocities of up to 84% can be achieved in this design.

Alloy — A combination of two or more different polymers/metals. Usually combined to make use of different properties of each polymer/metal.

Alpeth — Coated Aluminum Polyethylene. Basic sheath.

Alternating Current (AC) — Electric current that alternates or reverses polarity in a cyclical manner (e.g. 60 Hz AC power).

AM — Amplitude modulation.

Ambient — Conditions that exist in the environment of the cable. Conditions existing at a test or operating location prior to energizing equipment (e.g. ambient temperature).

American Wire Gage (AWG) — A standard for expressing wire diameter. As the AWG number gets smaller, the wire diameter gets larger.

Ampacity — Current handling capability expressed in amperes. The maximum current a conductor can carry without being heated beyond a safe limit.

Ampere — A standard unit of current. Defined as the amount of current that flows when one volt of electromotive force (EMF) is applied across one ohm of resistance. One ampere of current is produced by one coulomb of charge passing a point in one second.

Amplitude — The magnitude of a current or voltage. It can be the maximum, minimum, average or RMS value of an alternating current (AC) signal. These four magnitudes are the same for a direct current (DC) signal.

Analog — Representation of data by continuously variable quantities as opposed to a finite number of discrete quantities in digital.

Analog Signal — An electrical signal which varies continuously, not having discrete values. Analog signals are copies or representations of other waves in nature. An analog audio signal, for instance, is a representation of the pressure waves which make up audible sound.

Anneal — To soften and relieve strains in any solid material, such as metal or glass, by heating to just below its melting point and then slowly cooling it. Annealing generally lowers the tensile strength of the material, while improving its flex life and flexibility.

ANSI — American National Standards Institute.

ASP — Aluminum Steel Polyethylene. Provides mechanical and electrical protection.

ASTM — The American Society for Testing and Materials, a standards organization which suggests test methods, definitions and practices.

Asynchronous Transfer Mode — The SONET standard for a packet switching technique which uses packets of a fixed length.

ATM — Asynchronous Transfer Mode.

Attenuation — The decrease in magnitude of a signal as it travels through any transmitting medium, such as a cable or circuitry. Attenuation is usually expressed logarithmically as the ratio of the original and decreased signal amplitudes. It is usually expressed in decibels (dB).

Audio — A term used to describe sounds within the range of human hearing (20 Hz to 20 kHz). Also used to describe devices which are designed to operate within this range.

Audio Frequency — Frequencies within the range of human hearing (approximately 20 Hz to 20 kHz).

AWG — American Wire Gage. A wire diameter specification. The smaller the AWG number, the larger the wire diameter.

AWM — Appliance Wiring Material. A UL designation for a type of wire.

Backbone — The cable used to connect all systems of a multi-level distributed system to an intermediate system.

Backshell — Housing on a connector that covers the area where the cable conductors connect to the connector contacts. It can be a metal housing providing continuity of the shield through IDC connectors.

Balanced Line — A cable having two identical conductors which carry voltages opposite in polarity, but equal in magnitude with respect to ground, suitable for differential signal transmission.

Balun — Balanced to unbalanced (Bal-un) transformer used to connect an unbalanced transmission line (i.e. coaxial cable) to a balanced system or cable, or vice versa. It can also provide impedance transformation, as 300 ohm balanced to 75 ohm unbalanced.

Bandwidth — The difference between the upper and lower limits of a given band of frequencies. It is expressed in Hertz. The range of frequencies that a transmitted communications signal occupies or that a receiving system can accept. For example, it takes more bandwidth to download a photograph in a second than to download a page of text. Virtual reality and three-dimensional audio/visual presentations require even more.

Baud — Rate of digital transmission equal to the reciprocal of the time of one output signaling element.

Bel — A unit that represents the logarithm of the ratio of two levels. One bel equals the base 10 logarithm of the ratio of two power levels. It is also equal to the base 10 logarithm of square of the ratio of two voltage or current levels, provided the impedances are the same at the two levels. (See *dB*.)

Belden — A leading manufacturer of the specialty wire, cable and fiber products needed for new applications in data, audio, video and voice signal transmission, among other things.

Beldfoil® — Belden trademark for highly effective electrostatic shield of reinforced metallic foil.

Beldsol™ — Solderable Belden magnet wire combining insulating films of polyurethane for excellent dielectric characteristics and nylon for mechanical protection.

Bend Loss — A form of increased attenuation caused by (a) having an optical fiber curved around a restrictive radius of curvature or (b) microbends caused by minute distortions in the fiber imposed by externally induced perturbations.

Bend Radius — Radius of curvature that a flat, round fiber optic or metallic cable can bend without any adverse effects.

Binder — A tape or thread used for holding assembled cable components in place.

Bit — One binary digit.

Bit Error Rate — The number of errors occurring in a system per unit of time (e.g. bits per second).

Bits Per Second — The number of binary bits that can be transmitted per second (bps), i.e. Mbps (Mega = million), Gbps (Giga = billion).

BNC — Abbreviation for "Bayonet Neil-Concelman." A coaxial cable connector used extensively in video and RF applications and named for its inventors.

Glossary of Terms

Bonded — 1. Adhesive application of a metallic shielding tape to the dielectric of a coaxial cable to improve electrical performance and ease of connector installation. Also refers to adhesive application of a metallic shielding taper to the jacket of a cable. 2. Steel is bonded to polyethylene with a copolymer adhesive. All Stalpeth and some ASP cables are bonded. Provides extra strength to jacket, primarily used in underground applications.

Bonded ASP — Aluminum Steel Polyethylene where the steel is bonded to polyethylene for strength. Filled cables for use in ducts.

Bonding — The method used to produce good electrical contact between metallic parts of any device. Used extensively in automobiles and aircraft to prevent static buildup. Also refers to the connectors and straps used to bond equipment.

Booster — An amplifier inserted into a cable to increase the signal amplitude in order to compensate for signal loss due to attenuation. This extends the transmission range of the cable. Transformers may be employed to boost AC voltages. The term booster is also applied to amplifiers used in television receiving antenna systems.

BPS — Bits per second. (See *Bits Per Second*.)

BPSK — Binary Phase Sift Keying. A type of digital transmission where two phases of the signal are possible to represent binary one and zero.

Braid — A group of textile or metallic filaments interwoven to form a tubular flexible structure which may be applied over one or more wires or flattened to form a strap.

Braid Angle — The angle between a strand of wire in a braid shield and the longitudinal axis (i.e. axis along the length of the center) of the cable it is wound around.

Breakdown Voltage — The voltage at which the insulation between two conductors will fail and allow electricity to conduct or "arc."

Breakout — The point at which a conductor or conductors are separated from a multi-conductor cable to complete circuits at various points along the main cable.

BRI — Basic Rate Interface ISDN.

Broadband — The technique used to multiplex multiple networks on a single cable without interfering with each other. Technologies that allow you to transmit or receive higher volumes of data at higher speeds.

Buffer — A protective coating over an optical fiber.

Buffing Stripper — A motorized device for removing flat cable insulation by means of one or two buffing wheels that melt the insulation and brush it away from the conductors. Also called Abrasion Stripper.

Bunch Strand — Conductors twisted together with the same lay and direction without regard to geometric pattern.

Buried — Cables that are required to go underground.

Bus-bar Wire — Uninsulated tinned copper wire used as a common lead.

Butyl Rubber — A synthetic rubber with good electrical insulating properties.

Byte — A group of eight adjacent binary digits (8 bits).

C — Capacitance (electrical). Celsius (temperature).

Cable — A group of individually insulated conductors or subcomponents twisted helically.

Cable Modem — A device that enables you to hook up your PC to a local cable TV line and receive data at much faster rates than telephone modems and ISDN lines. A strong competitor to DSL telephone service.

Cabling — The grouping or twisting together of two or more insulated conductors or subcomponents to form a cable.

CACSP — Coated Aluminum, Coated Steel, Polyethylene. Provides additional strength and protection.

Canadian Electrical Code (CEC) — Canadian version of the US National Electrical Code (NEC).

CAP — Carrierless Amplitude Phase Modulation.

Capacitance — The ability of a dielectric material between conductors to store energy when a difference of potential exists between the conductors. The unit of measurement is the farad. Cable capacitance is usually measured in picofarads (pF).

Capacitive Crosstalk — Cable crosstalk or interference resulting from the coupling of the electrostatic field of one conductor upon one or more others.

Capacitive Reactance — The opposition to alternating current due to the capacitance of a capacitor, cable or circuit. It is measured in ohms and is equal to $1/(2*pi*f*C)$ where pi is approximately 3.1416, f is the frequency in Hz and C is the capacitance in farads.

Capacitor — Two conducting surfaces separated by a dielectric material. The capacitance is determined by the area of the surfaces, type of dielectric and spacing between the conducting surfaces.

Carrier Strip — Also referred to as substrate. A film that is on one side of a laminated flat cable.

CASPIC — Coated Aluminum, Coated Steel.

Category — Rating of a local area network (LAN) cable established by TIA/EIA to indicate the level of electrical performance.

Category Cables — Belden manufactures Category 3 to 7 cables, all high performance twisted pair data cables. The higher the category number, the greater the bandwidth. Category 7 is currently the highest performance telecommunication wire available. Ours is certified to applicable UL standards.

