



Broadcast Cables

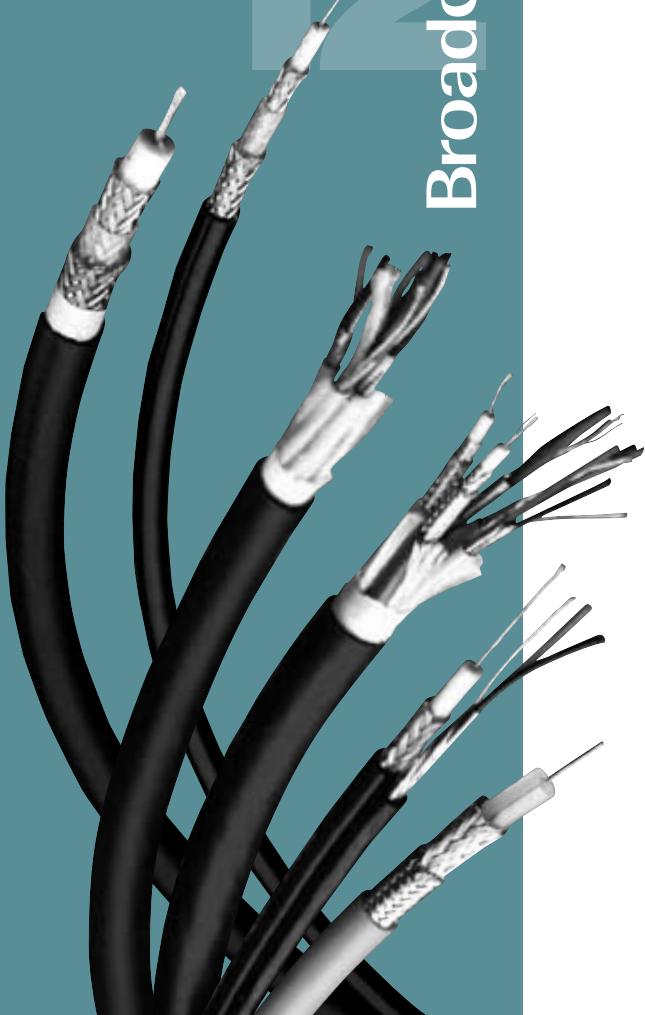


Table of Contents

Broadcast Cables	Page No.
Introduction	12.2
Microphone and Musical Instrument Cable	12.3–12.9
Single-Conductor, High-Impedance	12.4
Two-Conductor, Low-Impedance	12.5
Three-Conductor, Low-Impedance	12.8
Four-Conductor Star Quad, Low-Impedance	12.9
Line Level Analog Audio Cable	12.10–12.16
Single- and Double-Pair	12.10
Analog Multi-Pair Snake Cable	12.17–12.26
Super-Flexible, High-Performance, 26 AWG Star Quads	12.18
CMR Rated, 24 AWG Twisted Pairs	12.19
Flexible, CM Rated, 24 AWG Twisted Pairs	12.20
FlexXnake® Super-Flexible, 24 AWG Twisted Pairs	12.21
CMR Rated, 22 AWG Twisted Pairs	12.22
Flexible Low-Capacitance, 22 AWG Twisted Pairs	12.23
CM Rated, 22 AWG Twisted Pairs	12.24
CMP Rated, 22 AWG Plenum Twisted Pairs	12.25
AES/EBU Digital Audio Cable	12.27–12.31
Single- and Double-Pair	12.28
Multi-Pair Snake Cables	12.29
Audio Wire and Cable	12.32–12.37
Electrolytic Tough Pitch (ETP) Speaker Cables	12.33
High-Flex Bi-amp and Tri-amp Speaker Connections	12.37
Special Audio, Communication & Instrumentation Cable	12.38–12.39
Audio Connecting Cables	12.38
Dual Channel Audio Cables	12.38
Multimedia Control Cables	12.39
Microphone/Musical Instrument Cables	12.39
75 Ohm Standard Analog Video Coax	12.40–12.46
Miniature Coax	12.40
High-Frequency Conformable® Coax	12.41
RG-59/U Type	12.42
RG-6/U Type	12.45
RG-11/U Type	12.46
Precision Video Coax for Analog and Digital	12.47–12.56
Subminiature RG-59/U Type	12.48
RG-59/U Type	12.49
RG-59/U Type, Double Braided	12.51
RG-6/U Type, Low Loss Serial Digital	12.52
RG-7/U Type, Low Loss Serial Digital	12.52
RG-11/U Type, Low Loss Serial Digital	12.52
Bundled VideoFLEX® Miniature Snake Cables	12.53
Bundled VideoFLEX RG-59/U Type Snake Cables	12.53
Bundled VideoFLEX RG-6/U Type Snake Cables	12.54
Parallel Digital Video	12.55
Digital Video Time Code	12.56
Precision Video Twinax	12.56
Video Triax Cable	12.57–12.60
A/V and Composite Camera Cable	12.61–12.66
RGB and SVHS Cable	12.67–12.69
Technical Information	12.70

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.

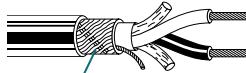
Performance Features

Innovative Shielding

Belden shielded cable ensures signal integrity and provides confidence in audio and video transmissions, preventing downtime 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.



French Braid

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 Datalex® — 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

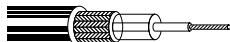
High-Conductivity Copper



Description	Part No.	UL NEC/C(U.L) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness	Jacket Thickness	Nominal OD	Nominal Capacitance			
					Ft.	m	Lbs.	kg				* 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**

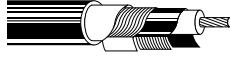
1000 VDC, 60°C 9396 1 N/A 250 76.2 2.8 1.3 .018 .46 .017 .43 .100 2.54 — — 75 246

**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**

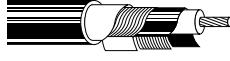
3000 VDC, 60°C 8410 1 N/A 500 152.4 20.5 9.3 .058 1.47 .024 .61 .245 6.22 — — 33 108

**20 AWG** Stranded (27x34) High-conductivity TC • Conductive Textile Shield (100% Coverage) • TC Spiral Shield (95%) • Paper Tape**Rubber Insulation • Black Neoprene Jacket**

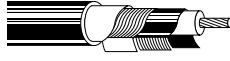
60°C 9394 1 N/A 1000 304.8 28.0 12.7 .030 .76 .033 .84 .190 4.83 — — 55 180

**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



Description	Part No.	UL NEC/C(U.L) 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	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
--	-------	------------------------------------	---	---------------	---------------------------	---------------------------	----------------------	---------------------	------	-----	------	-----	------	------	----	----	----	----

French Braid

^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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Microphone and Musical Instrument Cable

Two-Conductor, Low-Impedance Cables

High-Conductivity Copper



Description	Part No.	UL NEC/C(U.L) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness	Jacket Thickness	Nominal OD	Nominal Capacitance			
					Ft.	m	Lbs.	kg				*	pF/Ft.	*	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	9452	2	Black, Red	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	6.5 7.5 13.0 13.0	3.0 3.4 5.9 5.9	.008 .20 .020 .020	.20 .51 .135 .135	.020 .51 .135 .135	.343 30 98 98	.343 30 98 98	.190 58 190
---------------	------	---	------------	--------------------------------	--------------------------------------	----------------------------	--------------------------	-----------------------------	----------------------------	-----------------------------	------------------------	------------------------	-------------------



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)

200V RMS 75°C	1901A <small>new</small>	2	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	.20 .58 .138	.023 .58 .138	.351 26 86	.351 26 86	.156 48 156
---------------	-----------------------------	---	------------	-------------------------	---------------------------	---------------------	-------------------	---------------------	--------------------	---------------------	------------------	------------------	-------------------



For cross-connect use with FlexNake® Audio Snake Cables, see page 12.21.

▲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+ 328 500++ 1000	30.5 100.0 152.4 304.8	4.0 10.2 16.0 31.0	1.8 4.6 7.3 14.1	.017 .43 .055 .140	.43 .140 .236 .599	.055 .236 .599 .108	.33 108	.33 108	.61 200
------	-------	---	-----------	------------------------------	---------------------------------	-----------------------------	---------------------------	-----------------------------	-----------------------------	------------------------------	------------	------------	------------

*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 U-1000 1000	152.4 U-304.8 304.8	18.0 30.0 31.0	8.2 13.6 14.1	.021 .53 .022	.53 .56 .231	.022 .56 .231	.587 18 59	.587 18 59	.32 32 105
----------------	------	---	--------------	-----------------------	---------------------------	----------------------	---------------------	---------------------	--------------------	---------------------	------------------	------------------	------------------

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	100 250 U-500 500 U-1000 1000	30.5 76.2 U-152.4 152.4 U-304.8 304.8	5.9 12.0 24.0 24.0 31.0	2.7 5.5 10.9 10.9 21.4	.023 .58 .035 .091 .262	.58 .136 .21.4 .21.4	.035 .091 .262 .665	.89 .262 .665 .30	.89 .262 .665 .98	.55 .180
---------------	------	---	--------------	--	--	-------------------------------------	------------------------------------	-------------------------------------	-------------------------------	------------------------------	----------------------------	----------------------------	-------------

*Red, Yellow or Blue available in 1000 ft. put-up only.

Rubber Insulation • Cotton Wrap • Brown Hypalon® Jacket

600V RMS 60°C VW-1	8402	2	White, Black	500 U-1000	152.4 U-304.8	27.0 53.0	12.3 24.1	.023 .58	.035 .091	.091 .263	.89 .668	.89 .668	.55 .180
-----------------------	------	---	--------------	---------------	------------------	--------------	--------------	-------------	--------------	--------------	-------------	-------------	-------------

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.



Belden Electronics Division Technical Support: 1-800-BELEN-1 or 1-800-BELEN-3 • www.belden.com

Microphone and Musical Instrument Cable

Two-Conductor, Low-Impedance Cables

High-Conductivity Copper



Description	Part No.	UL NEC/C(U)L 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 VW-1	8428	2	White, Black	100 U-500 500 1000	30.5 U-152.4 152.4 304.8	7.0 30.0 30.0 59.0	3.2 13.6 13.6 26.8	.023 .58 .030 .76	.58 .030 .037 .040	.030 .040 .040 .040	.76 .040 .040 .040	.290 .380 .380 .380	7.37 9.65 9.65 18.0	35 30 30 30	115 98 98 55	60 180 180 180
-----------------------	-------------	---	-----------------	-----------------------------	-----------------------------------	-----------------------------	-----------------------------	----------------------------	-----------------------------	------------------------------	-----------------------------	------------------------------	------------------------------	----------------------	-----------------------	-------------------------

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 VW-1	8408	2	Black, White	500	152.4	51.5	23.4	.037	.94	.040	1.02	.380	9.65	30	98	55	180
-----------------------	-------------	---	-----------------	-----	-------	------	------	------	-----	------	------	------	------	----	----	----	-----

TC = Tinned Copper

*Capacitance between conductors.

