

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.

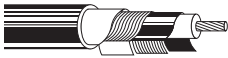
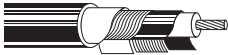
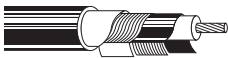
Microphone and Musical Instrument Cable

Single-Conductor, High-Impedance Cables

High-Conductivity Copper



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

25 AWG Stranded (7x33) Composite Copper Conductor • (3) Strands TC, (4) Strands TCCS • TC 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) Composite Copper Conductor† • Rayon Braid + TC Braid Shield (80% Coverage) • Cotton Serve**EPDM Rubber Insulation • Cotton Serve • Black EPDM Rubber Jacket**3000 VDC, 60°C **8410** — 1 N/A 500 152.4 18.5 8.4 .058 1.47 .024 .61 .245 6.22 — — 33 108**20 AWG** Stranded (27x34) High-conductivity TC Conductor • Conductive Textile (100%) plus TC Spiral Shields (95% Coverage) • Paper Tape**EPDM Rubber Insulation • Black Neoprene Jacket**60°C **9394** — 1 N/A 1000 304.8 26.0 11.8 .030 .76 .033 .84 .190 4.83 — — 55 180**20 AWG** Stranded (26x34) High-conductivity TC Conductor • Conductive Textile (100%) plus TC Spiral Shields (75% Coverage) • Paper Tape**EPDM Rubber Insulation • Black Neoprene Jacket**60°C **9778** — 1 N/A 1000 304.8 39.0 17.7 .040 1.02 .050 1.27 .235 5.97 — — 45 148**18 AWG** Stranded (41x34) High-conductivity TC Conductor • Conductive Textile (100%) plus TC Spiral Shields (68% Coverage) • Paper Tape**EPDM Rubber Insulation • Black Neoprene Jacket**600V RMS, 60°C **9395** — 1 N/A 1000 304.8 38.0 17.2 .045 1.14 .034 .86 .235 5.97 — — 55 180

EPDM = Ethylene Propylene Diene Monomer • TC = Tinned Copper • TCCS = Tinned Copper-covered Steel

*Capacitance between conductors.

**Capacitance between center conductor and outer shield.

†(3) Strands TC, (4) Strands TCCS.

Microphone and Musical Instrument Cable

Two-Conductor, Low-Impedance Cables
High-Conductivity Copper



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

24 AWG Stranded (105x44) High-conductivity Bare Copper Conductors† • Double Bare Copper Spiral Shield (97% Coverage)

PVC Insulation • Matte Black PVC Jacket

300V RMS 80°C	9397	—	2	White, Green	500	152.4	12.0	5.5	.012	.30	.031	.79	.176	4.47	47	154	86	283
					1000	304.8	24.0	10.9										



24 AWG Stranded (45x40) TC Alloy Conductors† • Conductive Textile Wrap (100% Coverage) • TC Braid Shield (56% Coverage) • Cotton Spiral

EPDM Rubber Insulation • Black EPDM Jacket

300V RMS 90°C	8413	—	2	White, Black	100	30.5	2.3	1.0	.016	.41	.017	.43	.199	5.05	30	98	55	180
					U-500	U-152.4	13.0	5.9										
					500	152.4	11.5	5.2										



24 AWG Stranded (45x40) BC Alloy Conductors† • Conductive Textile Wrap (100% Coverage) • TC Braid Shield (65% Coverage) • Cotton Spiral

EPDM Rubber Insulation • Brown EPDM Jacket

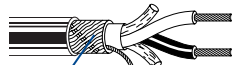
300V RMS 90°C	9399	—	2	Blue, Red	500	152.4	12.5	5.7	.016	.41	.020	.51	.200	5.08	30	98	55	180
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24 AWG Stranded (42x40) High-conductivity BC Conductors† • TC “French Braid” Shield (95% Coverage) • BC Drain Wire

Datalene® Insulation • Matte PVC Jacket (Available in Red, Yellow, Green, Blue, Gray or Black)

Digital MIC Cable	1800F	NEC:	2	Black,	500*	152.4	12.0	5.5	.017	.43	.037	.94	.211	5.36	12	39	26	85
High-Flex	110 Ohm	CL2R		Red	U-1000	U-304.8	26.0	11.8										
300V RMS 60°C	AES/EBU				1000*	304.8	24.0	10.9										



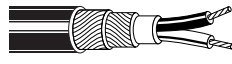
French Braid

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

24 AWG Stranded (42x40) High-conductivity BC Conductors† • Double Bare Copper Spiral Shield (95% Coverage)

PVC Insulation • PVC Inner Jacket • Matte PVC Outer Jacket (Available in Red, Yellow, Green, Blue or Black)

100V RMS 60°C	1812A	—	2	Brown, White	328*	100.0	9.8	4.5	.012	.30	.037	.94	.213	5.41	33	108	54	177
					1000	304.8	31.0	14.1										



*328 ft. put-up not available in Green.

BC = Bare Copper • EPDM = Ethylene Propylene Diene Monomer • TC = Tinned Copper

*Capacitance between conductors.

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

†Conductors cabled with fillers.

Not RoHS compliant at time of printing. Please check with Belden Technical Support for current compliance information at 1-800-BELDEN-1.

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

Microphone and Musical Instrument Cable

Two-Conductor, Low-Impedance Cables

High-Conductivity Copper

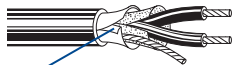


Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

24 AWG Stranded (19x36) HC TC Conductors • Twisted Pair • Noise Reducing Tape • Beldfoil® Shield (100% Coverage) • TC Drain Wire

High-density Polyethylene Insulation • Black PVC Jacket

200V RMS 75°C	9452	—	2	Black, Red	U-500	U-152.4	6.5	3.0	.008	.20	.020	.51	.135	3.43	30	98	58	190			
					500	152.4	6.0	2.7													
					U-1000	U-304.8	12.0	5.5													
					1000	304.8	12.0	5.5													



Shorting Fold

24 AWG Stranded (27x38) High-conductivity Bare Copper Conductors • Bare Copper Spiral Shield (92% Coverage)

PVC Insulation • Black Matte PVC Jacket

100V RMS 60°C	1813A	—	2	Red, Blue	328	100.0	10.2	4.6	.017	.43	.055	1.40	.236	5.99	33	108	61	200
					1000	304.8	31.0	14.1										



22 AWG Stranded (16x34) High-conductivity Tinned Copper Conductors • Cotton Braid • Double TC Braid Shield (85% Coverage)

Polyethylene Insulation • Chrome PVC Jacket

1000V RMS 80°C	8422	—	2	Clear, Black	500	152.4	15.0	6.8	.021	.53	.022	.56	.231	5.87	18	59	32	105		
					U-1000	U-304.8	31.0	14.1												
					1000	304.8	33.0	15.0												



20 AWG Stranded (26x34) High-conductivity TC Conductors • Rayon Braid • TC Braid Shield (85% Coverage) • Cotton Wrap

EPDM Rubber Insulation • EPDM Jacket (Available in Black, Red, Yellow or Blue)*

600V RMS 90°C	8412	—	2	White, Black	100	30.5	5.2	2.4	.023	.58	.035	.89	.262	6.65	30	98	55	180			
					250	76.2	12.0	5.5													
					U-500	U-152.4	24.0	10.9													
					500	152.4	22.0	10.0													
					U-1000	U-304.8	46.0	20.9													
					1000	304.8	47.0	21.4													

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

EPDM Rubber Insulation • Brown Hypalon® Jacket

600V RMS 60°C	8402	—	2	White, Black	500	152.4	25.0	11.3	.023	.58	.035	.89	.263	6.68	30	98	55	180
VW-1					U-1000	U-304.8	52.0	23.6										



18 AWG Stranded (41x34) High-conductivity TC Conductors • Rayon Braid • TC Braid Shield (85% Coverage) • Cotton Wrap

EPDM Rubber Insulation • Black Neoprene Jacket

600V RMS 60°C	8428	—	2	White, Black	100	30.5	6.3	2.8	.023	.58	.030	.76	.290	7.37	35	115	60	197			
					U-500	U-152.4	29.0	13.2													
					500	152.4	28.0	12.7													
					1000	304.8	59.0	26.8													



16 AWG Stranded (65x34) High-conductivity TC Conductors • Rayon Braid • Paper Wrap • TC Braid Shield (85% Coverage) • Cotton Wrap

EPDM Rubber Insulation • Brown Hypalon® Heavy-duty Jacket

600V RMS 60°C	8408	—	2	Black, White	500	152.4	50.0	22.7	.037	.94	.040	1.02	.380	9.65	30	98	55	180
VW-1																		



BC = Bare Copper • EPDM = Ethylene Propylene Diene Monomer • HC = High-conductivity • TC = Tinned Copper

Hypalon is a DuPont trademark.