CATV — Abbreviation for Community Antenna Television. Cable TV.

CB — Citizens band.

CBR — Constant Bit Rate.

CCTV — Closed-circuit television.

Cellular Polyethylene — Expanded or "foam" polyethylene, consists of individual closed cells of inert gas suspended in a polyethylene medium. The result is a desirable reduction of the dielectric constant compared to solid polyethylene, which decreases attenuation and increases the velocity of propagation.

Center-to-Center Distance — Pitch. Nominal distance from center-to-center of adjacent conductors within a cable. When conductors are flat, pitch is usually measured from the reference edge of a conductor to the reference edge of the adjacent conductor.

Channel — The horizontal cable including the workstation outlet and patch panel in the telecommunications closet plus a maximum combined length of up to ten meters of patch cable at each end (maximum length of 100 meters).

Characteristic Impedance — In a transmission cable of infinite length, the ratio of the applied voltage to the resultant current at the point the voltage is applied. Or the impedance which makes a transmission cable seem infinitely long, when connected across the cable's output terminals.

Chrominance Signal — The portion of a video signal that contains the color information.

Circuit — A system of conducting media designed to pass an electric current.

Circular Mil — Area of a wire that is one-thousandth of an inch (.001 inch, one mil) in diameter. This area is pi/4 of a square mil. The circular mil area (CMA, cmil) equals the diameter in mils squared. By knowing the CMA of various conductors, they can be used to determine what conductivity and gage size various combinations will produce.

Cladding — A low refractive index material that surrounds the core of an optical fiber causing the transmitted light to travel down the core and protects against surface contaminant scattering or a layer of metal applied over another. Cladding is often chosen to improve conductivity or to resist corrosion.

CO — Central Office.

Coaxial Cable — A cylindrical transmission line composed of a conductor centered inside a metallic tube or shield, separated by a dielectric material, and usually covered by an insulating jacket. Used by cable TV companies to distribute signals to homes and businesses. Also used by telephone companies in some applications and by cellular telephone, radio and television installations.

Coil Effect — The inductive effect exhibited by a spiral-wrapped shield, especially above audio frequencies.

Color Code — A system of different colors or stripes used to identify components of cables such as individual conductors or groups of conductors.

COLS — Commercial Online Service.

Glossary of Terms

Component Video — The unencoded output of a camera, video tape recorder, etc., whereby each red, green, and blue video signal is transmitted down a separate cable (usually coax) to improve picture quality. Can also refer to a video system where the luminance and chrominance video components are kept separate.

Composite Cable — Cable having conductors with two or more AWG sizes or more than one cable type.

Composite Video — The encoded output of a camera, video tape recorder, etc., whereby the red, green and blue video signals are combined with the synchronizing, blanking and color burst signals and are transmitted simultaneously down one cable.

Concentric Stranding — A group of uninsulated wires twisted together and containing a center core with subsequent layers spirally wrapped around the core with alternating lay directions to form a single conductor.

Conductivity — The ability of a material to allow electrons to flow, measured by the current per unit of voltage applied. It is the reciprocal of resistivity and is measured in siemens (S) or mhos.

Conductor — A substance, usually metal, used to transfer electrical energy from point to point.

Conduit — A tube of metal or plastic through which wire or cable can be run. Used to protect the wire or cable and, in the case of metal conduit, to contain the fire of a burning wire or cable.

Connector — A device designed to allow electrical flow from one wire or cable to a device on another cable. A connector will allow interruption of the circuit or the transfer to another circuit without any cutting of wire or cable or other preparation.

Copperweld® — Trademark of Copperweld Steel Co. for copper-clad steel conductor.

Cord — A very flexible insulated cable.

Core — The light conducting central portion of an optical fiber with a refractive index higher than that of the cladding. The center of a cable construction. Most often applies to a coaxial cable, where the core is the center conductor and the dielectric material applied to it.

Corona — The ionization of gasses about a conductor that results when the potential gradient reaches a certain value.

Coupling — The transfer of energy (without direct electrical contact) between two or more cables or components of a circuit.

Coverage — How well a metal shield covers the underlying surface. Measured in percent.

CPE — Chlorinated polyethylene can be used as either a thermoplastic or thermoset. It is a tough chemical- and oil-resistant material and makes an excellent jacket for industrial control cable. As a thermoset, it can be used as an oil-resistant cord jacket. Other outstanding properties include low water absorption and superior crush resistance, which are important attributes in industrial control applications.

CPS — Abbreviation for cycles per second. This term has been replaced by Hertz is common usage.

CPU — Central Processing Unit.

Crosstalk — A type of interference caused by signals from one pair or cable being coupled into adjacent pairs or cables. Can occur with audio, data or RF signals.

CRT — Cathode Ray Tube.

CSA — Abbreviation for Canadian Standards Association, the Canadian version of the Underwriters Laboratories.

CSMA/CD — Carrier Sense Multiple Access/ Collision Detection.

CSR — Customer Service Representative.

CUPIC — Copper.

Current Carrying Capacity — The maximum current a conductor can carry without being heated beyond a safe limit. Ampacity.

Current Loop — A two wire transmit/receive interface.

Current, Alternating (AC) — Electric current that alternates or reverses polarity in a cyclical manner (e.g. 60 Hz AC power).

Current, Direct (DC) — Electrical current whose electrons flow in one direction only and is generally constant.

Cut-through Resistance — A test to determine the ability of a material to withstand the application of blades or sharp edges without being cut.

D1 — A component digital video recording format that conforms to the CCIR-601 standard. Records on 19 mm magnetic tape. (Often used incorrectly to indicate component digital video.)

D2 — A composite digital video recording format. Records on 19 mm magnetic tape.

D3 — A composite digital video recording format. Records on 1/2 inch (12.7 mm) magnetic tape.

Daisy Chain — A cable assembly with three or more termination areas.

Datalene® — Belden trademark for foam polyolefin.

DAVIC — Digital Audio Video Council.

dB — Decibel.

DBS — Direct Broadcast Satellite.

DC — Direct current.

DC Resistance — See *Resistance.*

Decibel (dB) — A decibel is one-tenth of a bel and is equal to 10 times the logarithm of the power ratio, 20 times the log of the voltage ratio, or 20 times the log of the current ratio. Decibels are also used to express acoustic power, such as the apparent level of a sound. The decibel can express an actual level only when comparing with some definite reference level that is assumed to be zero dB.

Delay Line — A transmission line or equivalent device designed to delay a wave or signal for a specific length of time.

DEPIC — Dual Expanded Plastic Insulated Conductor (Foam Skin). Decreases outside diameter of cable.

Derating Factor — A multiplier used to reduce the current carrying capacity of conductors in more adverse environments, such as higher temperature, or where multiple conductors are together in one conduit.

DES — Data Encryption Standard.

DHCP — Dynamic Host Configuration Protocol.

Dielectric — An insulating (nonconducting) medium. It is the insulating material between conductors carrying a signal in a cable. In coaxial cables it is between the center conductor and the outer conductor. In twisted pair cables it is the insulation between conductors plus any surrounding air or other material.

Dielectric Breakdown — Any change in the properties of a dielectric that causes it to become conductive. Normally a catastrophic failure of an insulation because of excessive voltage.

Dielectric Constant — Also called relative permittivity. That property of a dielectric which determines the amount of electrostatic energy that can be stored by the material when a given voltage is applied to it. Actually, the ratio of the capacitance of a capacitor using the dielectric to the capacitance of an identical capacitor using a vacuum (which has a dielectric constant of 1) as a dielectric. A number which indicates the quality of a material to resist holding an electrical charge when placed between two conductors.

Dielectric Heating — The heating of an insulating material when placed in a radio-frequency field, caused by internal losses during the rapid polarization reversal of molecules in the material.

Dielectric Loss — The power dissipated in a dielectric as the result of the friction produced by molecular motion when an alternating electric field is applied.

Dielectric Strength — The voltage an insulation can withstand before it breaks down. Usually expressed as volts per mil.

Dielectric Withstand Voltage — The voltage an insulation can withstand before it breaks down. Usually expressed as volts per mil.

Digital Signal — An electrical signal which possesses two distinct states (on/off, positive/negative).

Dispersion — The cause of bandwidth limitations in an optical fiber. Dispersion causes a broadening of input pulses along the length of the fiber. Two major types are (a) mode dispersion caused by differential optical path lengths in a multimode fiber, and (b) material dispersion caused by a differential delay of various wavelengths of light in a wave guide material.

Distortion — Any undesired change in a wave form or signal.

Distribution Cable — In a CATV system, the transmission cable between the distribution amplifier and the drop cable.

Glossary of Terms

Disturbed Conductor — A conductor that receives energy generated by the field of another conductor or an external source, e.g. the quiet line.

DMT — Discrete Multitone.

DOCSIS — Data Over Cable Service Interface Specification™. Defines interface requirements for cable modems involved in high-speed data distribution over cable television system networks.

Drain Wire — A non-insulated wire in contact with parts of a cable, usually the shield, and used in the termination to that shield and as a ground connection.

Drop Cable — In a CATV system, the transmission cable from the distribution cable to a dwelling.

DSL — Digital Subscriber Line. A technology for bringing high-bandwidth information to homes and small businesses over ordinary copper telephone lines. A DSL line can carry both data and voice signals, with the data part of the line remaining continuously connected. Currently competes with the cable modem in bringing broadband services to homes and small businesses.