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

Hypalon is a DuPont trademark.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Microphone and Musical Instrument Cable

Three-Conductor, Low-Impedance Cables

High-Conductivity Copper



Description	Part No.	UL NEC/C(U.L) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness	Jacket Thickness	Nominal OD	Nominal Capacitance			
					Ft.	m	Lbs.	kg				*	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	30.5	4.0	1.8	.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	152.4	22.5	10.2	.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	30.5	6.6	3.0	.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

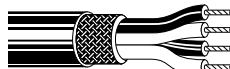


Description	Part No.	UL NEC/C(U.L) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/Ft.	* pF/m	** pF/Ft.	** pF/m

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	.15 .014	.36 .114	.115 2.92	.292	.40 131	.60 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	1172A	4	(2) Blue, (2) White	500 ▪ 1000	152.4 304.8	13.5 27.0	6.1 12.3	.011 .28	.28 .030	.76 .190	.190 4.83	.39	.128 50	.50 164
---------------	-------	---	------------------------	---------------	----------------	--------------	-------------	-------------	-------------	-------------	--------------	-----	------------	------------



2/c 23 AWG equivalent DCR when connected to a 3-pin XLR.

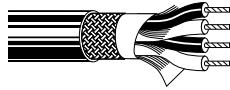
▪500 ft. put-up available in Red, Yellow or Black only.

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	.016 .41	.41 .045	1.14 .245	.245 6.22	.39	.128 57	.57 187
---------------	-------	---	------------------------	----------------------	------------------------	---------------------	------------	-------------	-------------	--------------	--------------	-----	------------	------------



2/c 21 AWG equivalent DCR when connected to a 3-pin XLR.

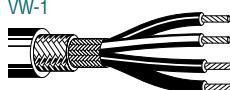
▼100 ft. put-up available in Black only. 500 ft. put-up available in Blue or Black only.

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 .045 .032	.41 .114 .1.14 .81	.252 .245 .6.22 .252	.6.22 6.22 6.22 6.40	.39	.128 57	.57 187
--	------	---	-----------------------------------	------------------------------	-----------------------------------	-----------------------------	-----------------------------	-----------------------------	-----------------------------	-------------------------------	-------------------------------	-----	------------	------------



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 VW-1	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	.58 .036 .043 .1.09 .416	.747 7.47 7.47 6.40 10.57	.7.47 7.47 7.47 6.40 10.57	.47	.154 59	.59 194
-----------------------	------	---	-----------------------------------	------------------------------------	---	-------------------------------------	------------------------------------	------------------------------------	--------------------------------------	---------------------------------------	--	-----	------------	------------

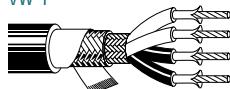


2/c 17 AWG equivalent DCR when connected to a 3-pin XLR.

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	.79 .043	.1.09 .416	.416 .10.57	.55	.180 66	.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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Line Level Analog Audio Cable

Single- and Double-Pair Cables



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	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	.20 .020	.51 .123	.123 .312	.312 31	.102 102	.58 58	.190 190	

▲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.

For cross-connect use with 1408R (et al.)
Snake Cables, see page 12.19.

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	.20 .024	.61 .131	.131 .333	.333 31	.102 102	.58 58	.190 190		

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 <i>new</i>	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	.20 .023	.58 .138	.138 .351	.351 26	.86 86	.48 48	.156 156		

*500 ft. and 1000 ft. put-ups available in Black only.

For cross-connect use with FleXnake®
Audio Snake Cables, see page 12.21.

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 .41 .025 .64 .168	.025 .41 .41 .025 .64 .168	.427 .168 .168 .168 .269 .269	.22 .72 .72 .42 .42 .42	.138 .42 .42 .42 .138 .138	.138 .42 .42 .42 .138 .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	.15 .36 .36	.014 .106 .106	.36 .269 .269	.269 31	.102 102	.59 59	.194 194
-----------------------	-------	--------------------------	---	------------	----------------------	------------------------	--------------------	-------------------	---------------------	-------------------	----------------------	---------------------	------------	-------------	-----------	-------------

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 .014	.36 .36	.106 .106	.269 .269	.269 31	.102 102	.59 59	.194 194
-----------------------	-------	--------------------------	---	------------	------------------	------------------	-------------	------------	-------------	--------------	------------	--------------	--------------	------------	-------------	-----------	-------------

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



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 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: CM CEC: CM	1	Black, Red	U-1000 1000▲	U-304.8 304.8	15.0 15.0	6.8 6.8	.010 .010	.25 .25	.020 .020	.51 .51	.145 .145	3.68 3.68	30 99	99 54	177 177
----------	-------	--------------------------	---	---------------	-----------------	------------------	--------------	------------	--------------	------------	--------------	------------	--------------	--------------	----------	----------	------------

▲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: CM CEC: CM	1	Black, Red	U-1000	U-304.8	16.0	7.3	.010	.25	.020	.51	.142	3.61	53	174	97	318
-----------	-------	--------------------------	---	---------------	--------	---------	------	-----	------	-----	------	-----	------	------	----	-----	----	-----

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	8450	NEC: CM CEC: CM	1	Black, Red	U-500▲ U-1000▲	U-152.4 U-304.8	7.0 13.0	3.2 5.9	.007 .007	.18 .18	.018 .018	.46 .46	.118 .118	3.00 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.

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	8451	NEC: CMR 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	2.7 7.5 8.0 14.0 15.0	1.2 3.4 3.6 6.4 6.8	.008 .008	.20 .20	.020 .020	.51 .51	.138 .138	3.51 3.51	34	111	67	220
----------	------	--------------------------------	---	---------------	--	--	-----------------------------------	---------------------------------	--------------	------------	--------------	------------	--------------	--------------	----	-----	----	-----

▼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: CMR CEC: CMR FT4	1	Black, Red	U-500* 500* T-1000* U-1000 5000	U-152.4 152.4 T-304.8 U-304.8 1524.0	8.0 8.0 17.0 15.0 74.5	3.6 3.6 7.7 6.8 33.9	.008 .008	.20 .20	.020 .020	.51 .51	.135 .135	3.43 3.43	34	111	67	220
----------	------	--------------------------------	---	---------------	---	--	------------------------------------	----------------------------------	--------------	------------	--------------	------------	--------------	--------------	----	-----	----	-----

*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.

TC = Tinned Copper

*Capacitance between conductors.

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



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Line Level Analog Audio Cable

Single- and Double-Pair Cables



Description	Part No.	UL NEC/C(U.L) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness	Jacket Thickness	Nominal OD	Nominal Capacitance			
					Ft.	m	Lbs.	kg				* 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 UL AWM Style 2092 (300V 60°C)	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	.41 .41	.025 .64	.175 4.45	24	79	47	154
---	------	--------------------------	---	-----------------	--	---	---	--	--	------------	-------------	--------------	----	----	----	-----

Plenum • FEP Insulation • Red FEP Jacket

300V RMS, Non-conduit	88761	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	2.7 7.0 7.5 13.0 14.0	1.2 .006 .15 .014 .36	.006 .15 .15 .014 .36	.014 .36 .116 .295	.116 .295	35	115	67	220
-----------------------	-------	--------------------------------	---	---------------	---	--	-----------------------------------	-----------------------------------	-----------------------------------	-----------------------------	--------------	----	-----	----	-----

Plenum • FEP Insulation • Red Fluorocopolymer Jacket

300V RMS, Non-conduit	87761	NEC: CMP CEC: CMP FT6	1	Black, Red	500† 1000†	152.4 304.8	7.0 13.0	3.2 5.9	.006 .006	.15 .15	.014 .014	.36 .36	.116 .116	.295 .295	35	115	67	220
-----------------------	-------	--------------------------------	---	---------------	---------------	----------------	-------------	------------	--------------	------------	--------------	------------	--------------	--------------	----	-----	----	-----

Plenum • FEP Insulation • Natural Flamarrest® Jacket

300V RMS, Non-conduit	82761	NEC: CMP CEC: CMP FT6	1	Black, Red	U-500† U-1000† 1000†	U-152.4 U-304.8 304.8	6.5 12.0 13.0	3.0 5.5 5.9	.006 .006	.15 .15	.014 .014	.36 .36	.116 .116	.295 .295	35	115	67	220
-----------------------	-------	--------------------------------	---	---------------	----------------------------	-----------------------------	---------------------	-------------------	--------------	------------	--------------	------------	--------------	--------------	----	-----	----	-----

Polyethylene Insulation • Chrome PVC Jacket

Low-Capacitance 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 .016	.41 .41	.026 .026	.66 .66	.180 .180	4.57 4.57	24	79	47	154
---	------	--------------------------	---	-----------------	-----------------	--------------------	--------------	------------	--------------	------------	--------------	------------	--------------	--------------	----	----	----	-----

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 (300V 80°C)	8737	NEC: CMG CEC: CMG FT4	1	Black, Red	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	10.5 10.0 20.0 20.0	4.8 4.5 9.1 9.1	.015 .015	.38 .38	.025 .025	.64 .64	.180 .180	4.57 4.57	40	131	70	230
----------------------------------	------	--------------------------------	---	---------------	--------------------------------	--------------------------------------	------------------------------	--------------------------	--------------	------------	--------------	------------	--------------	--------------	----	-----	----	-----

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



Description	Part No.	UL NEC/C(U.L) 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 • 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	8723	NEC: CM CEC: CM	2	Red/Black, Green/White	100 U-500 U-1000	30.5 152.4 304.8	2.3 10.5 20.0	1.0 4.8 9.1	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	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	14.7Ω/M' 48.2Ω/km	.148	3.76	40	69%	35	115	67	220
Z-Fold®																		

Plenum • FEP Insulation • Red Fluorocopolymer Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

300V RMS, Non-conduit	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	16.0Ω/M' 52.5Ω/km	14.7Ω/M' 48.2Ω/km	.148	3.76	40	69%	35	115	67	220
Z-Fold®																		

Plenum • Halar® Insulation • Natural Flamarrest® Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

300V RMS, Non-conduit	82723	NEC: CMP CEC: CMP FT6	2	Red/Black, Green/White	U-500† U-1000† 1000†	152.4 304.8 304.8	10.0 19.0 20.0	4.5 8.6 9.1	14.7Ω/M' 48.2Ω/km	16.6Ω/M' 54.5Ω/km	.148	3.76	36	62%	43	141	75	246
Z-Fold®																		

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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Line Level Analog Audio Cable

Single- and Double-Pair Cables

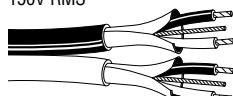


Description	Part No.	UL NEC/C(U.L) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness	Jacket Thickness	Nominal OD	Nominal Capacitance			
					Ft.	m	Lbs.	kg				* pF/Ft.	* pF/m	** pF/Ft.	** pF/m

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	.25 .020	.51 .143	3.63 57	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	.20 .020	.51 .135	3.43 34	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 .031	.36 .79 .198 .198	.503 5.03 5.03 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	30.5 76.2 U-152.4 152.4 U-304.8 304.8	3.2 6.3 12.0 12.0 23.0 23.0	1.5 2.8 5.5 5.5 10.5 10.5	.016 .41 .028 .028 .71 .71	.41 .41 .5.18 .5.18 .204 .204	5.18 27 5.18 27 89 89	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 25.0 304.8	13.0 11.4 25.0	5.9 11.4 11.4	.016 .41 .025	.41 .64 .199	.505 47 5.05	47	154	79	259
----------------------------------	------	--------------------------------	---	------------	-------------------------	--------------------------	----------------------	---------------------	---------------------	--------------------	--------------------	----	-----	----	-----

TC = Tinned Copper

*Capacitance between conductors.