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



For more information, contact Belden Technical Support: 1-800-BELDEN-1 • www.belden.com

Microphone and Musical Instrument Cable

Three-Conductor, Low-Impedance Cables

High-Conductivity Copper




19 • Brilliance® Broadcast

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

24 AWG Stranded (105x44) High-conductivity Bare Copper Conductors • Double Bare Copper Spiral Shield (97% Coverage)

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
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24 AWG Stranded (45x40) TC Alloy Conductors • Conductive Textile Wrap (100% Coverage) • TC Braid Shield (60% Coverage)

EPDM Rubber Insulation • Black EPDM Rubber Jacket


300V 90°C	8406	—	3	Black, Red, White	100	30.5	3.0	1.4	.016	.41	.025	.64	.223	5.66	30	98	55	180
					500	152.4	15.0	6.8										



24 AWG Stranded (19x32) High-conductivity Tinned Copper Conductors • Rayon Braid • TC Braid Shield (89% Coverage)

Polyethylene Insulation • Chrome PVC Jacket

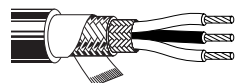
600V RMS 80°C	8403	—	3	Clear, Black, Red	500	152.4	20.5	9.3	.016	.41	.033	.84	.244	6.20	25	82	45	148
VW-1					1000	304.8	45.0	20.5										



20 AWG Stranded (26x34) High-conductivity TC Conductors • Rayon Braid • TC Braid Shield (85% Coverage) • Cotton Wrap

EPDM Rubber Insulation • Black EPDM Jacket

600V RMS 90°C	8423	—	3	White, Black, Red	100	30.5	6.0	2.7	.023	.58	.040	1.02	.272	6.91	30	98	55	180
					500	152.4	26.0	11.8										
					1000	304.8	56.0	25.5										



EPDM = Ethylene Propylene Diene Monomer • TC = Tinned Copper

*Capacitance between conductors.

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

Not RoHS compliant at time of printing. Please check with Belden Technical Support for current compliance information at 1-800-BELDEN-1.

Microphone and Musical Instrument Cable

Four-Conductor Star Quad, Low-Impedance Cables†
High-Conductivity Copper



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

28 AWG Stranded (19x40) High-conductivity Silver-plated Copper Alloy Conductors • 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	Blue/White, White/Blue	100 ▲	30.5	1.6	0.7	.006	.15	.014	.36	.115	2.92	40	131	60	197
					500 ■	152.4	4.5	2.0										

2/c 25 AWG equivalent DCR when connected to a 3-pin XLR.

▲100 ft. put-up available in Black only.

■May contain more than one piece. Min. length of any one piece is 50 ft.

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 • 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	Blue/White, White/Blue	500 *	152.4	13.5	6.1	.011	.28	.030	.76	.190	4.83	39	128	57	187
					1000	304.8	25.0	11.3										

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

French Braid

*500 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.

24 AWG Stranded (42x40) High-conductivity Bare Copper Conductors • 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	Blue/White, White/Blue	100 ▼	30.5	4.1	1.8	.016	.41	.045	1.14	.245	6.22	39	128	57	187			
					500 ▼	152.4	16.5	7.5													
					1000	304.8	37.0	16.8													


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 • Rayon Braid • Tinned Copper Braid Shield (85% Coverage)


Polyethylene Insulation • Chrome PVC Jacket

UL AWM Style 2094 (300V RMS 60°C) VW-1 	8404	—	4	Clear,	100	30.5	5.4	2.4	.016	.41	.032	.81	.252	6.40	23	75	49	161			
				Black,	500	152.4	23.0	10.4													
				Red,	U-1000	U-304.8	48.0	21.8													
				Green	1000	304.8	49.0	22.3													

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

20 AWG Stranded (26x34) High-conductivity Tinned Copper Conductors • Rayon Braid • TC Braid Shield (85% Coverage) • Cotton Wrap


EPDM Rubber Insulation • Black EPDM Rubber Jacket

600V RMS 90°C 	8424	—	4	Black,	100	30.5	6.8	3.1	.023	.58	.036	.91	.294	7.47	47	154	59	194			
				White,	250	76.2	15.3	6.9													
				Red,	U-500	U-152.4	32.0	14.5													
				Green	500	152.4	30.5	13.8													
					1000	304.8	64.0	29.1													

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

16 AWG Stranded (65x34) High-conductivity Tinned Copper Conductors • Rayon Braid • TC Braid Shield (85% Coverage) • Cotton Wrap

EPDM Rubber Insulation • Black Neoprene Jacket

600V RMS 60°C VW-1 	8407	—	4	Black,	100	30.5	11.3	5.1	.031	.79	.043	1.09	.416	10.57	30	98	66	216			
				White,	250	76.2	28.3	12.8													
				Red,																	
				Green																	

2/c 13 AWG equivalent DCR when connected to a 3-pin XLR.

BC = Bare Copper • EPDM = Ethylene Propylene Diene Monomer • TC = Tinned Copper

*Capacitance between conductors. **Nom. capacitance between conductors in a Quad configuration.

†**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.

⚠ Not RoHS compliant at time of printing. Please check with Belden Technical Support for current compliance information at 1-800-BELDEN-1.



For more information, contact **Belden Technical Support: 1-800-BELDEN-1 • www.belden.com**

Line Level Analog Audio Cable

Single-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.

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. 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 or stereo hook-ups.

Belden's analog audio cable offering consists of a selection of designs to handle a variety of audio applications. Belden part


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) TC Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 24 AWG Stranded TC Drain Wire
Polypropylene Insulation • PVC Jacket (Available in Brown, Red, Green, Lt. Blue, Purple, Gray, White or Black)

 300V RMS 60°C Z-Fold®	1883A	NEC:	1	Black,	U-1000	U-304.8	11.0	5.0	.008	.20	.020	.51	.123	3.12	31	102	58	190
		CMR		Red	1000 [▲]	304.8	11.0	5.0	For cross-connect use with 1408R (et al.) Snake Cables, see page 19.18.									
		CEC:																
		CMG FT4																


▲1000 ft. put-up available in Gray only.
 Jacket and shield are bonded so both can be removed with automatic stripping equipment.

Polyolefin Insulation • Black Matte PVC Jacket


 High-Flex 300V RMS 60°C	1508A	NEC:	1	Black,	500	152.4	6.5	2.9	.008	.20	.024	.61	.131	3.33	31	102	58	190
		CM		Red	1000	304.8	11.0	5.0	For cross-connect use with 1408R (et al.) Snake Cables, see page 19.18.									
		CEC:																
		CM																

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


24 AWG Stranded (7x32) TC Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage)^{††} • 24 AWG Stranded TC Drain Wire
Polyethylene Insulation • Chrome PVC Jacket

 Low-Capacitance UL AWM Style 2092 (300V RMS 60°C)	8641	NEC:	1	Black,	100	30.5	2.3	1.0	.016	.41	.025	.64	.168	4.27	22	72	42	138
		CM		Clear	U-500	U-152.4	7.5	3.4	For Plenum versions of 8641, see 88641 or 82641.									
		CEC:			500	152.4	7.0	3.2										
		CM			U-1000	U-304.8	14.0	6.4										
					1000	304.8	14.0	6.4										
					2000	609.6	28.0	12.7										

Plenum • FEP Insulation • Red FEP Jacket

 300V RMS 200°C, Non-conduit	88641	NEC:	1	Black,	100	30.5	2.4	1.1	.006	.15	.014	.36	.106	2.69	31	102	59	194
		CMP		Red	500 [†]	152.4	6.0	2.7										
		CEC:			1000 [†]	304.8	9.0	4.1										
		CMP FT6																

Plenum • FEP Insulation • Natural Flamarrest® Jacket

 300V RMS 60°C, Non-conduit	82641	NEC:	1	Black,	U-1000 ^{††}	U-304.8	9.0	4.1	.006	.15	.014	.36	.106	2.69	31	102	59	194	
		CMP		Red	1000 ^{††}	304.8	8.0	3.6											
		CEC:																	
		CMP FT6																	

FEP = Fluorinated Ethylene Propylene • 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% for UnReel.