Duobond® II — Belden trademark for a laminated shielding tape consisting of heat sensitive adhesive, aluminum foil, polyester or polypropylene and aluminum foil.

Duobond Plus® — Belden trademark for a foil/braid/foil connection with a shorting fold in the outermost shield.

Duofoil® — Belden trademark for a shield in which metallic foil is applied to both sides of a supporting plastic film.

DVB — Digital Video Broadcasting.

E — Voltage (electromotive force).

Earth — British terminology for zero-reference ground.

Edge Margin — Margin.

EFP — Electronic Field Production. Video production for commercials, television shows and other non-news purposes done outside the studio.

EIA — Electronic Industries Association (formerly RMA or RETMA).

Elastomer — Any material that will return to its original dimensions after being stretched or distorted.

Electromagnetic — Referring to the combined electric and magnetic fields caused by electron motion through conductors.

Electromagnetic Coupling — The transfer of energy by means of a varying magnetic field. Inductive coupling.

Electron Volt — A measure of the energy gained by an electron passing through an electric field produced by one volt.

Electrostatic — Pertaining to static electricity or electricity at rest. An electric charge, for example.

Electrostatic Coupling — The transfer of energy by means of a varying electrostatic field. Capacitive coupling.

ELFEXT — Equal Level Far End Crosstalk (dB). A subtraction of attenuation from FEXT. By subtracting the attenuation, ELFEXT negates the effects of attenuation on the interference as it propagates down the cable, thus bringing it to an equal level.

Elongation — The increase in length of a wire or cable caused by longitudinal tension.

EMF — Electromotive force (voltage).

EMI — Electromagnetic Interference.

Energy — The capability of doing work.

Energy Dissipation — Loss of energy from a system due to the conversion of work energy into an undesirable form, usually heat. Dissipation of electrical energy occurs when current flows through a resistance.

ENG — Electronic News Gathering.

EPDM — Ethylene-propylene-diene monomer rubber. A chemically cross-linked elastomer with good electrical insulating properties and excellent flexibility at high and low temperatures. It has good insulation resistance and dielectric strength, as well as excellent abrasion resistance and mechanical properties. EPDM has better cut-through resistance than Silicone rubber, which it replaces in some applications.

EPR — Ethylene-propylene copolymer rubber. A material with good electrical insulating properties.

Equilay — More than one layer of helically laid wires with the length of the lay the same for each layer.

ETP — Abbreviation for a copper refining process called Electrolytic Tough Pitch. This process produces a conductor that is 99.95% pure copper (per ASTM B115) resulting in high conductivity.

eV — Electron volt.

Expanded Polyethylene — Expanded or "foam" polyethylene, consists of individual closed cells of inert gas suspended in a polyethylene medium, resulting in a desirable reduction of the dielectric constant.

Extruded Cable — Conductors are simultaneously insulated and the cable is formed by a continuous extrusion process.

f — Frequency.

Farad — A unit of capacity that will store one coulomb of electrical charge when one volt of electrical pressure is applied.

FAS — Fire Alarm and Signal Cable, CSA (Canadian Standards Association) Cable Designation.

FAQ — Frequently Asked Question.

FCFC — Abbreviation for flat conductor flat cable.

FDDI — Fiber Distributed Data Interface.

FEC — Forward Error Correction.

Feedback — Energy that is extracted from a high-level point in a circuit and applied to a lower level. Positive feedback reduces the stability of a device and is used to increase the sensitivity or produce oscillation in a system. Negative feedback, also called inverse feedback, increases the stability of a system as the feedback improves stability and fidelity.

Feeder Cable — In a CATV system, the transmission cable from the head end (signal pickup) to the trunk amplifier. Also called a trunk cable.

FEP — Fluorinated ethylene-propylene. A thermoplastic material with good electrical insulating properties and chemical and heat resistance.

Ferrous — Composed of and/or containing iron. A ferrous metal exhibits magnetic characteristics.

FEXT — Far End Crosstalk. Crosstalk induced on the pairs, measured at the far end of the cable, referenced to the near end input signal. Usually expressed in decibels (dB).

Fiber — A single, separate optical transmission element characterized by core and cladding.

Fiber Optics — Light transmission through optical fibers for communication and signaling. A technology that transmits information as light pulses along a glass or plastic fiber. Optical fiber carries much more information than conventional copper wire and is generally not subject to interference. Most telephone company long-distance lines are optical fiber. See RUS 1755.900.

Fiber to the home (FTTH) — A technology that provides voice, data and video services from the phone company's branch office to local customers over an all-fiber optic link. Still in its infancy, FTTH technology is substantially more expensive and labor-intensive to install and maintain than competing technologies.

Field — An area through which electric and/or magnetic lines of force pass.

Filled — Cables that are gel filled.

Fillers — Non-conducting components cabled with the insulated conductors or optical fibers to impart roundness, flexibility, tensile strength or a combination of all three to the cable.

Flamarrest® — Belden trademark for a plenum grade chloride-based thermoplastic jacketing material with low smoke and low flame spread properties; more flexible than traditional fluorocopolymer jacket materials. Cables jacketed with Flamarrest meet the UL Standard 910, Plenum Cable Flame Test.

Flame Resistance — The ability of a material not to fuel a flame once the source of heat is removed.

Flat Cable — Also referred to as planar and/or ribbon cable. Any cable with two or more parallel conductors in the same plane encapsulated by insulating material.

Flat Conductor — A conductor with a width-to-thickness ratio of arbitrarily 5 to 1 or greater.

Flat Conductor Cable — A flat cable with a plurality of flat conductors.

Glossary of Terms

Flex Life — The qualification of the number of times a cable may bend before breaking.

Flexibility — The ability of a cable to bend in a short radius. The ability of a cable to lay flat or conform to a surface as with microphone cables.

Floating — Referring to a circuit which has no connection to ground.

Fluorocopolymer — Generic term for PVDF.

FM — Frequency modulation.

Foam Polyethylene — Expanded or "foam" polyethylene, consists of individual closed cells of inert gas suspended in a polyethylene medium, resulting in a desirable reduction of the dielectric constant.

FR-TPE — FR-TPE, flame retarded thermoplastic elastomer, is a rubber-like plastic that has properties similar to rubber yet is processed as a thermoplastic. It is used as the insulation and jacket in an all TPE construction which meets UL 13 and 1277 industrial cable requirements. It has good electrical properties, abrasion resistance, colorability and flame retardance. This compound is ideal for cold weather applications.

FREP — Flame retardant ethylene propylene is a special flame retardant version of EPDM rubber. It is designed for use as an industrial control insulation and has excellent electrical characteristics, deformation resistance and also meets the flame retardant needs of industrial control cables.

Frequency — The number of times a periodic action occurs in one second. Measured in Hertz.

Frequency Response — The amplitude versus frequency characteristics of a device. Also may refer to the range of frequencies over which the device operates within prescribed performance.

Frequency, Power — Normally, the 50 or 60 Hz power used to operate most AC powered equipment. The frequency of AC power supplied by electric utilities companies.

FSK — Frequency Shift Keying.

FTTC — Fiber-to-the-Curb.

Gage — The physical diameter of a wire. A standard for expressing wire diameter. As the AWG number gets smaller, the wire diameter gets larger.

Gain — The increase of voltage, current, or power over a standard or previous reading. Usually expressed in decibels (dB).

Geosol — A solderable, extra tough film insulation developed by Belden for use in geophysical cables and miniature cables.

Giga — One billion.

Gigahertz (GHz) — A unit of frequency equal to one billion Hz.

GND — Ground.

Gopher — Gopher Resistant Copper Alloy. Provides shield and added protection in a single layer.

GOPIC — Gopher.

Graded-Index — A type of optical fiber in which the refractive index of the core is in the form of a parabolic curve, decreasing toward the cladding. This type of fiber provides high bandwidth capabilities.

Ground — An electrical connection between a circuit and the earth. Also refers to a conductor connected to earth. In some instances, can refer to a central metallic point designated as having zero potential.

Ground Conductor — A conductor in a transmission cable or line that is grounded.

Ground Loop — A completed circuit between shielded pairs of a multiple pair created by random contact between shields. An undesirable circuit condition in which interference is created by ground currents when grounds are connected at more than one point.

Ground Potential — The potential of the earth. A circuit, terminal, or chassis is said to be at ground potential when it is used as a reference point for other potentials in the system.

H — Symbolic designation for magnetic field intensity. Abbreviation for henrys (unit of inductance).

Halar® — An Ausimont Corporation trademark for thermoplastic fluoropolymer material with excellent chemical resistance, electrical properties, thermal characteristics and impact resistance.

Haloarrest® I — Haloarrest I is a non-halogenated flame retarded thermoplastic polyolefin with excellent low smoke and flame properties. It is used as a jacket over the XLPE insulated singles (non-XHHW), and the entire construction meets the UL 13 and 1277 specifications as a non-halogenated PLTC/TC cable. Haloarrest I meets the European Specifications on acid gas evolution and % Halogen content. This jacket can also be used with XHHW conductors for wet ratings.

Harness — A flat cable or group of cables, usually with many breakouts with the wire ends prepared for termination or terminated to connectors and ready to install.

HDSL — High bit-rate Digital Subscriber Line.