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



Belden Electronics Division Technical Support: 1-800-BELEN-1 or 1-800-BELEN-3 • www.belden.com

Line Level Analog Audio Cable

Single- and Double-Pair 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

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 .028	.48 .71	.030 .222	.76 5.64	.230 24	5.84 79	24 44	144 144
----------------------------------	------	--------------------------	---	-----------------	-----------------	--------------------	--------------	-------------	--------------	------------	--------------	-------------	------------	------------	----------	------------

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)	8760	NEC: CM CEC: CM	1	Black, Clear	250 500 U-1000 1000 2000 5000 10000	76.2 152.4 U-304.8 304.8 609.6 1524.0 3048.0	6.8 13.0 26.0 25.0 50.0 135.0 260.0	3.1 5.9 11.8 11.4 22.7 61.4 118.2	.019 .028 .028 .028 .028 .028 .028	.48 .71 .71 .71 .71 .71 .71	.030 .222 .222 .222 .222 .222 .222	.76 5.64 5.64 5.64 5.64 5.64 5.64	.230 24 24 24 24 24 24	5.84 79 79 79 79 79 79	24 44 44 44 44 44 44	144 144 144 144 144 144 144
---	------	--------------------------	---	-----------------	---	--	---	---	--	---	--	---	--	--	--	---

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	88760	NEC: CMP CEC: CMP FT6	1	Black, Red	100 500† U-1000 1000†	30.5 152.4 U-304.8 304.8	3.7 12.5 24.0 24.0	1.7 5.7 10.9 10.9	.007 .007	.18 .18	.014 .014	.36 .36	.150 .150	3.81 3.81	51 51	167 167	97 97	318 318
-----------------------	-------	--------------------------------	---	---------------	--------------------------------	-----------------------------------	-----------------------------	----------------------------	--------------	------------	--------------	------------	--------------	--------------	----------	------------	----------	------------

Plenum • FEP Insulation • Red Fluorocopolymer Jacket

300V RMS, Non-conduit	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 .007	.18 .18	.014 .014	.36 .36	.150 .150	3.81 3.81	51 51	167 167	97 97	318 318
-----------------------	-------	--------------------------------	---	---------------	------------------------	---------------------------	----------------------	--------------------	--------------	------------	--------------	------------	--------------	--------------	----------	------------	----------	------------

Plenum • FEP Insulation • Natural Flamarrest® Jacket

300V RMS, Non-conduit	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 .007	.18 .18	.014 .014	.36 .36	.150 .150	3.81 3.81	51 51	167 167	97 97	318 318
-----------------------	-------	--------------------------------	---	---------------	----------------------------	-----------------------------	----------------------	---------------------	--------------	------------	--------------	------------	--------------	--------------	----------	------------	----------	------------

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 .022	.56 .56	.028 .028	.71 .71	.241 .241	6.12 6.12	53 53	174 174	92 92	302 302
---------------	------	--------------------------------	---	---------------	--------------------------------	--------------------------------------	------------------------------	----------------------------	--------------	------------	--------------	------------	--------------	--------------	----------	------------	----------	------------

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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Line Level Analog Audio Cable

Single- and Double-Pair Cables



Description	Part No.	UL NEC/C(U.L) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness	Jacket Thickness	Nominal OD	Nominal Capacitance			
					Ft.	m	Lbs.	kg				* 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: CMG CEC: CMG FT4	1	Black, White	500	152.4	23.5	10.7	.023	.58	.030	.76	.280	7.11	57	187	98	322
---------------	------	-----------------------	---	--------------	-----	-------	------	------	------	-----	------	-----	------	------	----	-----	----	-----

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 UL AWM Style 20253 (600V 80°C)	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										
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 UL AWM Style 20253 (600V 80°C)	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										
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 UL AWM Style 20253 (600V 80°C)	8718	NEC: CM, CL2 CEC: CM	1	Black, Clear	U-500	U-152.4	48.5	22.0	.037	.94	.040	.102	.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										
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



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



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.

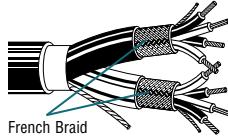
Color Code: Blue, White, Blue w/White stripe, White w/Blue stripe.

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 <small>new</small>	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 <small>new</small>	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 <small>new</small>	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 <small>new</small>	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 <small>new</small>	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 <small>new</small>	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	Quad No.	Jacket Color
1	Brown	8	Gray
2	Red	9	White
3	Orange	10	Black
4	Yellow	11	Beige
5	Green	12	Pink
6	Blue	13-24	Gray (numbered)
7	Violet		



Analog Multi-Pair Snake Cable

CMR Rated Cables

Individually Shielded and Jacketed Twisted Pairs



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.

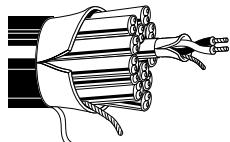
Color Code: Red, Black.

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	152.4	37.5	15.0	.346	8.79
		1000	304.8	73.0	33.2		
1409R	6	500	152.4	50.0	22.7	.412	10.46
		1000	304.8	99.0	45.0		
1410R	8	500	152.4	61.0	27.7	.446	11.33
		1000	304.8	121.0	55.0		
1411R	12	500	152.4	90.0	40.9	.555	14.10
		1000	304.8	173.0	78.6		
1412R	16	500	152.4	115.0	52.3	.622	15.80
		1000	304.8	229.0	104.1		
1413R	20	500	152.4	142.5	64.8	.704	17.88
		1000	304.8	289.0	131.4		
1414R	24	500	152.4	179.5	81.6	.801	20.35
		1000	304.8	369.0	167.7		
1415R	26	500	152.4	190.5	86.6	.816	20.73
		1000	304.8	391.0	177.7		
1416R	32	500	152.4	225.0	102.3	.890	22.61
		1000	304.8	458.0	208.2		

Length may vary -10% to +0% from length shown.



Analog Multi-Pair Snake Cable

Flexible, CM Rated Cables

Individually Shielded and Jacketed Twisted Pairs



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.

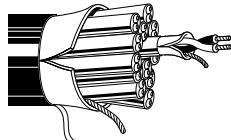
Color Code: Red, Black.

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	152.4	23.5	10.7	.301	7.65
		1000	304.8	44.0	20.0		
1510C	4	500	152.4	37.0	16.8	.352	8.94
		1000	304.8	71.0	32.3		
1511C	6	500	152.4	49.0	22.3	.418	10.61
		1000	304.8	97.0	44.1		
1512C	8	500	152.4	64.0	29.1	.452	11.48
(DT-12)		1000	304.8	130.0	59.1		
1513C	12	500	152.4	88.0	40.0	.561	14.25
		1000	304.8	174.0			
1514C	16	500	152.4	116.5	53.0	.628	15.95
		1000	304.8	228.0	103.6		
1515C	20	500	152.4	139.0	63.2	.710	19.56
		1000	304.8	282.0	128.2		
1516C	24	500	152.4	174.0	79.1	.807	20.50
		1000	304.8	358.0	162.7		
1517C	26	500	152.4	183.5	83.4	.823	20.90
		1000	304.8	377.0	171.4		
1518C	32	500	152.4	220.5	100.2	.897	22.78
		1000	304.8	449.0	204.1		
1519C	52	500	152.4	359.5	163.4	1.117	28.37
		1000	304.8	705.0	320.5		

Length may vary -10% to +0% from length shown.



Belden Electronics Division Technical Support: 1-800-BELEDEN-1 or 1-800-BELEDEN-3 • www.belden.com

Analog Multi-Pair Snake Cable

FleXnake® Super-Flexible, High-Performance Cables
Individually Shielded and Jacketed Twisted Pairs



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.

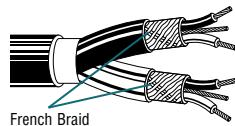
Color Code: Red, Black.

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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Analog Multi-Pair Snake Cable

CMR Rated Cables

Individually Shielded and Jacketed Twisted Pairs



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.

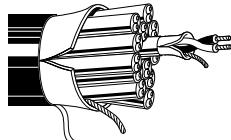
Color Code: Red, Black.

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



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.

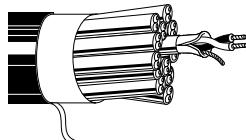
Color Code: Red, Black.

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	152.4	52.0	23.6	.458	11.63
		1000	304.8	104.0	47.3		
1218B	6	500	152.4	80.0	36.4	.578	14.68
		1000	304.8	153.0	69.5		
1219B	9	500	152.4	116.0	52.7	.700	17.78
		1000	304.8	235.0	106.8		
1220B	12	500	152.4	141.5	64.3	.760	19.30
		1000	304.8	287.0	130.5		
1222B	16	500	152.4	188.5	85.7	.852	21.64
		1000	304.8	385.0	175.0		
1225B	20	500	152.4	241.5	109.8	.960	24.38
		1000	304.8	474.0	215.5		
1427B	24	1000	304.8	579.0	263.2	1.088	27.64
1221B	28	500	152.4	335.5	152.5	1.140	28.96
		1000	304.8	677.0	307.7		
1226B	32	500	152.4	369.0	167.7	1.183	30.05
		1000	304.8	744.0	338.2		
1428Bⁱ	52	1000	304.8	1142.0	519.1	1.496	38.00

Length may vary -10% to +0% from length shown.

ⁱ1428B available by special order. Please contact Belden for lead time.



Analog Multi-Pair Snake Cable

CM Rated Cables

Individually Shielded Twisted Pairs



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)

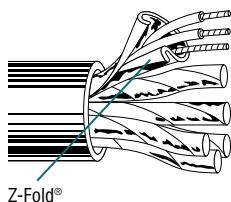
Nominal Impedance	50Ω
-------------------	-----

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.



Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	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



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.

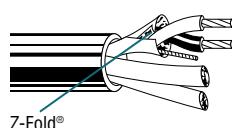
Color Code: See Chart 3 (in Technical Information Section)

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.



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							
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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Analog Multi-Pair Snake Cable

CMP Rated (Plenum) Cables
Individually Shielded Twisted Pairs



Individually Shielded and Jacketed Pairs

NEC: CMP (CEC: CMP FT6)

Product Description

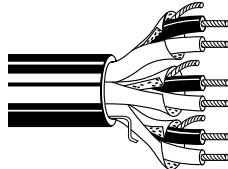
22 AWG stranded (7x30) bare copper conductor. FEP insulation. Twisted pairs individually shielded with 100% Beldfoil® with drain wire. Multiple pairs cable together. Overall Gray fluorocopolymer jacket and rip cord. Sequential footage marking every two feet.

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	152	13.5	6.1	.214	5.44
		U-1000	U-305	26.0	11.8		
		1000	305	26.0	11.8		
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: $110\Omega \pm 20\%$

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										
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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

AES/EBU Digital Audio Cable

Single- and Double-Pair 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

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
---	------	--------------------------------	---	--------------	------	-------	------	-----	-----------------------	----------------------	------	------	-----	-----	----	----	----	----

For cross-connect use with 7891A (et al.)
Digital Audio Snake Cables, see page 12.29.

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*	152.4	12.0	5.5	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.

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*	152.4	13.5	6.1	23.7Ω/M' 77.7Ω/km	5.0Ω/M'	.211	5.36	110	76%	13	43	26	85
--	-------	--------------	---	------------	------	-------	------	-----	----------------------	---------	------	------	-----	-----	----	----	----	----



French Braid

*500 ft. and 1000 ft. put-ups available in Black only.

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	NEC: new CMP CEC: CMG FT6	1	Black, Red	500†	152.4	9.0	4.1	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	152.4	18.5	8.4	23.7Ω/M' 77.7Ω/km	18.9Ω/M' 62.0Ω/km	.180	4.57	110	76%	13	43	26	85
------	-------	--------------------------------	---	------------	-----	-------	------	-----	----------------------	----------------------	------	------	-----	-----	----	----	----	----



The jacket and shield are bonded so both can be removed with automatic stripping equipment.