Line Level Analog Audio Cable

Single-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) TC Conductors • Twisted Pair • Overall Beldfoil® Shield (100% Coverage) • 24 AWG Stranded TC Drain Wire

Polypropylene Insulation • PVC Jacket (Available in Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White or Black)

	1266A	NEC:	1	Black, Red	U-1000	U-304.8	15.0	6.8	.010	.25	.020	.51	.143	3.63	30	99	54	177
		CM			1000 [▲]	304.8	15.0	6.8										
		CEC:																
		CM																

[▲]1000 ft. put-up available in Black only.
Unique design features lower capacitance and greater flexibility than standard audio pair constructions.

PVC Insulation • PVC Jacket (Available in Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White or Black)

	1503A	NEC:	1	Black, Red	U-1000	U-304.8	16.0	7.3	.010	.25	.020	.51	.142	3.61	53	174	97	318
		CM																
		CEC:																
		CM																

22 AWG Stranded (7x30) TC Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 22 AWG Stranded TC Drain Wire

Polypropylene Insulation • Paper Wrap • Gray or Black PVC Jacket

	8451	NEC:	1	Black, Red	100 [▼]	30.5	2.3	1.1	.008	.20	.020	.51	.138	3.51	34	111	67	220			
		CMR			U-500	U-152.4	8.5	3.9													
		CEC:			500	152.4	8.0	3.6													
		CMG FT4			U-1000	U-304.8	16.0	7.3													
					1000	304.8	16.0	7.3													

[▼]100 ft. put-up available in Black only.
Unique paper separator facilitates jacket stripping.

Polypropylene Insulation • PVC Jacket (Available in Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White or Black)

	9451	NEC:	1	Black, Red	U-500*	U-152.4	8.5	3.9	.008	.20	.020	.51	.135	3.43	35	115	67	220			
		CMR			500*	152.4	8.0	3.6													
		CEC:			T-1000*	T-304.8	18.0	8.2													
		CMG FT4			U-1000	U-304.8	15.0	6.8													
					5000	1524.0	75.0	34.0													

For cross-connect use with 1814R (et al.) Snake Cables, see page 19.21

*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.

Polypropylene Insulation • Black Low-Smoke, Zero-Halogen Jacket

	9451SB <small>new</small>	NEC:	1	Black, Red	1000	304.8	20.0	9.1	.008	.20	.032	.81	.160	4.06	35	114	67	220
		LSZH and ABS Type Approved			CMG-LS													
		CEC:																
		CMG-LS FT4																
		Limited Smoke																

The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.

Plenum • FEP Insulation • Flamarest® Jacket (Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White or Black)

	9451P <small>new</small>	NEC:	1	Black, Red	U-1000	U-304.8	16.0	7.3	.007	.18	.017	.43	.127	3.23	35	115	67	220
		CM			5000	1524.0	75.0	34.0										
		CEC:																
		CMP FT6																

The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.

22 AWG Solid Tinned Copper Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 22 AWG Solid TC Drain Wire

Polypropylene Insulation • Gray or Black PVC Jacket

	8450	NEC:	1	Black, Red	U-500*	U-152.4	7.5	3.4	.007	.18	.018	.46	.118	3.00	40	131	76	249			
		CM			U-1000*	U-304.8	14.0	6.4													
		CEC:			1000	304.8	13.0	5.9													
		CM																			

*U-500 ft. and U-1000 ft. put-ups available in Black only.
Belden's Miniature Type Broadcast Audio and Instrumentation Cables occupy 1/2 to 2/3 less space than standard cables.

FEP = Fluorinated Ethylene Propylene • TC = Tinned Copper

*Capacitance between conductors.

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



Line Level Analog Audio Cable

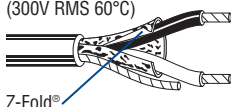
Single-Pair Cables



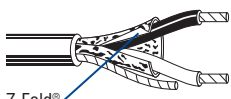
19 • Brilliance® Broadcast


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

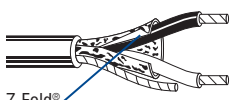
22 AWG Stranded (7x30) TC Conductors • Twisted Pair • Overall Beldfoil® Shield (100% Coverage) • 22 AWG Stranded TC Drain Wire


Polyethylene Insulation • Chrome PVC Jacket																					
Low-Capacitance UL AWM Style 2092 (300V RMS 60°C)  Z-Fold®	8761	NEC:	1	Black, Clear	U-500	U-152.4	9.0	4.1	.016	.41	.025	.64	.175	4.45	24	79	47	154			
		CM			500	152.4	9.0	4.1													
		CEC:			U-1000	U-304.8	17.0	7.7													
		CM			1000	304.8	18.0	8.2													
					2000	609.6	36.0	16.3													
					5000	1524.0	90.0	40.9													
	10000††	3048.0	170.0	77.3																	

For Plenum versions of 8761, see 88761, 87761 or 82761.

Plenum • FEP Insulation • Red FEP Jacket																				
300V RMS 200°C  Z-Fold®	88761	NEC:	1	Black, Red	100	30.5	2.7	1.2	.006	.15	.014	.36	.119	3.02	35	115	67	220		
		CMP			U-500▲	U-152.4	7.5	3.4												
		CEC:			500†	152.4	7.5	3.4												
		CMP FT6			U-1000▲	U-304.8	15.0	6.8												
					1000†	304.8	12.0	5.4												


Plenum • FEP Insulation • Red Fluoropolymer Jacket																			
300V RMS 150°C  Z-Fold®	87761	NEC:	1	Black, Red	500†	152.4	7.0	3.2	.006	.15	.014	.36	.116	2.95	35	115	67	220	
		CMP			1000†	304.8	11.0	5.0											
		CEC:																	
		CMP FT6																	

Plenum • FEP Insulation • Natural Flamarrest® Jacket																		
300V RMS 75°C  Z-Fold®	82761	NEC:	1	Black, Red	U-500▲	U-152.4	7.0	3.2	.006	.15	.014	.36	.116	2.95	35	115	67	220
		CMP			U-1000■	U-304.8	14.0	6.4										
		CEC:			1000†	304.8	11.0	5.0										
		CMP FT6																

Polyethylene Insulation • Chrome PVC Jacket																		
Low-Capacitance UL AWM Style 2092 (300V RMS 60°C)  Z-Fold®	9461	NEC:	1	Black, Clear	U-500	U-152.4	11.0	5.0	.016	.41	.026	.66	.180	4.57	24	79	47	154
		CM			U-1000	U-304.8	21.0	9.6										
		CEC:																
		CM																

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

22 AWG Stranded (7x30) Tinned Copper Conductors • Twisted Pair • Tinned Copper Spiral Wrapped Shield (85% Coverage)

PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2095 (300V RMS 80°C)  Z-Fold®	8737	NEC:	1	Black, Red	U-500	U-152.4	10.5	4.8	.015	.38	.025	.64	.180	4.57	40	131	70	230
		CMG			500	152.4	10.0	4.5										
		CEC:			U-1000	U-304.8	20.0	9.1										
		CMG FT4			1000	304.8	20.0	9.1										

FEP = Fluorinated Ethylene Propylene • 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.