Headroom — The amount by which a cable ACR exceeds the specified requirements. The TIA/EIA-568B standard specifies a minimum of 10 dB of ACR for Category 5e certification at 100 MHz.

Henry — Unit of inductance (H) that will produce a voltage drop of one volt when the current changes at the rate of one ampere per second.

Hertz (Hz) — Unit of frequency equal to one cycle per second.

Heterogeneous Insulation — A cable insulating system composed of two or more layers of different insulating materials.

HF — High Frequency. International Telecommunications Union designation for the 3 to 30 MHz band of frequencies.

HFC — Hybrid Fiber/Coaxial.

High Frequency — The band from 3 to 30 MHz in the radio spectrum, as designated by the Federal Communications Commission.

Homogeneous Insulation — A complete cable insulation structure whose components cannot be identified as layers of different materials.

Hook-Up Wire — Single conductor wire with various types of insulation.

Horizontal Cable — Cable used between the workstation outlet and the telecommunications closet. Limited to 90 meters maximum per TIA/EIA-568B.1.

HSCDS — High-Speed Cable Data Service.

HTML — Hypertext Markup Language.

HTTP — Hypertext Transfer Protocol.

Hum — Term used to describe noise in a audio, video or other system that comes from 60 Hz power or its harmonic(s). So named for the low-frequency humming sound produced in audio systems. Usually hum is the result of undesired coupling from a 60 Hz source or of inadequate filtering of the DC output of an AC input power supply.

Hypalon® — A DuPont trade name for a synthetic rubber (chlorosulfonated polyethylene) used as insulating and jacketing material for wire and cable.

I — Symbol used to designate current.

I/O Interconnection — Input/Output interface to the outside world.

I^2R — Formula for power in watts, where I = current in amperes, R = resistance in ohms.

ICEA — Insulated Cable Engineers Association.

IDC — Insulation Displacement Connector. Type of connector where contact is made to the cable conductor(s) by cutting through the individual conductor's insulation. The conductor does not need to have its insulation removed prior to connection. Flat cable often uses IDCs to simultaneously connect all conductors.

IDSL — ISDN Digital Subscriber Line.

IEEE — Institute of Electrical and Electronic Engineers.

IETF — Internet Engineering Task Force.

IF — Intermediate Frequency.

IFB — Interrupted Feedback (Foldback). A monitoring scheme often used in television where the feed of program audio to an on-air person can be interrupted with directions, cues or other information. Usually integrated into the intercom system.

IGMP — Internet Group Management Protocol.

Impedance — The total opposition that a circuit offers to the flow of alternating current or any other varying current at a particular frequency.

Impedance Match — A condition whereby the impedance of a particular circuit, cable or component is the same as the impedance of the circuit, cable or device to which it is connected.

Glossary of Terms

Impedance Matching Stub — A section of transmission line or pair of conductors cut to match the impedance of a load. Also called matching stub.

Impedance Matching Transformer — A transformer designed to match the impedance of one circuit to that of another.

Impedance, Characteristic — In a transmission cable of infinite length, the ratio of the applied voltage to the resultant current at the point the voltage is applied. Or the impedance which makes a transmission cable seem infinitely long, when connected across the cable's output terminals.

Impedance, High — Generally, the area of 25,000 ohms or higher.

Impedance, Low — Generally, the area of 1 through 600 ohms.

Index Edge — Reference Edge.

Inductance — The property of wire which stores electrical current in a magnetic field around the wire. By coiling wire, the effect can be intensified. It is measured in Henrys.

Induction — The phenomenon of a voltage, magnetic field or electrostatic charge being produced in an object from the source of such fields.

Induction Heating — Heating a conducting material by placing it in a rapidly changing magnetic field. The changing field induces electric currents in the material and losses account for the resultant heat.

Inductive Crosstalk — Crosstalk resulting from the coupling of the electromagnetic field of one conductor upon another.

Injection Laser Diode — Sometimes called the semiconductor diode. A laser in which the lasing occurs at the junction of N-type and P-type semiconductor materials.

INMS — Integrated Network Management System.

Input — A signal (or power) which is applied to a piece of electric apparatus or the terminals on the apparatus to which a signal or power is applied.

Insertion Loss — A measure of the attenuation of a cable and/or component(s) by determining the output of a system before and after the device is inserted into the system.

Insulation — A material having good dielectric properties which is used to separate close electrical components, such as cable conductors and circuit components.

Insulation Displacement Connector (IDC) — A mass termination connector for flat cable with contacts that displace the conductor insulation to complete termination.

Insulation Stress — The molecule separation pressure caused by a potential difference across an insulator. The practical stress on insulation is expressed in volts per mil.

Interface — The region where two systems or a major and a minor system meet and interact with each other.

Interference — Disturbances of an electrical or electromagnetic nature that introduce undesirable responses into other electronic equipment.

Intermediate Frequency — A frequency to which a signal is converted for ease of handling. Receives its name from the fact that it is an intermediate step between the initial and final conversion or detection stages.

Ionization — The formation of ions. Ions are produced when polar compounds are dissolved in a solvent and when a liquid, gas, or solid is caused to lose or gain electrons due to the passage of an electric current.

Ionization Voltage — The potential at which a material ionizes. The potential at which an atom gives up an electron.

IP — Internet Protocol.

IPCDN — IP Over Cable Data Network working group of the IETF.

IR — Insulation Resistance.

IR Drop — The designation of a voltage drop in terms of current and resistance. (See also *Voltage Drop*.)

IRC — Inter Relay Chat.

IRS — Ignition Radiation Suppression.

Integrated Services Digital Network — An alternative to telephone modems that allows digital transmission over ordinary telephone copper wire and other media. Home and business users can get highly graphic Web pages more quickly through ISDN adapters than through dial-up connections.

ISO — International Standards Organization.

Isolation — The ability of a circuit or component to reject interference, usually expressed in dB.

ISP — Internet Service Provider.

ITFS — Instructional Television Fixed Service.

ITU — International Telecommunications Union.

Jacket — Pertaining to wire and cable, the outer protective covering that may also provide additional insulation.

Jumper — A short length of conductor or flat cable used to make a connection between terminals or around a break in a circuit or between circuit boards.

kB — Kilobyte.

keV — 1000 electron volts.

Kilo — One thousand.

KPSI — Tensile strength in thousands of pounds per square inch.

kV — Kilovolt (1000 volts).

kVA — Kilo Volt-ampere. One thousand volt-amperes (VA). (See also *VA*.)

kW — Kilowatt.

L — Symbol for inductance.

Laminated Cable — Insulated or uninsulated wires which are encapsulated by two sheets of laminate material to maintain a predetermined pitch.

LAN — Local Area Network. A data network connecting any number of users, intended to serve a small area. A group of computers and associated devices that shares a common communications line and typically shares the resources of a single processor or server within a small geographic area.

Laser — A coherent source of light with a narrow beam and a narrow spectral bandwidth (about 2nm).

Lay — The length measured along the axis of a wire or cable required for a single strand (in stranded wire) or conductor (in cable) to make one complete turn about the axis of the conductor or cable. In a twisted pair cable, the lay length is the distance it takes for the two wires to completely twist around each other.

Lay Direction — The direction of the progressing spiral twist in a cable while looking along the axis of the cable away from the observer. The lay direction can be either left or right.

Lead Dress — The placement or routing of wiring and component leads in an electrical circuit.

Lead-in — The cable that provides the path for RF energy between the antenna and the receiver or transmitter.

Leakage — The undesirable passage of current over the surface of or through an insulator.

LEC — Local Exchange Carrier.

Level — A measure of the difference between a quantity or value and an established reference.

LF — Low frequency.

Light Emitting Diode (LED Source) — A semiconductor device that emits incoherent light formed by the P-N junction. Light intensity is roughly proportional to electrical current flow.

Limpness — The ability of a cable to lay flat or conform to a surface as with microphone cables. The ability of a cable to bend in a short radius.

Line Drop — A voltage loss occurring between any two points in a power or transmission line. Such loss or drop is due to the resistance, reactance or leakage of the line. (See also *Voltage Drop* and *IR Drop*.)

Line Equalizer — A reactance (inductance and/or capacitance) connected in series with a transmission line to alter the frequency-response characteristics of the line.

Line Level — Refers to the output voltage level of a piece of electronic equipment. Usually expressed in decibels (e.g. 0 dBV).

Line Voltage — The value of the potential existing on a supply or power line.

LMDS — Local Multipoint Distribution Service

Load — A device that consumes power from a source and uses that power to perform a function.

Glossary of Terms

Loaded Line — A transmission line that has lumped elements (inductance or capacitance) added at uniformly spaced intervals. Loading is used to provide a given set of characteristics to a transmission line.

Loading — A transmission line that has lumped elements (inductance or capacitance) added at uniformly spaced intervals. Loading is used to provide a given set of characteristics to a transmission line.

Local Area Network — A data network connecting any number of users, intended to serve a small area. (See also *LAN*.)

Long-wire Antenna — An antenna conductor length in excess of one-half of a wavelength.

Loss — Energy or signal lost without accomplishing useful work.

Lossy — Having high losses resulting in efficiency.

Low Frequency — International Telecommunications Union designation for the 3 to 30 MHz band of frequencies.

Luminance Signal — The portion of the composite video signal that represents the brightness or the black and white information.

m — Prefix for milli or one-thousandth.