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	76.2	8.0	3.6	14.8Ω/M' 48.5Ω/km	4.6Ω/M'	.234	5.94	110	76%	13	43	26	85
-------------------	-------	---	-------------	-----	------	-----	-----	----------------------	---------	------	------	-----	-----	----	----	----	----



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.



Belden Electronics Division Technical Support: 1-800-BELEN-1 or 1-800-BELEN-3 • www.belden.com

AES/EBU Digital Audio Cable

Multi-Pair Snake Cables

Individually Shielded and Jacketed Pairs



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%

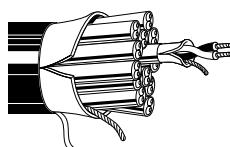
Nominal Capacitance

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 <small>new</small>	2	500	152.4	28.0	12.7	.343	8.71
		1000	304.8	56.0	25.5		
7890A <small>new</small>	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 [†] <small>new</small>	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 <small>new</small>	12	500	152.4	85.0	38.6	.679	17.25
		1000	304.8	174.0	79.1		

7893A <small>new</small>	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 <small>new</small>	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 <small>new</small>	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 <small>new</small>	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



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.

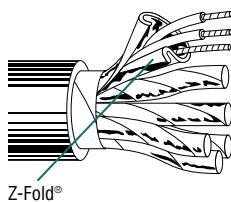
Color Code: See Chart 3 (in Technical Information Section)

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.



Z-Fold®

Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	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

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



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.

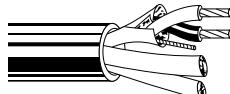
Color Code: See Chart 5 (in Technical Information Section)

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 1000	U-304.8 304.8	27.0	12.3	.255	6.48
89729	2	500 1000	152.4 304.8	18.5 31.0	8.4 14.1	.261	6.63
89730	3	500 1000	152.4 304.8	23.0 40.0	10.5 18.2	.278	7.06
89728	4	500 1000	152.4 304.8	26.5 50.0	12.0 22.7	.307	7.80
89705	5	500 1000	152.4 304.8	30.5 62.0	13.9 28.2	.327	8.31
89731	6	500 1000	152.4 304.8	35.0 71.0	15.9 32.3	.361	9.17
89757	7	500 1000	152.4 304.8	39.5 80.0	18.0 36.4	.361	9.17
89732	9	1000	304.8	106.0	48.2	.429	10.90
89734	12	500 1000	152.4 304.8	71.0 140.0	32.3 63.6	.498	12.65
89758	18	500 1000	152.4 304.8	100.5 204.0	45.7 92.7	.616	15.65

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



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Audio Wire and Cable

Overview



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

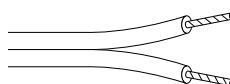


Description	Part No.	UL NEC/C(U.L) CEC Type	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm

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)	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
-------------------	-------------	---	------------------	------------------	------------	------------	------	-----	-------------------	-------------------



▲U-1000 ft. put-up available in Brown or Chrome only.

♦1000 ft. put-up available in White or Clear only.

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 (7x30) 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
------	-------------	---	-------------	----------------	--------------	--------------	------	------	-------------------	-------------------



Audio Wire and Cable

Electrolytic Tough Pitch (ETP) High-Conductivity Copper Speaker Cables
Open Twisted Construction



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. 9151 2 U-1000 U-304.8 7.0 3.2 .012 .30 .108 2.74
90V 90°C
VW-1



18 AWG Stranded (7x26) ETP High-conductivity Tinned Copper • Cabled

PVC Insulation • (Color Code: Black, White)

UL AWM Style 1007 8460 2 U-1000 U-304.8 17.0 7.7 .020 .51 .180 4.57
(300V 80°C)
VW-1



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 8470 2 500 152.4 13.0 5.9 .023 .58 .210 5.33
(300V 80°C)
VW-1



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



Description	Part No.	UL NEC/C(U.L) 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



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 .38 .025 .025 .025	.170 For Plenum versions of 8442, see 88442 or 82442. 4.32	.64	.64	.170	4.32			

20 AWG Stranded (7x28) Tinned Copper Conductors • Twisted Pairs

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 .33 .025 .025	.180	.180	4.57	
PVC Insulation • Chrome PVC Jacket													

18 AWG Stranded (7x26) Tinned Copper Conductors • Twisted Pair

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 .56 .028 .028	.71	.234	5.94	
PVC Insulation • Chrome PVC Jacket													

16 AWG Stranded (19x29) Tinned Copper Conductors • Twisted Pair

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	
PVC Insulation • Chrome PVC Jacket												

14 AWG Stranded (42x30) Tinned Copper Conductors • Twisted Pair

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
PVC Insulation • Chrome PVC Jacket												

See NEC Guidelines for applicable CL3 voltage ratings.

12 AWG Stranded (65x30) Tinned Copper Conductors • Twisted Pair

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
PVC Insulation • Chrome PVC Jacket												

See NEC Guidelines for applicable CL3 voltage ratings.



Audio Wire and Cable

High-Flex Multi-Conductor Cables
Bi-amp and Tri-amp Speaker Connections



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	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 /.040	1.02 1.02	.390 .390	9.91 9.91
-------------------	-------	---	-----------------------------------	--------------------	------------------------	-----------------------	----------------------	-------------	---------------	--------------	--------------	--------------

Compatible with Neutrik Speakon® Connectors.

High-Flex 60°C	1811A	8	Brown, Red, Orange, Yellow, Green, White, Blue, Black	1000	304.8	206.0	93.6	.025 .64	.040 /.040	1.02 1.02	.515 .515	13.08 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	5T00UP <small>new</small>	NEC: CL2 Audio Use Only	2	Black, White	500 1000	152.4 304.8	44.0 87.0	20.0 39.5	.015 .026	.38 .66	.026 .356	.356 9.04
-------------------	------------------------------	----------------------------------	---	-----------------	-------------	----------------	--------------	--------------	--------------	------------	--------------	--------------

For Plenum version of 5T00UP, see 6T00UP.

Jacket sequentially marked at 2 ft. intervals.

10 AWG Stranded (65x28) Bare Copper • Cabled • Rip Cord

Plenum • Flamarrest® Insulation • Natural Flamarrest Jacket

High-Flex 150V 75°C	6T00UP	NEC: CL2P Audio Use Only	2	Black, White	1000	304.8	83.0	37.8	.011 .28	.015 .38	.308 .308	7.82
------------------------	--------	-----------------------------------	---	-----------------	------	-------	------	------	-------------	-------------	--------------	------

Neutrik is a Liechtenstein Corporation trademark.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Special Application Audio, Communication and Instrumentation Cable

Audio Connecting Cables and Dual Channel Audio Cables



Description	Part No.	UL NEC/C(U.L) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness	Jacket Thickness	Nominal OD	Nominal Capacitance			
					Ft.	m	Lbs.	kg				*	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**

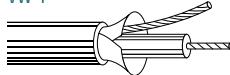
Miniature 80°C VW-1	8417	1	250	76.2	3.3	1.5	.020	.51	.026	.66	.140	3.56	29	95	—	—
---------------------------	------	---	-----	------	-----	-----	------	-----	------	-----	------	------	----	----	---	---

**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	9264	1	1000	304.8	14.0	6.4	.027	.69	.020	.51	.122	3.10	34	112	—	—
--	------	---	------	-------	------	-----	------	-----	------	-----	------	------	----	-----	---	---



Nominal impedance: 50 ohms.

Tear-drop, machine strippable coaxial cable.

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	9454	2	100	30.5	3.8	1.7	.049	1.24	.020	.51	.160	4.06	12	39	—	—
-------------------------	------	---	-----	------	-----	-----	------	------	------	-----	------	------	----	----	---	---



Stereo connecting cable

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	8416	2	250	76.2	5.3	2.4	.018	.46	.020	.51	.106	2.69	36	118	—	—
------	------	---	-----	------	-----	-----	------	-----	------	-----	------	------	----	-----	---	---



For use with head sets, stereo and language labs.

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.



Belden Electronics Division Technical Support: 1-800-BELEN-1 or 1-800-BELEN-3 • www.belden.com

Special Application

Audio, Communication and Instrumentation Cable

Multimedia Control Cables and Microphone/Musical Instrument Cables



Description	Part No.	UL NEC/C(U.L) 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	1502R <small>new</small>	NEC: CMR CEC: CMR FT4	1 STP +2/C	Pair: Blue, White	1000	304.8	45.0	20.5	Data: .025	.039 .99 .250	.64	14	46	38	125

Sequential footing marking every two feet.

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 <small>new</small>	NEC: CMP CEC: CMP FT6	1 STP +2/C	Pair: Blue, White	1000	304.8	40.0	18.2	Data: .025	.015 .381 .205	.64	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	46.2	18.5	8.4	.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	30.5	7.8	3.5	.023	.58	.031	.79	.318	8.08	30	98	55	180
	8426	6	(Same as 8425) + Green	100	30.5	9.0	4.1	.023	.58	.037	.94	.342	8.69	30	98	55	180
	8427	7	(Same as 8426) + Red	100	30.5	9.8	4.5	.023	.58	.041	1.04	.355	9.02	30	98	55	180
	8418	8	(Same as 8427) + Yellow	100	30.5	11.0	5.0	.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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Standard Analog Video Cable

75 Ohm Miniature Coax



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.

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 Coverage							4	1.3	4.3
(30V 60°C)		500	152.4	4.5	2.0	.012"			TC	11.7Ω/M'						5	1.6	5.2
									100.0Ω/M'							10	2.2	7.2
									328.0Ω/km							50	5.1	16.7
																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 Coverage							10	2.4	7.9
(30V 60°C)		U-1000	U-304.8	16.0	7.3	.017"			TC	5.7Ω/M'						50	4.2	13.8
		1000	304.8	16.0	7.3	BCCS			120.0Ω/M'							100	5.7	18.7
									393.7Ω/km							200	8.3	27.2
																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



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.

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	
															1000	26.0	85.3	

†100 ft. put-up available in Clear only.

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	
															1000	26.0	85.3	

Non-ferrous design.

CT = Copper Tin • DCR = DC Resistance • SCCC = 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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Standard Analog Video Cable

75 Ohm Coax
RG-59/U Type



Description	Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Conductor (stranding)	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation	
			Ft.	m		Diameter Nom. DCR	Inch					pF/Ft.	pF/m	MHz	dB/100 Ft.

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							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

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					.030"		95% Shield										10	.9	3.0
					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

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
																	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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Standard Analog Video Cable

75 Ohm Coax

RG-59/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 Inch mm	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.