▲ Length may vary ±10% for UnReel® cartons.

■ Length may vary -10% to +5% from length shown.



Line Level Analog Audio Cable

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) TC Conductors • Twisted Pairs • Individual Beldfoil® Shield (100% Coverage) • Stranded TC Common Drain Wire

Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

<p>Z-Fold®</p>	300V RMS 60°C	8723	NEC: 2 CM CEC: CM	Red/Black, Green/White	100 U-500 500 U-1000 1000 1640 U-2000 2000 3280 5000 10000	30.5 U-152.4 152.4 U-304.8 304.8 499.9 U-609.6 609.6 999.7 1524.0 3048.0	2.3 10.5 10.0 20.0 20.0 32.8 38.0 40.0 65.6 95.0 200.0	1.0 4.8 4.5 9.1 9.1 14.9 17.2 18.2 29.8 43.2 90.9	.008 —	.20 —	— —	.160 .406	35 4.06	115 62	203 203
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For Plenum versions of 8723, see 88723, 87723 or 82723.

Polypropylene Insulation • Black Low-Smoke, Zero-Halogen Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

<p>Z-Fold®</p>	LSZH and ABS Type Approved 300V RMS 60°C	8723SB <small>new</small>	NEC: 2 CMG-LS CEC: CMG-LS FT4 Limited Smoke	Red & Black, Green & White	1000	304.8	26.0	11.8	—	—	—	.196	4.98	35	115	62	203
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Polypropylene Insulation • Black Low-Smoke, Zero-Halogen Jacket

<p>Z-Fold®</p>	LSZH and ABS Type Approved 300V RMS	8777SB <small>new</small>	NEC: 3 CMG-LS CEC: CMG-LS FT4 Limited Smoke	See Chart 3 (Tech Info Section)	1000†	304.8	39.0	17.7	.010	.25	—	.273	6.93	30	98	55	180
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Plenum • FEP Insulation • Red FEP Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

<p>Z-Fold®</p>	300V RMS 200°C	88723	NEC: 2 CMP CEC: CMP FT6	Red/Black, Green/White	100† 500† 1000†	30.5 152.4 304.8	3.4 11.0 19.0	1.5 5.0 8.6	.006	.15	—	.148	3.76	35	115	67	220
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Plenum • FEP Insulation • Red Fluorocopolymer Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

<p>Z-Fold®</p>	300V RMS 150°C	87723	NEC: 2 CMP CEC: CMP FT6	Red/Black, Green/White	500† 1000†	152.4 304.8	11.0 18.0	5.0 8.2	.006	.15	—	.148	3.76	35	115	67	220
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Plenum • FEP Insulation • Natural Flamarrest® Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

<p>Z-Fold®</p>	300V RMS 75°C	82723	NEC: 2 CMP CEC: CMP FT6	Red/Black, Green/White	U-500† U-1000† 1000† U-2000†	U-152.4 U-304.8 304.8 U-609.6	10.5 20.0 19.0 40.0	4.8 9.1 8.6 18.1	.006	.15	—	.153	3.89	43	141	75	246
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FEP = Fluorinated Ethylene Propylene • TC = Tinned Copper

*Capacitance between conductors.

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

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

Line Level Analog Audio Cable

Single- and Double-Pair Cables



19 • Brilliance® Broadcast

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

22 AWG Stranded (19x34) TC Conductors • Dual Twisted Pairs • Overall Beldfoil® Shield (100% Coverage) • 24 AWG Stranded TC Drain Wire
PVC Insulation • PVC Jacket in Zip-Cord Construction (Red & Green, Red & Black, Red & Purple or Red & Gray)

	1504A	NEC:	2	Black, Red	U-1000	U-304.8	32.0	14.5	.010	.25	.020	.51	.143	3.63	57	187	100	328		
		CM			2000 ▲	609.8	64.0	29.0												
		CEC: CM														.286	7.26			

*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) TC Conductors • Dual Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 22 AWG Stranded TC Drain Wire
Polyolefin Insulation • PVC Jacket in Zip-Cord Construction (Red & Green, Red & Gray, Red & Black or Red & Purple)

	9451D	NEC:	2	Black, Red	U-1000	U-304.8	29.0	13.2	.008	.20	.020	.51	.135	3.43	34	112	67	220		
		CMR			2000 *	620.8	62.0	28.1								x	x			
		CEC: CMG FT4														.270	6.86			

*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.

Plenum • FEP Insulation • White Flamarrest® Jacket in Zip-Cord Construction

	9451DP <small>new</small>	NEC:	2	Black & Red, Black & White	1000	304.8	24.0	10.9	.007	.18	.017	.43	.127	3.23	35	115	67	220		
		CMP														x	x			
		CEC: CMP FT6														.269	6.83			

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) TC Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 20 AWG Stranded TC Drain Wire
PVC Insulation • Beige PVC Jacket

	9154	NEC:	1	Black, Red	U-500	U-152.4	11.5	5.2	.014	.36	.031	.79	.198	5.03	60	197	100	328		
		CMG			500	152.4	12.0	5.5												
		CEC:			U-1000	U-304.8	22.0	10.0												
		CMG FT4			1000	304.8	23.0	10.5												

9154 has 22 AWG stranded tinned copper drain wire.

Polyethylene Insulation • Chrome PVC Jacket

	8762	NEC:	1	Black, Clear	100	30.5	3.2	1.5	.016	.41	.028	.71	.204	5.18	27	89	49	161		
		CM			250	76.2	6.3	2.8												
		CEC:			U-500	U-152.4	12.0	5.5												
		CM			500	152.4	12.0	5.5												
					U-1000	U-304.8	23.0	10.5												

	9464	NEC:	1	Black, Clear	U-500	U-152.4	17.0	7.7	.016	.41	.035	.89	.214	5.44	27	89	49	161	
		CM			U-1000	U-304.8	32.0	14.5											
		CEC: CM																	

The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is on the inside of foil shield.

20 AWG Stranded (7x28) Tinned Copper Conductors • Twisted Pair • Tinned Copper Spiral Wrapped Shield (89% Coverage)
PVC Insulation • Chrome PVC Jacket

	8759	NEC:	1	Black, Red	U-500	U-152.4	12.5	5.7	.016	.41	.025	.64	.199	5.05	47	154	79	259	
		CMG			U-1000	U-304.8	24.0	10.9											
		CEC:			1000	304.8	25.0	11.4											
		CMG FT4																	

FEP = Fluorinated Ethylene Propylene • TC = Tinned Copper

*Capacitance between conductors.

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



For more information, contact Belden Technical Support: 1-800-BELDEN-1 • www.belden.com

Line Level Analog Audio Cable

Single-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) TC Conductors • Twisted Pair • Overall Beldfoil® Shield (100% Coverage) • 20 AWG Stranded TC Drain Wire

Polyethylene Insulation • Chrome PVC Jacket

Low-Capacitance UL AWM Style 2092 (300V RMS 60°C)	9460	NEC:	1	Black, Clear	U-500	U-152.4	18.5	8.4	.019	.48	.030	.76	.230	5.84	30	98	44	144			
		CM			U-1000	U-304.8	36.0	16.4													
		CEC:																			
		CM																			



The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is on the inside of foil shield.

Low-Capacitance UL AWM Style 2092 (300V RMS 60°C)	8760	NEC:	1	Black, Clear	250	76.2	6.8	3.1	.019	.48	.028	.71	.222	5.64	30	98	44	144			
		CM			U-500	U-152.4	13.5	6.1													
		CEC:			500	152.4	13.0	5.9													
		CM			U-1000	U-304.8	25.0	11.3													
					1000	304.8	26.0	11.8													
					2000	609.6	50.0	22.7													
					5000	1524.0	135.0	61.4													
					10000	3048.0	260.0	118.2													



Shorting Fold

For Plenum versions of 8760, see 88760, 87760 or 82760.