M — Mutual inductance. The abbreviation for mega or 1 million. And also indicates 1000 (one thousand) feet in the wire industry. Lower case m is for milli or one-thousandth. (See also *m*.)

M′ — Notation representing 1000 feet.

mA — milliampere (one-thousandth of an ampere).

MAC — Media Access Control (layer of OSI Reference Model).

MAN — Metropolitan Area Network.

Manufacturing Automation Protocol — A manufacturing automation protocol based on IEEE 802.4 standards.

MAP — Manufacturing Automation Protocol.

Margin — Distance between reference edge of cable and nearest edge of first conductor or center of first conductor.

Mass-Termination — The process of simultaneously terminating all conductors in a single operation.

Matte Finish PVC — A special formulation of PVC which very closely looks and feels like rubber.

MATV — Abbreviation for Master Antenna Television.

MB — Megabyte.

Mbps — Mega bits per second. The number of bits, in millions, transmitted per second.

MCNS — Multimedia Cable Network System Partners Ltd.

MDS — Multipoint Distribution System.

Mega — Prefix meaning million.

Megahertz (MHz) — Unit of frequency equal to one million Hertz.

Metropolitan Area Network (MAN) — A data network intended to serve the area of a city or an area of similar size.

mfd — Microfarad (one-millionth of a farad). Modern abbreviation is µF (lower case Greek *mu* followed by F).

Mho — The unit of conductance equal to the reciprocal of the unit of resistance (ohm).

MHz — Megahertz. (See also *Megahertz*.)

Micro — Prefix meaning one-millionth.

Microfarad — One-millionth of a farad (µf, µfd, mf and mfd are common abbreviations).

Micromicrofarad — One-millionth of a microfarad (µµf, µµfd, mmf, mmfd are common abbreviations). Modern usage is picofarad (pF).

Micron — Millionth of a meter. (µ is a common abbreviation).

Microphonics — Noise caused by mechanical excitation of a system component. In a single-conductor microphone cable, for example, microphonics can be caused by the shield rubbing against the dielectric as the cable is flexed.

Mil — A unit of length equal to one thousandth of an inch (.001).

Milli — Prefix meaning one-thousandth.

Mode — A single electromagnetic wave traveling in an optical fiber.

Modem — Modulator-Demodulator. Device that converts signals in one form to another form compatible with another kind of equipment.

Modulation — Altering the characteristics of a carrier wave to convey information. Modulation techniques include amplitude frequency, phase, plus many other forms of on-off digital coding.

Molded Cable — Cable assemblies with molded connectors on one or both ends.

Mono Filament — A single strand filament as opposed to a braided or twisted filament.

MSO — Multiple System Operator. Cable TV term referring to companies that operate multiple cable TV systems in numerous cities.

MTP — Simple Mail Transfer Protocol.

Multi-Conductor Cable — Cable with more than one conductor.

Multiplex — A technique for putting two or more signals into a single channel.

Mutual Capacitance — Effective capacitance between two conductors when the effects of the other conductors and shield, if present, are removed.

mV — Millivolt (one-thousandth of a volt).

mW — Milliwatt (one-thousandth of a watt).

Mylar® — DuPont trademark for polyethylene terephtalate (polyester) film.

N — Type of coaxial connector named after its inventor, Paul Neil of Bell Labs. Also the symbol for Newton.

Nano — One-billionth.

Nanometer (nm) — One billionth of a meter.

Nanosecond — One billionth of a second.

NAP — Network Access Point.

National Electrical Code (NEC) — A publication of the National Fire Protection Association (NFPA) which outlines requirements for electrical wiring and building construction.

NBR — Butadiene-acrylonitrile copolymer rubber, a material with good oil and chemical resistance.

NEC — National Electrical Code.

NEMA — National Electrical Manufacturers Association.

Neoprene — A synthetic rubber with good resistance to oil, chemical, and flame. Also called polychloroprene.

Network — A method of data communications between computers.

NEXT — Near-end Crosstalk. Crosstalk induced on the pairs, measured at the end near the transmitter. Usually expressed in decibels (dB).

NFPA — National Fire Protection Association.

Nibble — One half byte (4 bits).

NOC — Network Operations Center.

Noise — In a cable or circuit, any extraneous signal which tends to interfere with the signal normally present in or passing through the system.

NOMEX® — DuPont trademark for a temperature-resistant, flame-retardant nylon.

Non-Paired Cable — Cable with two or more cabled conductors that are not in a paired configuration.

Non-Plenum — A description for a cable that does not meet the requirements of UL 910 CMP flame test. Such a cable cannot be installed in an area that is used for air return (plenum).

Notch — The removal of the web section between conductors of a flat cable to aid in stripping, slitting and termination.

NTSC — National Television System Committee. Organization that formulated standards for the current U.S. color television system. This system is used in most countries of the Americas and in other parts of the world. It was designed to be compatible with the existing monochrome TV sets, so that they would not become obsolete. Color televisions would also be able to receive monochrome transmissions. NTSC uses a 3.579545 MHz subcarrier whose phase varies with the instantaneous hue of the televised color and whose amplitude varies with the instantaneous saturation of the color. NTSC employs 525 lines per frame, 29.97 frames per second and 59.94 fields per second.

Numerical Aperture (NA) — A measure of the angular acceptance for a fiber. It is approximately the sine of the half-angle of the acceptance cone.

Glossary of Terms

Nylon — An abrasion-resistant thermoplastic with good chemical resistance.

OFDM — Orthogonal Frequency Division Multiplexing.

OFHC — Abbreviation for oxygen-free, high conductivity copper. It has 99.95% minimum copper content and an average annealed conductivity of 101% compared to standard copper.

Ohm — The unit of electrical resistance. The value of resistance through which a potential difference of one volt will maintain a current of one ampere.

Ohm's Law — Stated E=IR, I=E/R or R=E/I. The current I in a circuit is directly proportional to the voltage E, and inversely proportional to the resistance R.

Optical Waveguide Fiber — A transparent filament of high refractive index core and low refractive index cladding that transmits light.

OSI — Open System Interconnect (Model for networking protocols).

OSS — Operations Support Systems.

Output — The useful power or signal delivered by a circuit or device.

Ozone — Extremely reactive form of oxygen, normally occurring around electrical discharges and present in the atmosphere in small but active quantities. In sufficient concentrations it can break down certain rubber insulations under tension (such as a bent cable).

Paired Cable — Cable with conductors cabled in groups of two.

PAL — Phase Alternation Line. PAL is a European color TV system featuring 625 lines per frame, 25 frames and 50 fields per second. Used mainly in Europe, China, Malaysia, Australia, New Zealand, the Middle East, and parts of Africa. PAL-M is a Brazilian color TV system with 525 lines per frame, 30 frames and 60 fields per second.

Parallel Circuit — A circuit in which the identical voltage is presented to all components, with current dividing among the components according to the resistances or the impedances of the components.

Parallel Digital — Digital information that is transmitted in parallel form. The digits are sent on separate conductors rather than sequentially on one transmission line (serial). Often used informally to refer to parallel digital television signals.

PASP — Polyethylene Aluminum Steel Polyethylene. Provides additional lightning and gopher protection.

Patchcord — A flexible piece of cable terminated at both ends with plugs. Used for interconnecting circuits on a patchboard, in a wiring closet or at the work area.

PC — Personal Computer.

PE — Polyethylene.

Peak — The maximum instantaneous value of a varying current or voltage.

Peel Strength — The force necessary to separate two adjacent conductors of a bonded or laminated flat cable.

Periodicity — The uniformly spaced cable impedance variations that result in addition of the reflections of a signal. The distance between them is the half wavelength of the most affected frequency. Multiples of that frequency are also affected. Even very slight variations, which appear over and over in a construction or installation, can have major effects on signal integrity because of periodicity.

Permanent Link — The horizontal cable including the workstation outlet and patch panel in the telecommunications closet plus two meters of cable at each end for testing. Limited to a maximum of 90 meters in TIA/EIA-568B.1.

PFA — Perfluoroalkoxy.

Phase — An angular relationship between waves.

Phase Shift — A change in the phase relationship between two alternating quantities.

Photodetector (Receiver) — Converts light energy to electrical energy. The silicon photo diode is most commonly used for relatively fast speeds and good sensitivity in the .75 micron to .95 micron wavelength region. Avalanche photodiodes (APD) combine the detection of optical signals with internal amplification of photo-current. Internal gain is realized through avalanche multiplication of carriers in the junction region. The advantage in using an APD is its higher signal-to-noise ratio, especially at high bit rates.

PHY — Physical (layer of OSI Reference Model). (See also *Physical Layer*.)

Physical Layer — The actual portion of a network that is used to physically connect computers of a network and over which the data is transmitted — the cable.

PIC — Plastic Insulated Conductor. Provides strong insulation.

Pickup — Any device which is capable of transforming a measurable quantity of intelligence (such as sound) into relative electrical signals (e.g. a microphone).

Pico — One-trillionth.

Picofarad — One trillionth of a farad. A micromicrofarad. Abbreviated pF in modern usage or mmF in earlier usage.

Pin-diode — A photodetector used to convert optical signals to electrical signals in a receiver. (See also *Photodetector*.)