22 AWG Solid Bare Copper-covered Steel • Bare Copper Braid Shield

Polyethylene Insulation • Black PVC Jacket

UL AWM	8263	NEC:	U-500	U-152.4	19.5	8.9	23 AWG	.146	3.71	BC Braid	.242	6.15	75	66%	20.5	67.3	1	.6	2.0
Style 1354		CMX	U-1000	U-304.8	39.0	17.7	(solid)			95% Shield							10	1.1	3.6
(30V 60°C)		CEC:	1000	304.8	38.0	17.3		.023"		Coverage							50	2.4	7.9
		CMX					BCCS			2.6Ω/M'							100	3.4	11.2
							49.0Ω/M'			8.5Ω/km							200	4.9	16.1
							160.7Ω/km										400	7.0	23.0
																	700	9.7	31.8

Non-contaminating Black PVC jacket

Foam Polyethylene Insulation • Black PVC Jacket

75°C	8221	U-500	U-152.4	18.5	8.4	22 AWG	.146	3.71	BC Braid	.242	6.15	80	78%	16.3	53.5	1	.4	1.4
		500	152.4	18.5	8.4	(solid)			95% Shield						10	.9	3.0	
		U-1000	U-304.8	36.0	16.4		.025"		Coverage						50	2.0	6.6	
		1000	304.8	36.0	16.4			BCCS		2.6Ω/M'					100	2.9	9.5	
						50.0Ω/M'			8.5Ω/km						200	4.1	13.4	
							164.0Ω/km								400	5.9	19.4	
															700	7.8	25.6	
															900	8.8	28.9	
															1000	9.9	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"	.146 95% Shield Coverage BC 2.6Ω/M	3.71	BC Braid 95% Shield Coverage BC 2.6Ω/M	.242	6.15	75	78%	17.3	56.7	1	.3	1.0
							15.0Ω/M'			8.5Ω/km	100% Sweep tested. 5 MHz to 450 MHz.						200	4.5	14.8
							49.2Ω/km										400	6.6	21.6
																	700	8.9	29.2
																	900	10.1	33.1

Non-contaminating PVC jacket. For CCTV applications

UL AWM	9259	NEC:	100	30.5	4.6	2.1	22 AWG	.146	3.71	BC Braid	.241	6.12	75	78%	17.3	56.7	1	.3	1.0
Style 1354		CM	U-500	U-152.4	18.5	8.4	(7x30)			95% Shield						10	.9	3.0	
(30V 80°C)		CEC:	500	152.4	20.5	9.3	.030"			Coverage						50	2.1	6.9	
		CM	U-1000	U-304.8	36.0	16.4	BC			2.6Ω/M						100	3.0	9.8	
			1000	304.8	36.0	16.4	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	32.1	

For CCTV applications

Plenum • Foam FEP Insulation • Black FEP Jacket

200°C	89259	NEC:	100	30.5	5.1	2.3	22 AWG	.135	3.43	BC Braid	.193	4.90	75	78%	17.3	56.7	1	.3	1.0
		CMP	500 †	152.4	18.0	8.2	(7x30)			95% Shield						10	.9	3.0	
		CEC:	1000 †	304.8	34.0	15.5		.030"		Coverage						50	2.1	6.9	
		CMP FT6					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	21.6	
																700	9.0	29.5	

Suitable for Outdoor and Direct Burial applications

Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket

75°C	82259	NEC: U-1000 †	U-304.8	31.0	14.1	22 AWG	.135	3.43	BC Braid	.193	4.90	75	78%	17.3	56.7	1	.3	1.0
		CMP	1000 †	304.8	33.0	15.0	(7x30)		95% Shield						10	.9	3.0	
		CEC:					.030"		Coverage						50	2.1	6.9	
		CMP FT6					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	21.6	
															700	9.0	29.5	
															900	10.1	33.1	
															1000	11.0	36.1	

BC = Bare Copper • BCCS = Bare Copper-covered Steel • DCB = 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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Standard Analog Video Cable

75 Ohm Coax

RG-59/U Type



Description	Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding)	Nominal Core OD		Shielding Materials	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation	
			Ft.	m	Lbs.	kg	Diameter Nom. DCR	Inch	mm	Nom. DCR	Inch	mm	(Ω)	pF/Ft.	pF/m	MHz	dB/100 Ft.	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	.143	3.63	BC Braid 80% Shield .032" Coverage BCCS 44.5Ω/M' 146.0Ω/km	.241	6.12	75	78%	17.3	56.7	1	.6	2.0
																10	1.0	3.3	
																50	2.1	6.9	
																100	3.0	9.8	
																200	4.5	14.8	
																400	6.6	21.6	
																700	8.9	29.2	
																900	10.1	33.1	
																1000	10.9	35.8	

Foam Polyethylene Insulation • Black Polyethylene Jacket

80°C	8212		U-500	U-152.4	16.5	7.5	20 AWG	.143	3.63	BC Braid 95% Shield .032" Coverage BCCS 44.5Ω/M' 146.0Ω/km	.242	6.15	75	78%	17.3	56.7	1	.6	2.0
			500	152.4	19.0	8.6	(solid)								10	1.0	3.3		
			U-1000	U-304.8	32.0	14.5	.032"								50	2.1	6.9		
			1000	304.8	32.0	14.5	BCCS								100	3.0	9.8		
															200	4.5	14.8		
															400	6.6	21.6		
															700	8.9	29.2		
															900	10.1	33.1		
															1000	10.9	35.8		

Foam Polyethylene Insulation • Black PVC Jacket

80°C	9274	NEC: CM	500	152.4	16.5	7.5	20 AWG	.143	3.63	BC Braid 95% Shield .032" Coverage BCCS 44.5Ω/M' 146.0Ω/km	.240	6.10	75	78%	17.3	56.7	1	.6	2.0
		CEC: CM	1000	304.8	32.0	14.5	(solid)								10	1.0	3.3		
							.032"								50	2.1	6.9		
							BCCS								100	3.0	9.8		
															200	4.5	14.8		
															400	6.6	21.6		
															700	8.9	29.2		
															900	10.1	33.1		
															1000	10.9	35.8		

20 AWG Solid .032" Bare Copper Conductor • 95% Bare Copper Braid Shield**Gas-injected Foam HDPE Insulation • Black PVC Jacket**

UL AWM	1426A	NEC: CM	U-1000	U-304.8	38.0	17.3	20 AWG	.145	3.68	BC Braid 95% Shield .032" Coverage BC 10.0Ω/M' 32.8Ω/km	.242	6.15	75	83%	16.3	53.5	1	.3	1.0
Style 1354 (30V 75°C)															10	.9	3.0		
							.032"							50	1.9	6.2			
							BC							100	2.6	8.5			
														200	3.6	11.8			
														400	5.0	16.4			
														700	7.0	23.0			
														900	8.0	26.3			
														1000	8.5	27.9			

Series 59 • 20 AWG Solid .032" Bare Copper-covered Steel • Foil + Braid Shield

80°C	9275	NEC: CATV CM	U-500	U-152.4	12.0	5.5	20 AWG	.144	3.66	Duofoil® + 40% Aluminum Braid	.237	6.02	75	83%	16.2	53.1	See Chart on page 6.88
		CEC: CM	500	152.4	12.5	5.7	(solid)								50	1.9	6.2
			U-1000*	U-304.8	24.0	10.9	.032"								100	2.6	8.5
			1000	304.8	24.0	10.9	BCCS								200	3.6	11.8
															400	5.0	16.4
															700	7.0	23.0
															900	8.0	26.3
															1000	8.5	27.9

*U-1000 ft. put-up also available in White.

80°C	9100	NEC: CATV CM	U-500	U-152.4	12.0	5.5	20 AWG	.144	3.66	Duobond® II + 40% Aluminum Braid	.237	6.02	75	83%	16.2	53.1	See Chart on page 6.88
		CEC: CM	U-1000*	U-304.8	24.0	10.9	(solid)								50	1.9	6.2
			1000	304.8	24.0	10.9	.032"								100	2.6	8.5
							BCCS								200	3.6	11.8
															400	5.0	16.4
															700	7.0	23.0
															900	8.0	26.3
															1000	8.5	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-BELEN-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



Description	Part No.	UL NEC/C(U.L) 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.

21 AWG Solid .028" Bare Copper-covered Steel • Two Bare Copper Braids (97% Shield Coverage)

Polyethylene Insulation • Black Polyethylene Jacket																			
MATV Cable	8215		1000	304.8	74.0	33.6	21 AWG (solid)	.185	4.70	(2) BC Braids	.332	8.43	75	66%	20.5	67.2	1	.4	1.3
80°C				.028"			97% Shield										10	.8	2.6
				BCCS			Coverage										50	1.9	6.2
				32.0Ω/M'			1.1Ω/M'										100	2.7	8.9
				105.0Ω/km			3.6Ω/km										200	4.1	13.4
																	400	5.9	19.4
																	700	8.1	26.6
																	900	9.4	30.8
																	1000	9.8	32.1

18 AWG Solid .037" Bare Copper • Two Bare Copper Braids (98% Shield Coverage)

Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	9290	NEC: CM	1000	304.8	60.0	27.3	18 AWG (solid)	.180	4.57	(2) BC Braids	.288	7.32	75	78%	17.3	56.7	1	.2	.7
		CEC: CM	2000	609.6	120.0	54.5	.037"			98% Shield							10	.7	2.3
							BC			Coverage							50	1.7	5.6
							7.5Ω/M'			2.0Ω/M'							100	2.5	8.2
							24.6Ω/km			6.6Ω/km							200	3.6	11.8
																	400	5.3	17.4
																	700	7.2	23.6
																	900	8.3	27.2
																	1000	8.8	28.9

18 AWG Solid .040" Bare Copper • Duofoil® + Tinned Copper Braid Shield

Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
UL AWM	9248	NEC: CM	U-500	U-152.4	17.0	7.7	18 AWG (solid)	.180	4.57	Duofoil + 60% TC Braid	.270	6.86	75	82%	16.2	53.1	1	.3	1.0
Style 1354		CEC: CM	500	152.4	18.0	8.2	.040"										10	.7	2.3
(30V 80°C)			U-1000	U-304.8	33.0	15.0	BC			5.6Ω/M'							50	1.5	4.9
			1000	304.8	33.0	15.0	BC			18.4Ω/km							100	2.0	6.6
			1640	500.0	55.8	25.3	6.4Ω/M'										200	2.8	9.2
			3280	1000.0	108.2	49.2	21.0Ω/km										400	4.0	13.1
																	700	5.3	17.4
																	900	6.1	20.0
																	1000	6.5	21.3

Plenum • Foam FEP Insulation • Black FEP Jacket

Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C	89248	NEC: CMP	500†	152.4	18.0	8.2	18 AWG (solid)	.170	4.32	Duofoil + 65% TC Braid	.222	5.64	75	82%	16.2	53.1	1	.3	1.0
		CEC: CMP	1000†	304.8	36.0	16.4	.040"										10	.7	2.3
			2000†	609.6	70.0	31.8	BC			5.1Ω/M'							50	1.5	4.9
							6.4Ω/M'			16.7Ω/km							100	2.1	6.9
							21.0Ω/km										200	3.1	10.2
																	400	4.5	14.8
																	700	6.0	19.7
																	900	6.9	22.6
																	1000	7.3	23.9

Suitable for Outdoor and Direct Burial applications.

Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket																			
75°C	82248	NEC: CMP	U-1000†	U-304.8	32.0	14.5	18 AWG (solid)	.170	4.32	Duofoil + 65% TC Braid	.222	5.64	75	82%	16.2	53.1	1	.3	1.0
		CEC: CMP	1000†	304.8	33.0	15.0	.040"										10	.7	2.3
							BC			5.1Ω/M'							50	1.6	5.2
							6.4Ω/M'			16.7Ω/km							100	2.2	7.2
							21.0Ω/km										200	3.0	9.8
																	400	4.6	15.1
																	700	6.6	21.6
																	900	7.7	25.3
																	1000	8.2	26.9

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



Description	Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Nom. DCR	Nominal Core OD Inch mm	Shielding Materials Nom. DCR	Nominal OD Inch mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft. pF/m	Nominal Attenuation dB/100 Ft. dB/100m
			Ft.	m	Lbs.	kg								

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	500 1000	152.4 304.8	59.0 117.0	26.8 53.2	18 AWG (7x26)	.285 .048"	BC Braid 97% Coverage TC	.405 1.2Ω/M'	10.29 20.5	75 66%	67.2 20.5	1 4.2	.2 13.8	.6 2.2		
		CEC: CM						20.0Ω/km	3.9Ω/km					100 200 400 700 900 1000	.7 2.0 2.9 5.8 6.8 7.1	50 100 200 400 700 900	1.3 2.0 2.9 4.2 5.8 6.8	4.3 6.6 9.5 13.8 19.0 22.3
																	2.2 23.3	

Polyethylene Insulation • Non-contaminating Black PVC Jacket

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)	.285 .048"	BC Braid 97% Coverage TC	.405 1.2Ω/M'	10.29 20.5	75 66%	67.2 20.5	1 4.2	.2 13.8	.6 2.2			
								20.0Ω/km	3.9Ω/km					100 200 400 700 900 1000	.7 2.0 2.9 5.8 6.8 7.1	50 100 200 400 700 900	1.3 2.0 2.9 4.2 5.8 6.8	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)	.280 .064"	Duofoil + 60% TC Braid BC	.405 3.0Ω/M'	10.29 9.8Ω/km	75 84%	16.1 100% Sweep tested. 5 MHz to 450 MHz.	52.8	1 2.3	.2 10.8	.6 14.1	
														100 200 400 700 900 1000	.5 1.6 2.9 4.3 7.6 10.8	50 100 200 400 700 900	1.6 3.0 4.3 7.6 10.8 14.1

Plenum • Foam FEP Insulation • Black FEP Jacket

Plenum • Foam FEP Insulation • Black FEP Jacket																	
200°C	89292	NEC: CMP CATV P	500† 1000†	152.4 304.8	39.5 77.0	18.0 35.0	14 AWG (solid)	.274 .064"	Duofoil + 63% TC Braid BC	.346 9.8Ω/km	8.79 100% Sweep tested. 5 MHz to 450 MHz.	75 83%	16.2 52.8	53.1	1 2.3	.2 10.8	.5 14.1
		CEC: CMP FT6												100 200 400 700 900 1000	.4 1.3 2.2 5.2 7.2 10.8	1.0 1.5 2.2 4.5 7.2 10.8	3.3 4.9 7.6 14.8 17.1 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 1000 2000	152.4 304.8 609.6	44.0 87.0 172.0	20.0 39.5 78.2	14 AWG (solid)	.285 .064"	BC Braid 97% Shield Coverage BC	.405 1.1Ω/M'	10.29 3.6Ω/km	84% 100% Sweep tested. 5 MHz to 450 MHz.	75 16.1	52.8	1 2.9	.2 9.5	.6 13.5	
														100 200 400 700 900 1000	.4 1.3 2.2 4.1 5.2 7.1	1.0 1.5 2.2 4.5 5.2 7.1	3.0 4.3 6.2 14.8 17.1 18.0

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 (**D₁, D₂ & D₃**)

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



Description	Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) 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.

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	
																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	
																360	6.2	20.3	
																540	7.7	25.3	
																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



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.

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 + 95% .023" BCC 19.1Ω/M' 62.6Ω/km	.220	5.59	75	66%	21.0	68.9	1	.4	1.1
		1000	304.8	28.0	12.7											3.6	.6	2.0
																10.0	1.2	3.9
																71.5	3.3	10.8
																135	4.7	15.4
																270	6.8	22.3
																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 + 95% .022" BC 20.4Ω/M' 66.9Ω/km	.220	5.59	75	66%	21.0	68.9	1	.4	1.2
		U-1000	U-304.8	29.0	13.2											3.6	.5	1.8
																10.0	1.2	3.8
																71.5	2.9	9.5
																135	4.0	13.0
																270	5.6	18.4
																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: CMR Style 1354 (30V 75°C)	U-1000	U-304.8	35.0	15.9	23 AWG	.146	3.71	Duofoil + 95% .022" BC 20.4Ω/M' 66.9Ω/km	.220	5.59	75	66%	20.5	67.2	1	.4	1.2
		CEC: CMG FT4														3.6	.5	1.8	
																10.0	1.2	3.8	
																71.5	2.9	9.5	
																135	4.0	13.0	
																270	5.6	18.4	
																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 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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Precision Video Cable for Analog and Digital

RG-59/U Type



Description	Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Nom. DCR	Nominal Core OD Inch mm	Shielding Materials Nom. DCR	Nominal OD Inch mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft. pF/m	Nominal Attenuation dB/100 Ft. dB/100m
			Ft.	m	Lbs.	kg								

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 .032" BC 12.0Ω/M' 40.0Ω/km	3.68 TC Braid 3.8Ω/M' 12.5Ω/km	.234 TC Braid 3.8Ω/M' 12.5Ω/km	5.94 75 83%	75 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		

▲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 	NEC: CM CEC: CM	1000	304.8	44.0	20.0	22 AWG (7x29) .031"	.145 95% Shield BCC 12.0Ω/M' 40.0Ω/km	3.68 TC Double Braid 95% Shield Coverage 2.4Ω/M' 7.8Ω/km	.242 TC Double Braid 95% Shield Coverage 2.4Ω/M' 7.8Ω/km	6.15 75 80%	75 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		

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 .032" BC 10.0Ω/M' 32.8Ω/km	3.38 TC Braid 3.8Ω/M' 10.5Ω/km	.199 TC Braid 3.8Ω/M' 10.5Ω/km	5.05 75 84%	75 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		

†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 .031" BC 9.9Ω/M' 32.5Ω/km	5.03 98% Shield Coverage 1.1Ω/M' 3.6Ω/km	.305 TC Double Braid 98% Shield Coverage 1.1Ω/M' 3.6Ω/km	7.75 75 66%	75 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		

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



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.

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 .031"	.200	5.06	TC Double Braid 98% Shield Coverage 1.1Ω/M' 32.5Ω/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 6.6 11.5 4.3 5.0 6.2 7.2 7.4 9.1	1.0 1.6 2.6 6.6 14.1 16.4 20.3 23.6 24.3 29.8

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*	152.4	37.0	16.8	20 AWG .031"	.198	5.03	TC Double Braid 98% Shield Coverage 1.1Ω/M' 32.5Ω/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 6.9 14.1 16.6 20.7 24.3 24.9 30.2	.8 1.8 2.6 6.9 9.8 14.1 16.6 20.7 24.3 24.9 30.2
			1000	304.8	74.0	33.6													

*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 .031"	.198	5.03	TC Double Braid 98% Shield Coverage 1.1Ω/M' 32.5Ω/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 6.9 9.8 14.4 16.6 21.5 25.4 26.2 30.2	.8 1.8 2.6 6.9 9.8 14.4 16.6 21.5 25.4 26.2 30.2

*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*	152.4	32.0	14.5	22 AWG (7x29) .031"	.193	4.90	TC Double Braid 98% Shield Coverage 1.7Ω/M' 40.0Ω/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 9.0 2.5 3.6 11.6 16.7 19.7 24.3 28.5 29.2 34.4	.9 1.7 2.9 8.0 11.6 16.7 19.7 24.3 28.5 29.2 34.4
			1000	304.8	65.0	29.5													

*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†	152.4	46.0	20.9	20 AWG .032"	.185	4.70	TC Double Braid 98% Shield Coverage 1.1Ω/M' 32.5Ω/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 8.0 2.3 3.3 10.8 16.7 20.0 26.2 31.8 32.8 40.3	.7 1.6 2.6 7.5 10.8 16.7 20.0 26.2 31.8 32.8 40.3
			1000†	304.8	86.0	39.1													

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-BELEDEN-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.



Belden Electronics Division Technical Support: 1-800-BELEDEN-1 or 1-800-BELEDEN-3 • www.belden.com

Precision Video Cable for Analog and Digital

Low Loss Serial Digital Coax

RG-6/U, RG-7/U and RG-11/U Type



Description	Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding)	Nominal Core OD		Shielding Materials	Nominal OD	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Attenuation		
			Ft.	m	Lbs.	kg	Diameter Nom. DCR	Inch	mm	Nom. DCR	Inch	mm	pF/Ft.	pF/m	MHz	dB/100 Ft.	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 .040" BC 6.4Ω/M' 21.0Ω/km	.180 TC Braid 2.8Ω/M' 9.2Ω/km	.275 75 82%	6.99 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				

▲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† 4500	152.4 304.8 1371.6	22.5 45.0 20.5	10.2 20.5 94.3	18 AWG .040" BC 6.4Ω/M' 21.0Ω/km	.170 TC Braid 2.8Ω/M' 9.2Ω/km	.234 75 82%	5.94 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				

†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 4500	152.4 304.8 1371.6	32.5 62.0 28.2	14.8 28.2	16 AWG .064" BC 1.2Ω/M' 3.9Ω/km	.225 TC Braid 1.7Ω/M' 5.6Ω/km	.320 75 84%	8.13 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 7.7 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				

▼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 .064" BC 2.5Ω/M' 8.2Ω/km	.280 TC Braid 1.5Ω/M' 4.9Ω/km	.405 75 85%	10.3 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 5.5 6.1 7.7 8.2	.5 1.0 1.5 3.6 4.8 6.9 8.0 10.0 11.7 12.0 14.1 22.6 26.9				

*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 .064" BC 2.5Ω/M' 8.2Ω/km	.274 TC Braid 2.5Ω/M' 8.2Ω/km	.348 75 83%	8.84 16.3 53.5	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000	.2 .3 .4 1.1 1.2 2.1 2.5 3.1 3.6 4.7 5.5 6.9 7.7 10.2	.5 1.0 1.3 3.6 4.1 4.8 8.0 12.8 15.4 18.0 22.7 30.2 33.5				

*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.



Belden Electronics Division Technical Support: 1-800-BELEN-1 or 1-800-BELEN-3 • www.belden.com

VideoFLEX® Snake Cable for Precision Digital and Analog

Bundled Miniature and RG-59/U Type



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 pF/Ft. pF/m	Nominal Frequency MHz	Nominal Attenuation dB/100 Ft. dB/100m
				Ft.	m	Lbs.	kg		Inch	mm		Inch	mm					

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	7787A new	NEC: CMR CEC: (1855A Bundled)	3 1000	500 304.8	152.4 94.0	47.5 42.7	21.6 .023"	23 AWG (solid)	.102 .159	2.55 4.03	Duofoil Coax OD: TC Braid BC 20.1Ω/M' 65.9Ω/km	.432 75 10.97 24.9Ω/km	83%	16.5	54.1	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	
															360	6.2	20.3	
															540	7.7	25.3	
															720	9.1	29.8	
															750	9.5	31.2	
															1000	10.5	34.4	
															1500	13.0	42.6	
															2500	16.9	55.4	
															3000	18.5	60.7	

Sweep tested 5 MHz to 3 GHz.