18 AWG Stranded (19x30) TC Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 20 AWG Stranded TC Drain Wire

Plenum • FEP Insulation • Red FEP Jacket

300V RMS 200°C	88760	NEC:	1	Black, Red	100	30.5	3.7	1.7	.007	.18	.014	.36	.153	3.89	51	167	97	318	
		CMP			U-500†	U-152.4	12.5	5.7											
		CEC:			500†	152.4	11.0	5.0											
		CMP FT6			U-1000†	U-304.8	24.0	10.9											
		1000†	304.8	22.0	10.0														



Z-Fold®

Plenum • FEP Insulation • Red Fluorocopolymer Jacket

300V RMS 150°C	87760	NEC:	1	Black, Red	U-500†	U-152.4	12.5	5.7	.007	.18	.014	.36	.150	3.81	51	167	97	318
		CMP			500†	152.4	10.5	4.8										
		CEC:			1000†	304.8	21.0	9.5										
		CMP FT6																



Z-Fold®

Plenum • FEP Insulation • Natural Flamarrest® Jacket

300V RMS 75°C	82760	NEC:	1	Black, Red	U-500†	U-152.4	12.0	5.5	.007	.18	.014	.36	.150	3.81	51	167	97	318
		CMP			U-1000††	U-304.8	22.0	10.0										
		CEC:			1000†	304.8	21.0	9.5										
		CMP FT6																



Z-Fold®

18 AWG Stranded (7x26) Tinned Copper Conductors • Twisted Pair • Tinned Copper Spiral Wrapped Shield (85% Coverage)

PVC Insulation • Chrome PVC Jacket

300V RMS 60°C	8790	NEC:	1	Red, White	U-500	U-152.4	17.5	7.9	.022	.56	.028	.71	.241	6.12	53	174	92	302
		CMG			500	152.4	17.0	7.7										
		CEC:			U-1000	U-304.8	33.0	15.0										
		CMG FT4			1000	304.8	35.0	15.9										



FEP = Fluorinated Ethylene Propylene • 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.
 †† Spools and/or UnReel® cartons are one piece, but length may vary -0% to +10%.

Line Level Analog Audio Cable

Single-Pair Cables



19 • Brilliance® Broadcast

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

16 AWG Stranded (19x29) Tinned Copper Conductors • Twisted Pair • Tinned Copper Spiral Wrapped Shield (85% Coverage)

PVC Insulation • Chrome PVC Jacket																			
	300V RMS 60°C	8780	NEC:	1	Black,	500	152.4	23.5	10.7	.023	.58	.030	.76	.280	7.11	57	187	98	322
			CMG		White	U-1000	U-304.8	44.0	20.0										
			CEC:			1000	304.8	46.0	20.9										
			CMG FT4																

16 AWG Stranded (19x29) TC Conductors • Twisted Pair • Overall Beldfoil® Shield (100% Coverage) • 18 AWG Stranded TC Drain Wire

Polyethylene Insulation • Chrome PVC Jacket																				
	Low-Capacitance	8719	NEC:	1	Black,	U-500	U-152.4	24.0	10.9	.032	.81	.032	.81	.313	7.95	23	75	44	144	
	UL AWM Style 20253		CM, CL2		Clear	500	152.4	25.5	11.6											
	(600V RMS 80°C)		CEC:			U-1000	U-304.8	47.0	21.3											
			CM			1000	304.8	50.0	22.7											
						2000	609.6	100.0	45.5											
	Shorting Fold					5000	1524.0	245.0	111.4											
					10000 [†]	3048.0	510.0	231.3												

14 AWG Stranded (19x27) TC Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 16 AWG Stranded TC Drain Wire

Polyethylene Insulation • Chrome PVC Jacket																				
	Low-Capacitance	8720	NEC:	1	Black,	U-500	U-152.4	34.0	15.4	.032	.81	.035	.89	.355	9.02	24	79	47	154	
	UL AWM Style 20253		CL2		Clear	500	152.4	35.0	15.9											
	(600V RMS 80°C)					1000	304.8	71.0	32.3											
						2000	609.6	138.0	62.7											
	Z-Fold®																			

12 AWG Stranded (19x25) TC Conductors • Twisted Pair • Overall Beldfoil Shield (100% Coverage) • 14 AWG Stranded TC Drain Wire

Polyethylene Insulation • Chrome PVC Jacket																			
	Low-Capacitance	8718	NEC	1	Black,	U-500	U-152.4	47.5	21.6	.037	.94	.040	1.02	.400	10.16	25	82	49	161
	UL AWM Style 20253		CL2		Clear	500	152.4	50.5	22.9										
	(600V RMS 80°C)					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.

[†] Final put-up length may vary -10% to +20% from length shown. May contain 2 pieces. Minimum length of any one piece is 1500 ft.

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 FleXsnake® 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 19.19

CMR Rated
24 AWG
Individually Shielded and Jacketed Pairs

1500C Series Page 19.20

Flexible, CM Rated
24 AWG
Individually Shielded and Jacketed Pairs

1800R Series Page 19.22

CMR Rated
22 AWG
Individually Shielded and Jacketed Pairs

8769-8778/9767-9769 Series Page 19.24

CM Rated
22 AWG
Individually Shielded Pairs

80000 Series Page 19.25

CMP Rated (Plenum-Rated)
22 AWG
Individually Shielded Pairs

6540PA Series Page 19.26

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 19.20

Flexible, CM Rated
24 AWG
Individually Shielded and Jacketed Pairs

1200B Series Page 19.23

Flexible, Low-Capacitance
22 AWG
Individually Shielded and Jacketed Pairs

1900A Series Page 19.21

Super-Flexible
24 AWG
Individually Shielded and Jacketed Pairs with "French Braid" Shield

7880A Series Page 19.18

Super-Flexible Star Quads
26 AWG
Individually Shielded and Jacketed Quads with "French Braid" Shield

For AES/EBU Digital Multi-Snake Cables
See Pages 19.28 -19.30

Analog Multi-Quad Snake Cable

Super-Flexible, High-Performance Cables
Individually Shielded and Jacketed Quads



Individually Shielded and Jacketed Quads

Not NEC Rated

Product Description

26 AWG* stranded (19x38) 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 tinned copper drain wire.

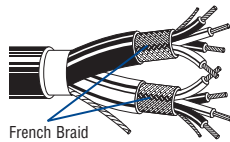
Color Code: Blue, White, Blue w/White stripe, White w/Blue stripe.

Specifications

Nominal OD — Conductor	.020" (.51mm)
Nominal OD — Insulation	.045" (1.14mm)
Inner Quad Jacket OD	.157" (3.99mm)
Nominal DCR	
Conductor	36.0 Ω/M' (11.8 Ω/km)
Shield (Inner Pair)	6.8 Ω/M' (2.23 Ω/km)
Voltage Rating	100V RMS
Temperature Rating	60°C
Nominal Impedance	40Ω
Nominal Velocity of Propagation	66%
Nominal Capacitance	
Between Conductors and Shield	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



French Braid

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

Super-Flexible Quads

26 AWG							
7884A	2	250	76.2	27.0	12.3	.458	11.63
		500 [†]	152.4	49.0	22.2		
		1000 [†]	304.8	98.0	44.4		
7885A	4	250	76.2	36.3	16.4	.498	12.65
		500 [†]	152.4	70.0	31.8		
		1000 [†]	304.8	136.0	61.7		
7886A	8	500 [†]	152.4	146.5	66.6	.782	19.86
		1000 [†]	304.8	314.0	142.4		
7887A	12	250	76.2	89.5	40.6	.828	21.03
		500 [†]	152.4	177.5	80.5		
		1000 [†]	304.8	365.0	165.6		
7888A	16	250	76.2	114.0	51.7	.938	23.83
		500 [†]	152.4	238.5	108.2		
		1000 [†]	304.8	468.0	212.3		
7889A	24	500 [†]	152.4	396.0	180.0	1.232	31.29
		1000 [†]	304.8	798.0	362.0		

[†]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	Purple		

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 (7x30) tinned copper conductor. Polyolefin insulation. Twisted pairs individual Beldfoil® shield (100% Coverage) 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 and 18 AWG tinned copper drain wire, plus overall Black PVC jacket and nylon rip cord.