Pitch — Nominal distance from center-to-center of adjacent conductors within a cable. When conductors are flat, pitch is usually measured from the reference edge of a conductor to the reference edge of the adjacent conductor. Spacing.

Planar Cable — Also referred to as flat and/or ribbon cable. Any cable with two or more parallel conductors in the same plane encapsulated by insulating material.

Plastic — High polymeric substances, including both natural and synthetic products that are capable of flowing under heat and pressure, called thermoplastics. Unlike rubber and other thermoset compounds, plastics can be remelted and reused.

Plasticizer — A chemical added to plastics to make them softer and more flexible.

Plenum — A compartment or chamber to which one or more air ducts are connected and that forms part of the air distribution system. A description for a cable that passes the UL 910 CMP flame test requirements.

Plug — A male housing with male or female contacts.

Point-to-Point Wiring — Wiring that consists of continuous conductors terminated at each end to circuit destination.

Polarization — The orientation of a flat cable or a rectangular connector (e.g. for gray flat cable), the colored edge indicating the number one conductor.

Polybutadiene — A type of synthetic rubber often blended with other synthetic rubbers to improve their properties.

Polyethylene (PE) — A thermoplastic material having excellent electrical properties. Low dielectric constant, a stable dielectric constant over all frequencies, very high insulation resistance. In terms of flexibility, polyethylene can be rated stiff to very hard, depending on molecular weight and density — low density being the most flexible and the high-density, high-molecular weight formulation being very hard. Moisture resistance is rated excellent.

Polymer — A substance made of many repeating chemical units or molecules. The term polymer is often used in place of plastic, rubber or elastomer.

Polyolefin — Any of the polymers and copolymers of the ethylene family of hydrocarbons, such as polyethylene and polypropylene.

Polypropylene (PP) — A thermoplastic similar to polyethylene but stiffer and having a higher softening point (temperature). This material is primarily used as an insulation material. Typically, it is harder than polyethylene. This makes it suitable for thin wall insulations. The dielectric constant is 2.25 for solid and 1.55 for cellular designs.

Polyurethane (PUR) — Broad class of polymers noted for good abrasion and solvent resistance. Can be in solid or cellular form. This thermoplastic material is used primarily as a cable jacket material. It has excellent oxidation, oil, and ozone resistance. Some formulations also have good flame resistance. It is a hard material with excellent abrasion resistance. It has outstanding memory properties, making it an ideal jacket material for retractile cords.

Polyvinyl Chloride (PVC) — A general purpose thermoplastic used for wire and cable insulation and jackets.

Portable Cordage — Cable with two or more twisted conductors for flexible applications. Also called flexible cord.

Glossary of Terms

POTS — Plain Old Telephone Service. Sometimes used in discussions of new telephone technologies in which the question of whether and how existing voice transmission for ordinary telephone communication can be accommodated. For example, DSL and ISDN provide part of their channels for POTS, while using most of their bandwidth for digital data transmission.

Potting — Sealing by filling with a substance to exclude moisture.

Power — The amount of work per unit of time. Usually expressed in watts. Power equals the product of voltage and current (P = V x I).

Power Loss — The difference between the total power delivered to a circuit, cable or device and the power delivered by that device to a load.

Power Ratio — The ratio of power appearing at the load to the input power.

PP — Polypropylene.

PPP — Point-to-Point Protocol.

Precision Video — Video coaxial cables having very tight electrical tolerances in impedance, velocity of propagation, attenuation and return loss. Used in high quality applications such as live broadcast in network studios and pre- or post-production facilities.

Premise Cabling — Refers to the entire cabling system used for voice, data, video and power on a user's premise. For Local Area Networks, the cabling of choice includes unshielded twisted pairs (UTP), fiber optic and coaxial cables. Of these, the UTP market is the largest, with greatest demand for cables with four pairs that meet certain standards of performance, such as Category 5 and Category 5e.

PRI — Primary Rate Interface ISDN.

Propagation Delay — Time required for a signal to pass from the input to the output of a device.

Pseudo Random NRZ — A wave form of binary signals that may be used in a computer system. It is called NRZ, Non-Return to Zero, because the voltage does not return to zero after each bit.

PSTN — Public Switched Telephone Network.

Pulse — A current or voltage which changes abruptly from one value to another and back to the original value in a finite length of time. Used to describe one particular variation in a series of wave motions.

Put-up — Packaging of finished wire or cable.

PVC — Polyvinyl Chloride. (See also *Polyvinyl Chloride*.)

PVDF — Polyvinylidene Fluoride.

QAM — Quandrature Amplitude Modulation.

QOS — Quality of Service.

QPSK — Quaternary Phase Shift Keying or Quadrature PSK.

Hypalon is a DuPont trademark.

Quad — A four conductor cable. Also called star quad.

R — Symbol for resistance.

Radio Frequency (RF) — Radio Frequency. Includes frequencies from a few kilohertz to several gigahertz. Used to transmit information from point to point over the airwaves or cable.

RAM — Random Access Memory.

Rated Temperature — The maximum temperature at which an electric component can operate for extended periods without loss of its basic properties.

Rated Voltage — The maximum voltage at which an electric component can operate for extended periods without undue degradation or safety hazard.

RDC — Regional Data Center.

Reactance — A measure of the combined effects of capacitance and inductance on an alternating current. The amount of such opposition varies with the frequency of the current. The reactance of a capacitor decreases with an increase in frequency; the opposite occurs with an inductance.

Receiver — A unit that converts an RF signal to another type of signal (e.g. radio, television). Also refers to an electronic package that converts light energy to electrical energy in a fiber optic system. (See also *Photodetector*.)

Receptacle — A female housing with male or female contacts.

Reference Edge — Edge of cable or conductor from which measurements are made, such as in flat cable. Sometimes indicated by a thread, identification stripe or printing. Conductors are usually identified by their sequential position from the reference edge, with number one conductor closest to this edge.

Reflection — The change in direction (or return) of waves striking a surface. For example, electromagnetic energy reflections can occur at an impedance mismatch or variation in a transmission line, causing standing waves.

Reflection Loss — The part of a signal which is lost due to reflection of power at a line discontinuity.

Refractive Index — The ratio of light velocity in a vacuum to its velocity in the transmitting medium.

Registration — Alignment of one object with relation to another. In flat cables it involves aligning conductors with contacts or solder pads. Also called register.

Repeater — A receiver and transmitter combination used to regenerate an attenuated signal.

Resistance — In DC circuits, the opposition a material offers to current flow, measured in ohms. In AC circuits, resistance is the real component of impedance, and may be higher than the value measured at DC.

Resonance — An AC circuit condition in which inductive and capacitive reactances interact to cause a minimum or maximum circuit impedance.

Retractile Cord — A cord having specially treated insulation or jacket so that it will retract like a spring. Retractability may be added to all or part of a cord's length.

Return Loss — Measure of signal reflections from a cable or device with a fixed, standard reference impedance on the measuring equipment. Expressed in decibels (dB).

RF — Radio Frequency.

RFI — Radio Frequency Interference.

RFP — Request for Proposals.

RG/U — RG is the abbreviation for radio guide, a military designation for a coaxial cable, and U stands for universal.

RGB — Abbreviation for the three parts of color video signal: red, green and blue. Also refers to multi-coaxial cables carrying these signals.

Ribbon Cable — A flat cable made with parallel round conductors in the same plane. Also referred to as planar and/or flat cable. Any cable with two or more parallel conductors in the same plane encapsulated by insulating material.

Ringing Out — The process of locating or identifying specific conductor paths by means of passing a current through selected conductors.

RJ-45 — Modular telecommunications connector.

RL — Return Loss.

RMS — Root-mean-square.

Rope Strand — A conductor composed of groups of twisted strands.

Round Conductor Flat Cable (RCFC) — A cable made with parallel round conductors in the same plane.

Routing — The path followed by a cable or conductor.

RSVP — Resource Reservation Protocol.

RTP — Real-Time Transport Protocol.

Rubber (Wire Insulation) — A general term used to describe wire insulations made of thermosetting elastomers, such as natural or synthetic rubbers, neoprene, Hypalon® butyl rubber and others.

RUS 1755.900 (*aka* PE90) — A specification for fiber optic cables currently in high demand by the telecommunications industry. Only a handful of U.S. manufacturers can produce fiber optic cables to this specification. Belden is one of them.

S-CDMA — Synchronous Code Division Multiple Access.

S-HDSL — Single-pair High bit-rate Digital Subscriber Line.

SAE — Society of Automotive Engineers.

SBR — A copolymer of styrene and butadiene. Also GR-S or Buna-S. Most commonly used type of synthetic rubber.

ScTP — Screened Twisted Pair. Premise network cable with an overall foil shield.

SDI — Serial Digital Interface.

SDSL — Symmetric Digital Subscriber Line.

SEALPIC — Aluminum Shield. Sealed Aluminum.

Glossary of Terms

Self-extinguishing — The characteristic of a material that extinguishes its own flame after the igniting flame is removed.

Self-Support — Undulated core with aluminum, polyethylene and a support strand. For aerial use.

Semiconductor — In wire industry terminology, a material possessing electrical conductivity that falls somewhere between that of conductors and insulators. Usually made by adding carbon particles to an insulator. Not the same as semiconductor materials such as silicon, germanium, etc. Used for making transistors and diodes.