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	7794A new	NEC: CMR CEC: (1505A Bundled)	3 1000	500 304.8	152.4 188.0	94.5 85.5	43.0 .032"	20 AWG (solid)	.145 .235	3.68 5.97	Duofoil Coax OD: TC Braid BC 10.0Ω/M' 32.8Ω/km	.631 75 16.03 12.5Ω/km	83%	16.3	53.1	1	.3	1.0
															3.6	.6	1.8	
															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	9.4	30.8	
															2500	12.4	40.7	
															3000	13.8	45.3	

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



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

VideoFLEX® Snake Cable for Precision Digital and Analog

RG-6/U Type



Description	Part No.	UL NEC/C(UL) CEC Type	No. of Cond.	Standard Lengths		Standard Unit Weight		Conductor (stranding) Nom. DCR	Nominal Core OD Inch	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft. pF/m	Nominal Attenuation MHz dB/100 Ft. dB/100m
				Ft.	m	Lbs.	kg								

RG-6/U Type • 18 AWG Solid .040" Bare Copper • Dufoil® + 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 .040" BC 6.4Ω/M' 21.0Ω/km	.180 Coax OD: .257 6.99	4.57 + 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 6.99	4.57 as above	same	.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 6.99	4.57 as above	same	.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 6.99	4.57 as above	same	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

Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Precision Video Cable for Analog and Digital

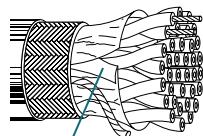
Parallel Digital Video



Description	Part No.	UL NEC/C(U.L) 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**

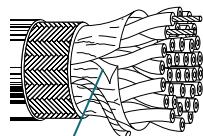
UL AWM Style 2919 (30V 80°C)	8142	NEC: CL2	12.5 (12 pairs + 1 single)	See Chart 5 (Tech Info Section)	100	30.5	7.0	3.2	65.0Ω/M'	3.1Ω/M'	.407	10.34	120	78%	11.0	36.1	20.0	65.6
---------------------------------	------	----------	-------------------------------	------------------------------------	-----	------	-----	-----	----------	---------	------	-------	-----	-----	------	------	------	------



Shorting Fold

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	30.5	10.5	4.8	24.0Ω/M'	2.4Ω/M'	.440	11.18	100	78%	12.5	41	22	72.2
---------------------------------	------	--------------------	-------------------------------	------------------------------------	-----	------	------	-----	----------	---------	------	-------	-----	-----	------	----	----	------



Shorting Fold

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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Precision Video Cable for Analog and Digital

Digital Video Time Code and
Precision Video Twinax



Description	Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) 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.

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
------	------	--------------------------------	------	-------	------	-----	--	------	------	--	------	------	-----	-----	------	------	---	--	--

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 .051"	16 AWG (solid) 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.



Belden Electronics Division Technical Support: 1-800-BELEN-1 or 1-800-BELEN-3 • www.belden.com

Video Triax Cable

RG-59/U Type



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)	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nominal Capacitance		Nominal Attenuation	
			Ft.	m	Lbs.	kg		Diameter Nom. DCR	Inch		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	1857A		500	152.4	42.5	19.3	22 AWG	.143	3.63	(2) BC Braids	.360	9.14	75	79%	17.0	55.8	1	3	1.0						
80°C			1000	304.8	86.0	39.1	(19x34)	.031"		95% Coverage							3.6	.5	1.6						
										BC							10	.8	2.6						
										Inner:							71.5	2.2	7.2						
										14.0Ω/M'							135	3.1	10.2						
										45.9Ω/km							270	4.5	14.8						
										8.2Ω/km							360	5.4	17.7						
										Outer:	100% Sweep tested. 5 MHz to 850 MHz.														
										1.6Ω/M'							720	8.1	26.6						
										5.3Ω/km							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	.145	3.68	(2) BC Braids	.315	8.00	75	83%	16.2	53.1	1	3	1.0						
			1000	304.8	60.0	27.3	(solid)			95% Coverage							3.6	.6	2.0						
			2000	609.6	118.0	53.6	.032"			BC							10	.9	3.0						
										10.0Ω/M'							71.5	2.1	6.9						
										32.8Ω/km							135	3.0	9.8						
										2.5Ω/M'							270	4.2	13.8						
										8.2Ω/km							360	4.8	15.7						
										Outer:	For Plenum version of 8232, see 88232.														
										2.8Ω/M'							540	5.9	19.4						
										9.2Ω/km							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.

Gas-injected Foam HDPE Insulation • Black PVC Jacket (PVC Insulation between Braids)																									
75°C	8232A	NEC: CMR	1000	304.8	69.0	31.4	20 AWG	.145	3.68	(2) BC Braids	.315	8.00	75	83%	16.2	53.1	1	3	1.0						
		CEC: CMG FT4					(solid)			95% Coverage							3.6	.6	2.0						
							.032"			BC							10	.9	3.0						
										10.0Ω/M'							71.5	2.1	6.9						
										32.8Ω/km							135	3.0	9.8						
										2.5Ω/M'							270	4.2	13.8						
										8.2Ω/km							360	4.8	15.7						
										Outer:	For Plenum version of 8232A, see 88232.														
										2.8Ω/M'							540	5.9	19.4						
										9.2Ω/km							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						

Plenum • Foam FEP Insulation • Black FEP Jacket (FEP Insulation between Braids)

Plenum • Foam FEP Insulation • Black FEP Jacket (FEP Insulation between Braids)																									
200°C	88232	NEC: CMR	500†	152.4	31.0	14.1	20 AWG	.140	3.56	(2) BC Braids	.246	6.25	75	80%	16.9	55.4	1	4	1.3						
		CEC: CMG FT4	1000†	304.8	61.0	27.7	(solid)			95% Coverage							3.6	.6	2.0						
							.032"			BC							10	.8	2.6						
										10.0Ω/M'							71.5	2.2	7.2						
										32.8Ω/km							135	3.1	10.2						
										8.5Ω/km							270	4.5	14.8						
										Outer:	100% Sweep tested. 5 MHz to 3 GHz.														
										2.6Ω/M'							360	5.3	17.4						
										8.5Ω/km							540	6.6	21.6						
										Outer:							720	7.7	25.3						
										2.6Ω/M'							750	7.9	25.9						
										8.5Ω/km							1000	9.4	30.8						
										Outer:							1500	12.1	39.7						
										2.6Ω/M'							2250	15.6	51.2						
										8.5Ω/km							3000	18.7	61.3						

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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Video Triax Cable

RG-59/U Type



Description	Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Nom. DCR	Nominal Core OD Inch mm	Shielding Materials Nom. DCR	Nominal OD Inch mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft. pF/m	Nominal Attenuation MHz dB/100 Ft. dB/100m
			Ft.	m	Lbs.	kg								

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	NEC: CMR CEC: CMG FT4	500	152.4	41.0	18.6	20 AWG	.145	3.68	(2) BC Braids 95% .032" BC 10.6Ω/M' 34.8Ω/km	.360	9.14	75	83%	16.2	53.1	1	.3	1.0
			1000	304.8	83.0	37.7				Coverage Inner: Outer:							3.6	.6	1.8
										10.6Ω/M' 34.8Ω/km							10	.8	2.7
										100% Sweep tested. 5 MHz to 3 GHz.							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 <i>new</i>	NEC: CMR CEC: CMG FT4	1000	304.8	86.0	39.1	20 AWG	.145	3.68	(2) BC Braids 95% .032" BC 10.1Ω/M' 33.1Ω/km	.360	9.14	75	83%	16.2	53.1	1	.3	1.0
										Coverage Inner: Outer:							3.6	.6	1.8
										10.1Ω/M' 33.1Ω/km							10	.8	2.7
										100% Sweep tested. 5 MHz to 3 GHz.							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	9267 <i>VW-1</i>	NEC: CMR CEC: CMG FT4	500	152.4	39.5	18.0	20 AWG	.145	3.68	(2) BC Braids 95% .032" BC 10.0Ω/M' 32.8Ω/km	.360	9.14	75	82%	16.3	53.5	1	.3	1.0
			1000	304.8	77.0	35.0				Coverage Inner: Outer:							3.6	.6	2.0
										10.0Ω/M' 32.8Ω/km							10	.9	3.0
										100% Sweep tested. 5 MHz to 3 GHz.							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
																	3000	15.9	52.2

Suitable for Outdoor and Direct Burial applications.

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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Video Triax Cable

RG-11/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.

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	1858A	500	152.4	81.0	36.8	15 AWG	.312	7.92	(2) BC Braids	.520	13.20	75	78%	17.3	56.8	1	.1	.3
80°C		1000	304.8	158.0	71.8	(19x27)	.064"		Coverage							3.6	.3	1.0
									BC							10	.5	1.6
									Inner:							71.5	1.2	3.9
									3.0Ω/M'							135	1.8	5.9
									9.8Ω/km							270	2.6	8.5
										100% Sweep tested. 5 MHz to 850 MHz.						360	3.1	10.2
																540	3.9	12.8
																720	4.7	15.4
																750	4.8	15.7
																1000	5.7	18.7

Plenum • Foam FEP Insulation • Black Fluorocopolymer Jacket (Fluorocopolymer Insulation between Braids)																		
125°C	1859A	NEC: 500	152.4	66.5	30.2	15 AWG	.285	7.24	(2) BC Braids	.406	10.30	75	80%	16.5	54.1	1	.1	.3
		CMP: 1000	304.8	134.0	60.9	(19x27)	.064"		Coverage							3.6	.2	.7
		CEC: CMP FT6							BC							10	.5	1.6
									Inner:							71.5	1.3	4.3
									3.0Ω/M'							135	1.9	6.2
									9.8Ω/km							270	3.0	9.8
										100% Sweep tested. 5 MHz to 850 MHz.						360	3.6	11.8
																540	4.5	14.8
																720	5.4	17.7
																750	5.6	18.4
																1000	6.6	21.6

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	9192	NEC: 1000	304.8	150.0	68.2	15 AWG	.312	7.92	(2) BC Braids	.520	13.20	75	78%	17.3	56.8	1	.1	.3
Style 1641		CL2X				(19x27)	.064"		Coverage							3.6	.3	1.0
(30V 80°C)									BC							10	.5	1.6
VW-1									Inner:							71.5	1.2	3.9
									3.0Ω/M'							135	1.8	5.9
									9.8Ω/km							270	2.6	8.5
										100% Sweep tested. 5 MHz to 850 MHz.						360	3.1	10.2
																540	3.9	12.8
																720	4.7	15.4
																750	4.8	15.7
																1000	5.7	18.7

Foam Polyethylene Insulation • Paper Tape Separator • Black Hypalon® Jacket (Polyethylene Insulation between Braids)																		
UL AWM	9232	500	152.4	42.5	19.3	15 AWG	.312	7.92	(2) BC Braids	.520	13.20	75	78%	17.3	56.8	1	.1	.3
Style 1641		1000	304.8	145.0	65.9	(19x27)	.064"		Coverage							3.6	.3	1.0
(30V 60°C)									BC							10	.5	1.6
VW-1									Inner:							71.5	1.2	3.9
									3.0Ω/M'							135	1.8	5.9
									9.8Ω/km							270	2.6	8.5
										100% Sweep tested. 5 MHz to 850 MHz.						360	3.1	10.2
																540	3.9	12.8
																720	4.7	15.4
																750	4.8	15.7
																1000	5.7	18.7

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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Video Triax Cable

RG-11/U Type



Description	Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD Inch mm	Shielding Materials Nom. DCR	Nominal OD Inch mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/Ft. pF/m	Nominal Attenuation MHz dB/100 Ft. dB/100m
			Ft.	m	Lbs.	kg								

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
										Outer:							360	2.7	8.9
										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

Suitable for Outdoor and Direct Burial applications.

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
							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
										Outer:							360	2.7	8.9
										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	new	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			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
										Outer:							360	2.7	8.9
										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

Suitable for Outdoor and Direct Burial applications.