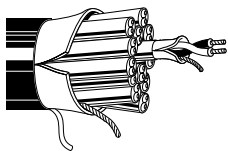
Color Code: Red, Black.

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 (Inner Pair)	15.9Ω/M' (52.1Ω/km)
Voltage Rating	300V RMS
Temperature Rating	75°C
Nominal Impedance	50Ω
Nominal Velocity of Propagation	66%
Nominal Capacitance	
Between Conductors	31 pF/Ft. (102 pF/m)
Between Conductor/Shield*	58 pF/Ft. (191 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	36.0	16.3	.346	8.79
		1000	304.8	73.0	33.2		
1409R	6	500	152.4	50.5	22.9	.412	10.46
		1000	304.8	100.0	45.4		
1410R	8	500	152.4	62.0	28.1	.446	11.33
		1000	304.8	122.0	55.3		
1411R	12	500	152.4	91.0	41.3	.555	14.10
		1000	304.8	175.0	79.4		
1412R	16	500	152.4	117.0	53.1	.622	15.80
		1000	304.8	232.0	105.2		
1413R	20	500	152.4	145.0	65.8	.704	17.88
		1000	304.8	293.0	132.9		
1414R	24	500	152.4	182.0	82.6	.801	20.35
		1000	304.8	374.0	169.6		
1415R	26	500	152.4	193.5	87.8	.816	20.73
		1000	304.8	397.0	180.1		
1416R	32	500	152.4	228.5	103.7	.890	22.61
		1000	304.8	465.0	210.9		

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 individual Beldfoil® shield (100% coverage) and have numbered and color-coded PVC jackets (see Chart 7 in Technical Information Section for colors). Jackets and shields are bonded so both strip simultaneously. Overall Beldfoil shield and 24 AWG tinned copper drain wire, plus overall Matte Black PVC jacket and nylon rip cord.

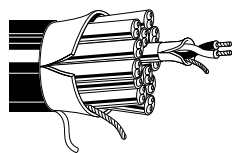
Color Code: Red, Black.

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 (Inner Pair)	15.9Ω/M' (52.2Ω/km)
Voltage Rating	300V RMS
Temperature Rating	75°C
Nominal Impedance	50Ω
Nominal Velocity of Propagation	66%
Nominal Capacitance	
Between Conductors	31 pF/Ft. (102 pF/m)
Between Conductor/Shield*	58 pF/Ft. (191 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	24.0	10.9	.301	7.65
		1000	304.8	46.0	20.9		
1510C	4	500	152.4	35.5	16.1	.352	8.94
		1000	304.8	72.0	32.6		
1511C	6	500	152.4	52.0	23.6	.418	10.61
		1000	304.8	102.0	46.3		
1512C	8	500	152.4	65.5	29.7	.452	11.48
		1000	304.8	124.0	56.3		
1513C (DT-12)	12	500	152.4	89.5	40.6	.561	14.25
		1000	304.8	178.0	80.7		
1514C	16	500	152.4	122.5	55.6	.628	15.95
		1000	304.8	241.0	109.3		
1515C	20	500	152.4	142.5	64.6	.710	19.56
		1000	304.8	288.0	130.6		
1516C	24	500	152.4	180.5	81.9	.807	20.50
		1000	304.8	371.0	168.3		
1517C	26	500	152.4	187.5	85.1	.823	20.90
		1000	304.8	385.0	174.6		
1518C	32	500	152.4	236.5	107.3	.897	22.78
		1000	304.8	481.0	218.2		
1519C	52	500	152.4	372.5	169.0	1.117	28.37
		1000	304.8	731.0	331.6		

Analog Multi-Pair Snake Cable

FlexSnake® 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) with tinned copper drain wire. Pairs have numbered and color-coded PVC jackets (see Chart 7 in Technical Information Section for colors). Overall Black PVC jacket.

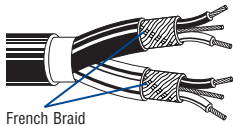
Color Code: Red, Black.

Specifications

Nominal OD — Conductor	.023" (.58mm)
Nominal OD — Insulation	.040" (1.02mm)
Inner Pair Jacket OD	.119" (3.02mm)
Nominal DCR	
Conductor	25.5Ω/M' (83.7Ω/km)
Shield (Inner Pair)	7.2Ω/M' (23.6Ω/km)
Voltage Rating	300V RMS
Temperature Rating	60°C
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

FlexSnake Super-Flexible Twisted Pairs

24 AWG							
1902A	2	250	76.2	12.0	5.5	.330	8.38
		500 †	152.4	27.5	12.5		
		1000 †	304.8	53.0	24.1		
1904A	4	250	76.2	19.8	9.0	.372	8.45
		500 †	152.4	40.5	18.4		
		1000 †	304.8	78.0	35.5		
1906A	6	250	76.2	28.5	12.9	.449	11.40
		500 †	152.4	55.5	25.2		
		1000 †	304.8	111.0	50.5		
1908A	8	250	76.2	36.0	16.3	.482	12.20
		500 †	152.4	72.5	32.9		
		1000 †	304.8	141.0	64.0		
1912A	12	250	76.2	51.8	23.5	.602	15.30
		500 †	152.4	102.5	46.6		
		1000 †	304.8	202.0	91.6		
1916A	16	250	76.2	71.0	32.2	.683	17.30
		500 †	152.4	138.0	62.7		
		1000 †	304.8	279.0	126.6		
1924A	24	250	76.2	108.0	49.0	.825	21.00
		500 †	152.4	214.5	97.3		
		1000 †	304.8	437.0	198.2		
1932A	32	250	76.2	135.3	61.4	.968	24.60
		500 †	152.4	274.0	124.3		
		1000 †	304.8	539.0	244.5		

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

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 individual bonded Beldfoil® shield and have numbered and color-coded PVC jackets (see Chart 7 in Technical Information Section for colors). Jackets and shields are bonded so both strip simultaneously. Overall Beldfoil shield plus overall Black PVC jacket and nylon rip cord.

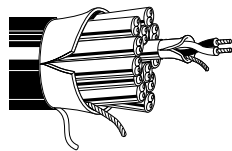
Color Code: Red, Black.

Specifications

Nominal OD — Conductor	.030" (.76mm)
Nominal OD — Insulation	.050" (1.27mm)
Drain Wire	
Individual Pairs	22 AWG
Overall: 1814R	22 AWG
Overall: 1815R – 1823R	18 AWG
Inner Pair Jacket OD	.133" (3.38mm)
Approvals	
NEC	CMR
CEC	CMG FT4
Nominal DCR	
Conductor	14.8Ω/M' (52.5Ω/km)
Shield (Inner Pair)	14.1Ω/M' (46.3Ω/km)
Voltage Rating	300V RMS
Temperature Rating	60°C
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 1000	152.4 304.8	30.0 59.0	13.6 26.8	.330	8.38
1815R	4	500 1000	152.4 304.8	45.0 91.0	20.4 41.3	.384	9.74
1816R	6	500 1000	152.4 304.8	65.0 131.0	29.5 59.6	.462	11.73
1817R	8	500 1000	152.4 304.8	80.0 152.0	36.3 68.9	.503	12.78
1818R	12	500 1000	152.4 304.8	121.0 241.0	54.9 109.3	.638	16.21
1819R	16	500 1000	152.4 304.8	180.0 364.0	81.6 165.0	.776	19.71
1820R	20	500 1000	152.4 304.8	216.0 442.0	98.0 200.1	.865	21.97
1821R	24	500 1000	152.4 304.8	263.5 518.0	119.5 235.0	.969	24.61
1822R	26	500 1000	152.4 304.8	280.5 552.0	127.2 250.4	.989	25.12
1823R	32	500 1000	152.4 304.8	335.5 692.0	152.2 313.9	1.072	27.23

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 individual Beldfoil® shield (100% Coverage) 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.