Semi-Solid Dielectric — A coaxial design in which a monofilament of plastic holds the center conductor in place in a hollow plastic tube allowing the remainder of the dielectric to be air. Typical velocities of up to 84% can be achieved in this design.

Separator — Pertaining to wire and cable, a layer of insulating material such as textile, paper, Mylar®, etc., which is placed between a conductor and its dielectric, between a cable jacket and the components it covers, or between various components of a multiple-conductor cable. It can be utilized to improve stripping qualities, flexibility or can offer additional mechanical or electrical protection to the components it separates.

Serial Digital — Digital information that is transmitted in serial form. SDI informally refers to serial digital television signals that conform to the SMPTE 259M standard.

Serial Digital Interface — Informally refers to serial digital television signals that conform to the SMPTE 259M standard.

Series Circuit — A circuit in which the components are arranged end to end to form a single path for current.

Serve Shield — A metallic shield consisting of several strands of wire, helically wound and laid parallel around a cable core in only one direction, as opposed to the two directions with interleaving of a braid shield.

Sheath — Pertaining to wire and cable, the outer protective covering, also called jacket, that may also provide additional insulation.

Shield — A tape, serve or braid (usually copper, aluminum or other conductive material) placed around or between electric circuits or cables or their components, to prevent signal leakage or interference.

Shield Coverage — The optical percentage of a cable actually covered by shielding material.

Shield Effectiveness — The relative ability of a shield to screen out undesirable interference or prevent signal leakage out of the cable. Frequently confused with the term shield coverage.

Shield Percentage — The percentage of physical area of a circuit or cable actually covered by shielding material.

Shielded Armored — Types of Shield: Aluminum, Aluminum/Steel and Copper. Cables that require some sort of shield.

Signal — Any visible or audible indication which can convey information. Also, the information conveyed through a communication system.

Signal Conductor — A conductor in a transmission cable or line that carries electrical signals.

Signal to Noise Ratio — Ratio of desired signal to undesired signal (noise) that is often expressed in decibels. Commonly used interchangeably with Attenuation Crosstalk Ratio (ACR) — the difference between attenuation and crosstalk, measured in decibels (dB), at a given frequency. Important characteristic in networking transmission to assure that signal sent down a twisted pair is stronger at the receiving end of the cable than are any interference signals imposed on that same pair by crosstalk from other pairs.

Silicone — A material made from silicon and oxygen. Can be in thermosetting elastomer or liquid form. The thermosetting elastomer form is noted for high heat resistance. This is a very soft thermoset insulation. It has excellent electrical properties plus ozone resistance, low moisture absorption, weather resistance, and radiation resistance. It typically has low mechanical strength and poor scuff resistance.

Single-mode Fiber — An optical fiber wave guide in which only one mode will propagate. The fiber has a very small core diameter of approximately 8 micro meters. It permits signal transmission at extremely high bandwidths and is generally used with laser diodes.

Single-ended — Unbalanced, such as grounding one side of a circuit or transmission line.

Sinusoidal — Varying in proportion to the sine of an angle or time function. Ordinary alternating current is sinusoidal.

Skew Rays — A ray that does not intersect the fiber axis. Generally, a light ray that enters the fiber core at a very high angle.

Skin Effect — The tendency of alternating current to travel only on the surface of a conductor as its frequency increases.

SMA — Subminiature A connector commonly used in VHF, UHF, RF and microwave applications.

SMB — Subminiature B connector snap-mount connector.

SMC — Subminiature C connector.

Snake Cable — A name given to individually shielded or individually shielded and jacketed, multi-pair audio cables. Used in the connection of multi-channel line level audio equipment.

SNMP — Simple Network Management Protocol.

SNR — Signal to Noise Ratio.

SONET — Synchronous Optical Network.

Source — The device from which a signal is marked into a cable. The device (usually LED or laser) used to convert an electrical information-carrying signal into a corresponding optical signal for transmission by an optical wave guide.

Spacing — The distance between the centers of two adjacent conductors. Pitch.

Span — The distance between the center of the first conductor and the center of the last conductor in a flat cable.

Spectral Bandwidth — The difference between wavelengths at which the radiant intensity of illumination is half its peak intensity.

Spectrum — Frequencies that exist in a continuous range and have a common characteristic. A spectrum may be inclusive of many spectrums (e.g. the electromagnetic radiation spectrum includes the light spectrum, radio spectrum, infrared spectrum, etc.).

Speed of Light (c) — Approximately 2.998×10^8 meters per second.

Splitter — A device that sends the signal from one source to two or more receiving devices by allocating a portion of the signal to each receiver (e.g. cable TV splitter). A device that divides a high bandwidth signal into two or more lower bandwidth signals, each carrying a selected frequency range. Users connected to a DSL line, for example, may have a splitter installed at their home or business to divide the incoming signal into low frequencies to send to their phone and high frequencies for data to the computer.

SRL — Structural Return Loss.

Stalpeth (DUCTPIC) — Aluminum steel bonded to the polyethylene jacket. Helps minimize jacket damage.

Standing Wave — The stationary pattern of waves produced by two waves of the same frequency traveling in opposite directions on the same transmission line. The existence of voltage and current maxima and minima along a transmission line is a result of reflected energy from an impedance mismatch.

Standing Wave Ratio (SWR) — A ratio of the maximum amplitude to the minimum amplitude of a standing wave stated in current or voltage amplitudes. (See also *Standing Wave*.)

Star Quad — Term given to 4-conductor microphone cables where the conductors are spiraled together, which, when connected in an x configuration, greatly increases common mode noise rejection.

Static Charge — An electrical charge that is bound to an object. An unmoving electrical charge.

Stay Cord — A component of a cable, usually of high tensile strength, used to anchor the cable ends at their points of termination and keep any pull on the cable from being transferred to the electrical conductors.

Step Insulated — Process of applying insulation in two layers. Typically used in shielded networking cables such that the outer layer of insulation can be removed and remaining conductor and insulation can be terminated in a RJ-45 type connector.

Step-index Fiber — An optical fiber in which the core is of a uniform refractive index with a sharp decrease in the index of refraction at the core/cladding interface.

Glossary of Terms

STP — Shielded Twisted Pair(s).

Strain Gage — A device for determining the amount of strain (change in dimensions) when a stress is applied.

Strand — A single uninsulated wire.

Stranded Conductor — A conductor composed of several strands or groups of uninsulated wires.

Strip — To remove insulation from a cable or wire.

Stripping Groove — The controlled thinning of the lamination between two conductors in a flat cable to allow easy hand separation. Tear feature.

Structural Return Loss — Magnitude of the internal cable reflections, measured in decibels (dB), relative to the actual cable impedance, not the system impedance. Measure of signal reflections caused by the structure of the cable without the additional reflections from any impedance mismatch between the cable and the measuring equipment. Measure of internal cable reflections using a reference impedance in the measuring equipment that is adjusted to the nominal or average impedance of the cable. (See also *Return Loss*.)

Surge — A temporary and relatively large increase in the voltage or current in an electric circuit or cable. Also called transient.

SVHS — Abbreviation for Super VHS. A video format in which the two parts of the video signal, the chrominance and luminance, are recorded and played back separately providing for better picture quality.

Sweep Test — Testing a characteristic of a cable or device across a range of frequencies. In cable, it usually implies return loss or structural return loss. (See also *Return Loss* or *Structural Return Loss*.)

TCP/IP — Transmission Control Protocol/ Internet Protocol.

TDMA — Time Division Multiple Access.

Tear Feature — The controlled thinning of the lamination between two conductors in a flat cable to allow easy hand separation.

Teflon® — DuPont Company trademark for fluorocarbon resins.

Tefzel® — DuPont Company trademark for a ETFE. Fluorocopolymer thermoplastic material which has excellent electrical properties, heat resistance, chemical resistance, toughness, radiation resistance and flame resistance.

Temperature Rating — The maximum temperature at which the insulating material or cable may be used in continuous operation without change in its basic properties.

Tensile Strength — The pull stress required to break a bare wire.

TFE — Tetrafluoroethylene. A thermoplastic material with good electrical insulating properties and chemical and heat resistance.

Thermal Rating — The temperature range in which a material will perform its function without undue degradation.

Thermoplastic — A material which will soften, flow or distort appreciably when subjected to sufficient heat and pressure. Examples are polyvinyl chloride and polyethylene.

Thermoset — A material which will not soften, flow or distort appreciably when subjected to heat and pressure. Vulcanizable. Examples are rubber and neoprene.

TIA — Telecommunications Industry Association. Body which authored the TIA/EIA-568-B Commercial Building Telecommunications Wiring Standard in conjunction with EIA.

TIA/EIA-568-B — Commercial Building Telecommunications Wiring Standard defines a generic telecommunications wiring system for commercial buildings that will support a multi-product, multi-vendor environment. It also provides direction for the design of telecommunications products for commercial enterprises.

Tinsel — A type of electrical conductor composed of a number of tiny threads, each thread having a fine, flat ribbon of copper or other metal closely spiraled about it. Used for small size cables requiring limpness and extra-long flex life.

Topcoated Wire — Conductor produced by applying a layer of tin over a stranded bare copper conductor holding the strands together allowing easier soldering and preventing the fraying of strands.

TP-PMD — Twisted Pair-Physical Medium Dependent.

Transducer — A device for converting one form of energy to another, such as mechanical energy to electrical energy.