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.

Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

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

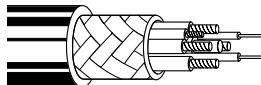


Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nominal Optical Attenuation (@1310nm)	
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm	dB/1000 Ft.	dB/km

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

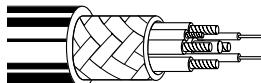
7804R new	NEC:	328	100.0	33.5	15.2	(2) Fibers: SM/125µ/900µ (core/clad/buffer)	.079	2.00	36 AWG	.362	9.20	.14	.45
	CMR	500	152.4	50.0	22.7				TC Braid				
	CEC:	1000	304.8	98.0	44.5				95% Shield				
CMG FT4	1640	500.0	155.8	70.8		(2) Cond.: 24 AWG (7x32) .024"	.050	1.27	Coverage				
	3280	1000.0	321.4	146.1		Tinned Copper 23.3Ω/M' 76.4Ω/km			2.9Ω/M'				
						(4) Cond.: 20 AWG (19x32) .037"	.063	1.60	9.5Ω/km				
						Tinned Copper 8.8Ω/M' 28.9Ω/km							
									Plenum version and other conductor counts/diameters available by special order.				



Plenum version and other conductor counts/diameters available by special order.

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



Plenum version and other conductor counts/diameters available by special order

DCB = DC Resistance • SM = Single-mode • TC = Tinned Copper

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



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.

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 .242 6.15 95% Shield Coverage 2.6Ω/M' 8.5Ω/km	3.71 6.15 BC Braid x x .470 11.94	.242 x x	6.15 x x	75 75	78% 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																		

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 .242 6.15 95% Shield Coverage 2.6Ω/M' 8.5Ω/km	3.71 6.15 BC Braid x x .561 14.25	.290 x x	7.37 x x	75 75	78% 78%	17.3 56.8	1 5 10 50 100 400	.3 .7 1.0 2.1 6.9 3.0 24.3		
Z-Fold®																		
Siamese Type Construction																		

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.



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

Audio and Video Composite Camera Cable

ENG and EFP Cables

Multiple Coax with Shielded Twisted Pairs

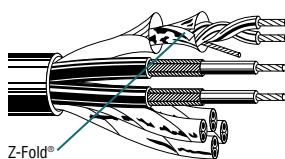


Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation	
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.

12-conductor EFP and ENG Camera Cable

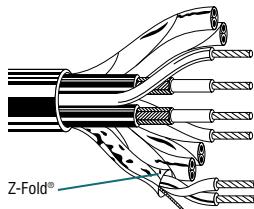
Foam Polyethylene (Coax) and Polypropylene (Pairs) Insulation • Overall Chrome Jacket

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 2.54 Coax OD: .150 3.81 93% Shield Coverage 6.0Ω/M' 19.7Ω/km	Each Coax: TC Braid 93% Shield Coverage 6.0Ω/M' 19.7Ω/km	.490 12.45 75 78% 17.3 56.8	1 .4 1.3 10 1.5 4.9 50 3.8 12.5 100 5.6 18.4 300 10.6 34.8 500 13.8 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 1.12 Pair OD: .095 2.41 100% Shield Coverage with Drain Wire 18.0Ω/M' 59.1Ω/km	Each Pair: Beldfoil® Shielded	— — — 66% 27.0 88.6	— — —



14-conductor EFP and ENG Camera Cable

Foam Polyethylene (Coax) and PVC (Pairs and Conductors) Insulation • Overall Chrome Jacket



BC – Bare Copper • DCB – 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-BEI-DEF-1**. Request quotations of cables not listed.

Composite Camera Cable

Cables for TV Cameras and CCTV



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		PVC
Conductors		Coax
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

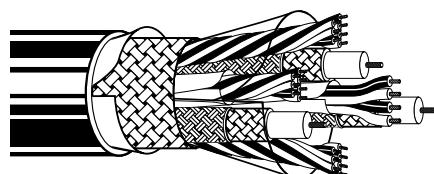
Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Standard Unit Weight	
		Ft.	m	Lbs.	kg

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

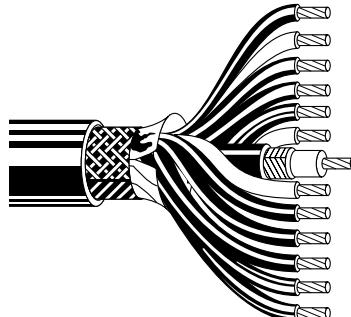
Conductor	(12) Conductors (1) Coax	Tinned Copper Bare Copper
Insulation	Conductors Coax	PVC Foam PE
Shield	(12) Conductors (1) Coax Overall	Unshielded 95% Bare Copper Braid 80% Tinned Copper Braid
Jacket		Gray PVC
Nominal OD		.406" (11.70mm)
Nominal Impedance (Coax)		75Ω
Temperature Rating		60°C
Approvals/Rating	UL AWM Style NEC Rating	2594 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 CL2X	100 1000	30.5 304.8	16.7 161.0	7.6 73.2
------	-------------	-------------	---------------	---------------	-------------



Composite Camera Cable

Cables for TV Cameras and CCTV



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.

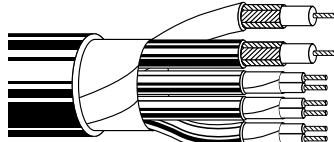
Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Standard Unit Weight	
		Ft.	m	Lbs.	kg

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 NEC Rating	2497 CL2X

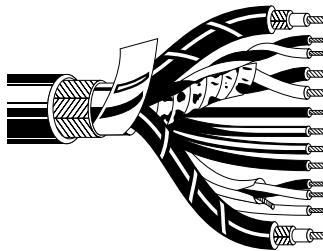
Part No.	UL NEC/C(UL) CEC Type	Standard Lengths		Standard Unit Weight	
		Ft.	m	Lbs.	kg

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



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. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation	
				Ft.	m	Lbs.	kg		Inch	mm		Inch	mm		pF/Ft.	pF/m	MHz	dB/100 Ft.

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"	.056 .102	1.42 2.59	Coaxes: Duofoil + 90%	.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 30.8 101.0 32.8 107.6	2.6 4.9 7.2 13.1 17.7 26.9 41.0 62.0 86.9
								TC			TC Braid									
								100.0Ω/M'			Overall:									
								328.0Ω/km			Beldfoil									
											9.5Ω/M'									
											31.2Ω/km									
	1521A	NEC: CL2	4	500 1000	152.4 304.8	30.0 60.0	13.6 27.3	same as above	.056 .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 .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"	.090 .146	2.29 3.71	Duofoil + 93% BC	.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 10.4 13.5 15.2 15.9 20.4 44.3 49.9 52.2	2.0 4.3 5.9 10.2 12.8 17.7 24.6 34.1 44.3 49.9 52.2
								TC			Tin Braid									
								41.5Ω/M'			8.6Ω/M'									
								136.0Ω/km			28.2Ω/km									
	1407B		4	1000†	304.8	100.0	45.5	same as above	.090 .146	2.29 3.71	same as above	.455	11.56							
	1417B		5	1000†	304.8	120.0	54.5	same as above	.090 .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



Belden Electronics Division Technical Support: 1-800-BELDEN-1 or 1-800-BELDEN-3 • www.belden.com

RGB and SVHS Cable

Bundled RGB Coaxial Cables

CM and CMP Rated



Description	Part No.	UL NEC/C(UL) CEC Type	No. of Cond.	Standard Lengths		Standard Unit Weight	Conductor (stranding)	Nominal Core OD	Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Attenuation	
				Ft.	m					Inch	mm				pF/Ft.	pF/m

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†	152.4	39.5	18.0	26 AWG	.090	2.29	Duofoil	.388	9.86	75	78%	17.3	56.7	1	.6	2.0	
				1000†	304.8	78.0	35.5	(7x34)	Coax OD: .019"	+ 93%	TC Braid							5	1.3	4.3	
									.146	3.71	BC	8.6Ω/M'						10	1.8	5.9	
									41.5Ω/M'		28.2Ω/km							30	3.1	10.2	
									136.1Ω/km									50	3.9	12.8	
																		100	5.4	17.7	
																		200	7.5	24.6	
																		400	10.4	34.1	
																		700	13.5	44.3	
																		900	15.2	49.9	
																		1000	15.9	52.2	
	1167B	NEC: CM	4	1000†	304.8	105.0	47.7	same as above	.090	2.29	same as above	.455	11.56								
									Coax OD: .146	3.71	as above										
	1418B	NEC: CM	5	500†	152.4	61.0	27.7	same as above	.090	2.29	same as above	.477	12.12								
				1000†	304.8	118.0	53.6		Coax OD: .146	3.71	as above										

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	152.4	63.5	28.9	22 AWG	.135	3.43	Coaxes: Duofoil	.475	12.07	75	81%	17.3	56.7	1	.3	.8	
				1000	304.8	127.0	57.7	(7x30)	Coax OD: .030"	+ 95%	TC Braid							5	.6	1.9	
									.200	5.08	BC	15.3Ω/M'						10	.8	2.7	
											2.5Ω/km							30	1.5	4.9	
											8.3Ω/km							50	2.0	6.4	
											Overall: Beldfoil							100	2.9	9.5	
																		200	4.3	14.2	
																		400	6.6	21.6	
																		700	9.4	30.9	
											100% Shield Coverage							900	11.1	36.4	
											11.1Ω/M'							1000	11.9	39.0	
	1825A	NEC: CMP	4	500	152.4	84.5	38.4	same as above	.135	3.43	same as above	.527	13.39								
				1000	304.8	167.0	75.9		Coax OD: .200	5.08	as above										
	1826A	NEC: CMP	5	500	152.4	101.5	46.1	same as above	.135	3.43	same as above	.585	14.86								
				1000	304.8	201.0	91.4		Coax OD: .200	5.08	as above										

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



RGB and SVHS Cable

High-Flex SVHS Cables



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)	Nominal Capacitance		Nominal Attenuation	
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm		pF/Ft.	pF/m	MHz	dB/100 Ft.

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	.058	1.47	TC Serve 90% Shield Coverage	.110	2.79	75	78%	17.3	56.7	1	.6	2.0	
		500	152.4	8.5	3.9	(7x38)			x	x						5	1.4	4.6	
		U-1000	U-304.8	15.0	6.8		.012"		.230	5.84						10	2.1	6.9	
		1000	304.8	19.0	8.6			TC			7.5Ω/M'					30	3.8	12.5	
											24.6Ω/km					50	5.1	16.7	
																100	7.6	24.9	
																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	.058	1.47	TC Serve 90% Shield Coverage	.255	.84	75	78%	17.3	56.7	1	.6	2.0	
		500	152.4	15.5	7.0	(7x38)			x	x						5	1.4	4.6	
		U-1000	U-304.8	30.0	13.7		.012"		.100	2.54						10	2.1	6.9	
		1000	304.8	31.0	14.1			TC			7.5Ω/M'					30	3.8	12.5	
											24.6Ω/km					50	5.1	16.7	
																100	7.6	24.9	
																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	7700A	NEC: CMP	500	152.4	10.5	4.8	30 AWG	.053	1.35	TC "French Braid" Coverage	.107	2.72	75	78%	17.3	56.7	1	.7	2.3
			1000	304.8	19.0	8.6	(7x38)			x	x					5	1.7	5.6	
							.012"			98% Shield Coverage	.214	5.44				10	2.3	7.5	
								TC								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



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)