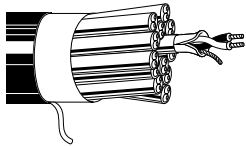
Color Code: Red, Black.

Specifications

Nominal OD — Conductor	.030" (.76mm)
Nominal OD — Insulation	.060" (1.52mm)
Inner Pair Jacket OD	.153" (3.89mm)
Nominal DCR	
Conductor	15.0Ω/M' (52.5Ω/km)
Shield (Inner Pair)	10.6Ω/M' (34.8Ω/km)
Voltage Rating	150V RMS
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	53.0	24.0	.458	11.63
		1000	304.8	107.0	48.5		
1218B	6	500	152.4	79.5	36.1	.578	14.68
		1000	304.8	152.0	68.9		
1219B	9	500	152.4	115.5	52.4	.700	17.78
		1000	304.8	234.0	106.1		
1220B	12	500	152.4	141.0	70.0	.760	19.30
		1000	304.8	286.0	129.7		
1222B	16	500	152.4	188.0	85.3	.852	21.64
		1000	304.8	384.0	174.2		
1225B	20	500	152.4	240.0	108.8	.960	24.38
		1000	304.8	471.0	213.6		
1427B	24	1000	304.8	588.0	266.7	1.088	27.64
1221B	28	500	152.4	335.0	152.0	1.140	28.96
		1000	304.8	676.0	306.6		
1226B	32	500	152.4	369.0	167.4	1.183	30.05
		1000	304.8	744.0	337.5		
1428B†	52	1000	304.8	1141.0	517.5	1.496	38.00

†1428B available by special order. Please contact Belden for lead time.

Analog Multi-Pair Snake Cable

CM Rated Cables
Individually Shielded Twisted Pairs



Individually Shielded Pairs

NEC: CM (CEC: CM)

Product Description

22 AWG stranded (7x30) tinned copper conductors. Polypropylene insulation. Twisted pairs individually Beldfoil® shielded (100% Coverage). 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
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Voltage Rating	30V RMS
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Temperature Rating	80°C
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Nominal DCR	
Conductor	15.0Ω/M' (52.5Ω/km)
Shield	10.6Ω/M' (34.8Ω/km)

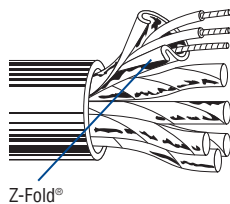
Nominal Impedance	50Ω
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Nominal Velocity of Propagation	66%
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Nominal Capacitance	
Between Conductors	30 pF/Ft. (98 pF/m)
Between Conductor/Shield*	55 pF/Ft. (180 pF/m)

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	4.7	2.1	.273	6.93
		250	76.2	10.0	4.5		
		U-500	U-152.4	21.0	9.5		
		500	152.4	20.0	9.1		
		U-1000	U-304.8	41.0	18.6		
		1000	304.8	44.0	20.0		
		1640	499.9	70.5	32.0		
		3280	999.7	141.0	64.0		
9767	37	500††	152.4	224.0	101.8	.800	20.32
		1000††	304.8	481.0	218.6		

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	19.0	8.6		
		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	11.5	5.2	.417	10.59
		250	76.2	29.5	13.4		
		500	152.4	57.5	26.1		
		1000	304.8	113.0	51.3		
8775	11	100	30.5	12.1	5.5	.464	11.79
		500	152.4	65.5	29.7		
		1000	304.8	130.0	59.0		
9768	12	100	30.5	13.2	6.0	.464	11.79
		250	76.2	36.5	16.6		
		500	152.4	73.5	33.4		
		1000	304.8	143.0	65.0		
8776	15	100	30.5	17.8	8.1	.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	20.0	9.1	.577	14.66
		500	152.4	109.0	49.5		
		1000	304.8	215.0	97.7		
8769	19	100	30.5	22.9	10.4	.603	15.32
		500	152.4	123.0	55.8		
		1000	304.8	244.0	110.7		
8773	27	100	30.5	33.9	15.4	.709	18.00
		250	76.2	83.8	38.0		
		500	152.4	163.0	73.9		
		1000	304.8	341.0	154.7		

† Final put-ups may vary -10 to +20% from length shown, and may contain 2 pieces.

Minimum length of any one piece will be 1500 ft.

†† 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 Pairs

NEC: CMP (CEC: CMP FT6)

Product Description

22 AWG stranded (7x30) tinned copper conductors. FEP insulation. Twisted pairs individually Beldfoil® shielded (100% Coverage). 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)

Overall Jacket

88000 Series FEP
87000 Series PVDF
82000 Series Flamarrest®

Approvals

NEC CMP
CEC CMP FT6

UL Ratings

Non-conduit

Voltage Rating

300V RMS

Temperature Rating

88000 Series 200°C
87000 Series 150°C
82000 Series 60°C

Nominal DCR

Conductor 16.0Ω/M' (52.5Ω/km)
Shield 11.3Ω/M' (37.1Ω/km)

Nominal Impedance

82000 Series 46Ω
87000, 88000 Series 50Ω

Nominal Velocity of Propagation

82000 Series 62%
87000, 88000 Series 69%

Nominal Capacitance (82000 Series)

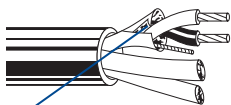
Between Conductors 35 pF/Ft. (115 pF/m)
Between Conductor/Shield* 76 pF/Ft. (249 pF/m)

Nominal Capacitance (87000, 88000 Series)

Between Conductors 31 pF/Ft. (102 pF/m)
Between Conductor/Shield* 67 pF/Ft. (220 pF/m)

DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene

*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

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	19.0	8.6		
		1000†	304.8	42.0	19.1		
88778	6	100	30.5	7.0	3.2	.309	7.85
		500†	152.4	38.5	17.5		
		1000†	304.8	75.0	34.1		
87777	3	500†	152.4	18.0	8.2	.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	19.5	8.9	.237	6.02
		U-1000	U-304.8	38.0	17.3		
		1000†	304.8	39.0	17.7		
82778	6	1000†	304.8	71.0	32.2	.314	7.98

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and UnReel U-500 and -10% to +5% for UnReel U-1000 from length shown.

Analog Multi-Pair Snake Cable

CMP Rated (Plenum) Cables
Individually Shielded Twisted Pairs



Individually Shielded Pairs

NEC: CMP (CEC: CMP FT6)

Product Description

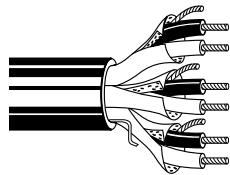
22 AWG stranded (7x30) bare copper conductor. FEP insulation. Twisted pairs individual Beldfoil® shield (100% Coverage) with drain wire. Multiple pairs cable together. Overall Gray fluorocopolymer jacket and rip cord. Sequential footage marking every two feet.

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
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 • FEP = Fluorinated Ethylene Propylene



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	27.0	12.2		
6542PA	3	1000	305	36.0	16.4	.228	5.79
6543PA	4	1000	305	45.0	20.4	.252	6.40
6545PA	6	1000	305	60.0	27.2	.300	7.62
6546PA	8	1000	305	85.0	38.6	.332	8.43
6548PA	12	1000	305	125.0	56.7	.408	10.36
6549PA	16	1000	305	162.0	73.5	.457	11.61

AES/EBU Digital Audio Cable

Overview



While digital audio has been around for over 25 years, only recently has there been an effort to standardize specifications. The Audio Engineering Society (U.S.) and the European Broadcast Union have established an international standard, called AES/EBU. The detailed specifications of this standard are:

- Sampling Rate:** from 32 KHz to 192 KHz
- Bandwidth:** from 4.096 MHz to 24.5 MHz
- Impedance:** 110Ω ± 20%

The key difference between twisted pair specifications for digital audio cable and standard analog audio cable is the impedance specification.