Transfer Impedance — For a specified cable length, transfer impedance relates to a current on one surface of a shield to the voltage drop generated by this current on the opposite surface of the shield. Transfer impedance is used to determine shield effectiveness against both ingress and egress of interfering signals. Cable shields are normally designed to reduce the transfer of interference — hence, shields with lower transfer impedance are more effective than shields with higher transfer impedance.

Transmission Line — An arrangement of two or more conductors, such as a coaxial cable or a waveguide used to transfer signal energy from one location to another.

Transmission Line Cable — Two or more conductors placed within a dielectric material in such a way as to control the electrical characteristics.

Transmitter — Equipment that generates RF or electrical signals for transmission through the air or space or over a transmissions line. Also refers to the electronic package that converts electrical energy to light energy in a fiber optic system.

Triad Cable — Cable with three twisted conductors.

Triaxial Cable — A cable construction having a conductor and two isolated braid shields, all insulated from each other. A coaxial cable with a second braid applied over an inner jacket and an outer jacket applied over the outer braid. Commonly used in television camera systems.

Triboelectric Noise — Noise generated in a shielded cable due to variations in capacitance between the shield and conductors as the cable is flexed.

Trunk Cable — In a CATV system, the transmission cable from the head end (signal pickup) to the trunk amplifier. Also called a feeder cable.

Turn-key — A contractual arrangement in which one party designs and installs a system and turns over the keys to another party who will operate the system.

TVRO — TV Receive Only.

Twin-lead — A transmission line having two parallel conductors separated by insulating material. Line impedance is determined by the diameter and spacing of the conductors and the insulating material and is usually 300 ohms for television receiving antennas.

Twinax Cable — Cable with two twisted conductors with established electrical properties (one pair = two conductors sharing a common axis = twinax).

Twisted Pair — Two lengths of insulated conductors twisted together. The traditional method for connecting home and many business computers to the telephone company. Gets its name because two insulated copper wires are twisted together, both of which are needed for each connection. In commercial environments, performance of data transmission can be improved by adding a composite tape to the wire. This is known as shielded twisted pair.

Two-pair Premise Wiring — Refers to the two pairs of voice grade (low bandwidth) twisted pair wire installed in most homes since the 1950s. The extra pair makes it possible for you to add another line when you need it.

UHF — Ultra High Frequency. International Telecommunications Union designation for the 300 to 3000 MHz band of frequencies.

UL — Underwriters Laboratories. A nonprofit organization which tests and verifies construction and performance of electronic parts and equipment, including wire and cable.

UM — Unsoldered Mechanical Protection. Additional steel and polyethylene over inner polyethylene jacket. Provides additional mechanical protection.

Unbalanced Line — A transmission line in which voltages on the two conductors are unequal with respect to ground. A coaxial cable is a common type of unbalanced line.

Unilay — A conductor with more than one layer of helically laid wires with the direction of lay and length of lay the same for all layers.

UTP — Unshielded Twisted Pair(s).

Glossary of Terms and Terms of Use of Master Catalog

V — Volt. (See also *Volt*.)

VA — Volt-ampere. Measure of apparent power in a reactive circuit found by multiplying the voltage by the current.

VC/MTM — Variable Constellation/ Multi-Tone Modulation.

VDSL — Very high bit rate Digital Subscriber Line.

Velocity of Propagation (VP) — The transmission speed of electrical energy in a length of cable compared to speed of light in free space. Usually expressed as a percentage.

VHF — Very High Frequency. International Telecommunications Union designation for the 30 to 300 MHz band of frequencies.

VHS — Abbreviation for Video Home System.

Video — Pertaining to picture information in a television system.

VLF — Very Low Frequency. International Telecommunications Union designation for the 3 to 30 kHz band of frequencies.

Volt — A unit of electromotive force.

Voltage — Electrical potential of electromotive force expressed in volts.

Voltage Drop — The voltage developed across a component or conductor by the current flow through the resistance or impedance of the component or conductor.

Voltage Rating — The highest voltage that may be continuously applied to a cable construction in conformance with standards or specifications.

Voltage Standing Wave Ratio — Ratio of maximum voltage of the standing wave to the minimum voltage of the standing wave. (See also *Standing Wave Ratio*.)

VSWR — Voltage Standing Wave Ratio.

VW-1 — A flammability rating established by Underwriters Laboratories for wires and cables that pass a specially designed vertical flame test, formerly designed FR-1.

W — Symbol for watt or wattage.

Wall Thickness — The thickness of an insulation or jacket.

WAN — Wide Area Network.

Watt — A unit of electrical power.

Wave Form — A graphical representation of a varying quantity. Usually, time is represented on the horizontal axis, and the current or voltage value is represented on the vertical axis.

Wavelength — The distance between positive peaks of a signal. As the frequency increases, and waves get closer together, the wavelength decreases.

WCS — Wireless Communications Service.

Wire — A conductor, either bare or insulated.

Wireless — Really a misnomer. Belden makes a variety of cables needed to build the transmitting infrastructure required to support wireless devices. Wireless is a technology that allows a device (phone, pager or satellite dish) to be unconnected from the transmission point of a voice, video or data signal. The transmission infrastructure required to support such wireless devices is a wired platform of transmission towers and stations that communicate point to point and to telephone central offices.

X — Symbol for reactance.

XLPE — Crosslinked polyethylene is a thermoset and is crosslinked by radiation, thermally, or by moisture. XLPE offers a wide range of operating temperatures, excellent deformation, abrasion, and flame resistance. XLPE can be formulated with halogenated or non-halogenated flame retardant packages. Some grades are also rated XHHW-2 which offers excellent wet electrical properties.

XLR — A multi-pin audio connector (typically 3 pins) used in microphone, line level and snake cable audio connections.

XPE-PVC — Expanded Polyethylene-Polyvinyl Chloride. Fire retardant.

Z — Symbol for impedance.

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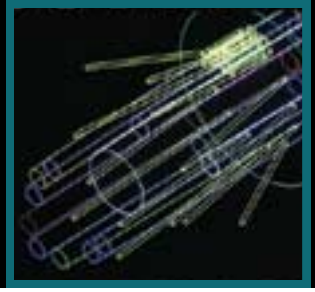

Belden® Quality

Setting Reliability Standards While Continuing To Raise The Bar

Belden's commitment to quality begins even before our cable products leave the product development phase. Not only do we design products to achieve a given level of performance, we also ensure that these products can be manufactured in a way that makes *Installable Performance*™ possible and consistent. Here's a look at how we do it:

Design For Manufacturability

Delivering a superior product means being sure you can make a superior product, day after day. Design for Manufacturability (DFM) seeks to identify and account for the challenges inherent in any manufacturing process and address them up front. It takes into account every aspect of manufacturing: materials, machines, operations, environmental factors and more.

The purpose of DFM is to design products that are robust enough to stand up to the challenges of manufacturing to yield consistent, superior product quality. Unlike sorting or inspection, which focuses solely on an already produced product, DFM is focused on the entire manufacturing process and how it can be monitored, controlled and adjusted to achieve our quality goals.

The DFM Process involves a wide range of personnel, from production, engineering, quality, and marketing, bringing together the entire team in a way that shortens the product development cycle and allows us to make better products with remarkable speed. But the real benefit to our customers is that our products achieve high performance standards that are consistent and measurable.

Monitoring And Maintaining Quality

Before we release any new products for production, all critical characteristics of Belden products are targeted to meet a capability index of Cpk ≥ 1.33, which corresponds to a 99.997% passing rate. A Cpk is an index that quantifies the capability of a product's design and manufacturing process. The Cpk values are determined through capability studies, which represent the final product design and manufacturing set-ups. This includes statistically valid run times, footage, and sampling methods. The result is a Cpk value that corresponds to a predicted defect rate for the product.

Belden's Cpk testing methods are actually more reliable than simple "pass/fail" testing on cable as it comes off the manufacturing line. Rather than merely testing batches of cable, Cpk testing allows Belden to monitor and control the long-term quality and performance of the cable we produce. It gives us an accurate measurement of quality over time, so that we can adjust our manufacturing processes in ways that ensure the production of high performance cable, day in and day out.

Our Sigma Initiative

A number of years ago, in an effort to evaluate the quality of our products, Belden adopted the "Sigma" concept. In technical terms, Sigma, also known as standard deviation from the mean, measures the variability in a process. At Belden, Sigma is a quality term that allows us to measure the effectiveness of our process in producing defect-free design, product, delivery, and service — with a defect being *anything* that results in customer dissatisfaction.

We derive our Sigma level from customer feedback which we convert into Sigma parts per million: The amount of cable footage identified by our customers as not meeting their expectations x 1 million total footage shipped.

As a company, Belden has set a 5-sigma goal, which translates to 233 defective parts per million. It's a goal we have not only achieved, but also exceeded, year after year. We're very proud of this fact because most companies operate at 3-to-4 sigma quality levels.

In the end, quality at Belden is not just a word we toss around because it sounds good. Quality is a commitment. We have built our name and reputation on quality, and our ongoing dedication to that principle will allow us to continually set new standards for reliability, and raise the bar for quality in the wire and cable products industry.

If you'd like to learn more about our quality commitment, request a copy of our Quality Brochure from your local Belden representative.

Specify Belden...For The Most Reliable Cable Available.

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