AES/EBU, with its broad tolerance, allows cables with impedances from 88 ohms to 132 ohms to be used. Standard analog audio cable impedance is 45 ohms to 70 ohms. This potential amount of mismatch can result in signal reflections and jitter, causing bit errors at the receiver. For this reason Belden recommends 100 to 120 ohm shielded twisted pair cable.

Product Characteristics

Belden's product offering includes 110 ohm cable solutions and an entire line of single and multi-pair snake cable designed specifically for digital audio. These cables utilize Datalene® premium grade high density insulation. This provides exceptional crush resistance as compared to standard foam polyethylenes, making the new cables less susceptible to damage resulting from cable pulling or flexing. The high velocity of propagation further reduces capacitance and signal delay providing error-free transmissions over extended distances.

Belden's "Super Flexible" digital patch cable, part no. 1800F, utilizes Belden's patented "French Braid" shield technology and a special jacket compound formulation to provide the ultimate in flexibility and performance.

Digital Audio Attenuation

Part Number	2 MHz		4 MHz		5 MHz		6 MHz		12 MHz		25 MHz	
	dB/100 Ft.	dB/100m	dB/100 Ft.	dB/100m	dB/100 Ft.	dB/100m	dB/100 Ft.	dB/100m	dB/100 Ft.	dB/100m	dB/100 Ft.	dB/100m
9180, 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
1800B, 1801B, 1802B, 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
179DT (coax)	1.34	4.40	1.67	5.48	1.74	5.71	1.99	6.53	2.77	9.09	3.83	12.57
1855A (coax)	.57	1.86	.82	2.70	.92	3.02	1.00	3.29	1.30	4.27	1.80	5.91
1505A (coax)	.41	1.35	.58	1.89	.63	2.07	.69	2.25	.90	2.95	1.30	4.27
1505F (coax)	.34	1.11	.53	1.74	.60	1.97	.67	2.20	.98	3.22	1.44	4.72
1694A (coax)	.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 (AES3-2003)*

Part Number	2 MHz		4 MHz		5 MHz		6 MHz		12 MHz		25 MHz	
	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m
9180, 7880A Series	1198	365	948	289	870	265	813	248	633	193	474	144
7731A Series	8889	2709	6349	1935	5882	1793	5479	1670	3774	1150	2817	859
1800F	1563	476	922	281	763	233	664	203	424	129	279	85
1800B, 1801B, 1802B, 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
179DT (AES3)†♦	1493	455	1198	365	1149	350	1005	306	722	220	522	159
(AES-3id)††	597	182	479	146	460	140	402	123	289	88	209	64
1855A (AES3)†♦	3521	1073	2427	740	2174	663	1992	607	1538	469	1111	339
(AES-3id)††	1408	429	970	295	869	265	796	242	615	188	444	135
1505A (AES3)†♦	4866	1483	3478	1060	3175	968	2911	887	2222	677	1538	469
(AES-3id)††	1946	593	1391	424	1270	387	1164	355	888	270	615	188
1505F (AES3)†♦	5882	1793	3774	1150	3333	1016	2985	910	2041	622	1389	423
(AES-3id)††	2353	717	1509	460	1333	406	1194	364	816	249	556	169
1694A (AES3)†♦	5882	1793	4184	1275	3704	1129	3407	1039	2500	762	2000	610
(AES-3id)††	2353	717	1673	510	1482	452	1363	416	1000	305	800	244

* Longer transmission distances are achievable but are contingent upon system component quality of input/output voltages.

† Transmission distance calculations assume minimum allowable output signal amplitude (2V per AES3-2003) and minimum allowable input signal amplitude (200mV per AES3-2003).

†† Per AES-3id-2001, when using analog video distribution equipment to implement AES-3id, maximum transmission distances are 40% of AES3 values assuming a minimum allowable output signal amplitude of 1V and a minimum allowable input signal amplitude of 320mV.

♦ Implementation of AES3 with coaxial cable and 110-75Ω baluns can be achieved with transmission distances of 91% of the AES3 coaxial distances listed above.

AES/EBU Digital Audio Cable

Single- and Double-Pair Cables



19 • Brilliance® Broadcast

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

110 Ohm • 26 AWG Stranded (7x34) .018" TC Conductors • Twisted Pair • Beldfoil® Shield (100% Coverage) • 26 AWG Stranded TC Drain Wire

Datalene® Insulation • Chrome or Purple PVC Jacket

2-Conductor Digital Video Time Code Cable 75°C	9180	NEC: CMR CEC: CMG FT4	1	Black, White	1000	304.8	10.0	4.5	37.3Ω/M'	23.1Ω/M'	.144	3.66	110	76%	13	43	26	85
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Shorting Fold

For cross-connect use with 7891A (et al.) Digital Audio Snake Cables, see page 19.28.

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

Datalene Insulation • Gray or Purple PVC Jacket

60°C	1800B	NEC: CMG CEC: CMG FT4	1	Black, Red	500*	152.4	8.0	3.6	23.7Ω/M'	18.9Ω/M'	.177	4.57	110	76%	12	39	26	85
					U-1000	U-304.8	17.0	7.7	77.7Ω/km	62.0Ω/km								
					1000	304.8	16.0	7.3										
					5000*	1524.0	90.0	40.8										



For cross-connect use with 1803F (et al.) Digital Audio Snake Cables, see page 19.28.
For Plenum version of 1800B, see 1801B.

*500 ft. put-up available in Gray only. 5000 ft. put-up available in Purple only.
The jacket and shield are bonded so both can be removed with automatic stripping equipment.

24 AWG Stranded (42x40) HC BC Conductors • Conductors Cabled with Fillers • TC "French Braid" Shield (95% Coverage) • BC Drain Wire

Datalene Insulation • Matte PVC Jacket (Available in Red, Yellow, Green, Blue, Gray or Black)

Digital Mic Cable High-Flex 60°C	1800F	NEC: CL2R	1	Black, Red	500*	152.4	12.0	5.5	23.7Ω/M'	5.0Ω/M'	.211	5.36	110	76%	12	39	26	85
					U-1000	U-304.8	26.0	11.8	77.7Ω/km	16.4Ω/km								
					1000*	304.8	24.0	10.9										



French Braid

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

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

Plenum • Foam FEP Teflon® Insulation • Flam arrest® Jacket (Available in Natural White or Purple)

75°C, Non-conduit	1801B	NEC: CMP CEC: CMP FT6	1	Black, Red	500	152.4	6.0	2.7	23.7Ω/M'	18.9Ω/M'	.165	4.19	110	78%	12	39	26	85
					U-1000	U-304.8	14.0	6.4	77.7Ω/km	62.0Ω/km								
					1000	304.8	12.0	5.5										



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

Datalene Insulation • Purple PVC Jacket in Zip-Cord Construction

60°C	1802B	NEC: CMG CEC: CMG FT4	2	Black, Red	500	152.4	16.5	7.5	23.7Ω/M'	18.9Ω/M'	.180	4.57	110	76%	12	39	26	85
					U-1000	U-304.8	35.0	15.9	77.7Ω/km	62.0Ω/km	x	x						
					1000	304.8	37.0	16.8			.360	9.14						



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

22 AWG Stranded (7x30) TC Conductors • Twisted Pair with Fillers • Overall Beldfoil + TC Braid Shield (90% Coverage) • 24 AWG Drain Wire

Datalene Insulation • Black High-Flex Matte PVC Jacket

DMX512 Type High-Flex 60°C	1696A	—	1	Blue, White	250	76.2	8.0	3.6	17.8Ω/M'	4.6Ω/M'	.234	5.94	110	76%	13	43	26	85
					500	152.4	14.5	6.6	48.5Ω/km	15.2Ω/km								
					U-1000	U-304.8	30.0	13.6										
					1000	304.8	32.0	14.5										



Z-Fold®

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • HC = High-conductivity • TC = Tinned Copper

*Capacitance between conductors.

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

Teflon is a DuPont trademark.



For more information, contact Belden Technical Support: 1-800-BELDEN-1 • 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® with a drain wire 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/drain wire 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 (26 AWG)

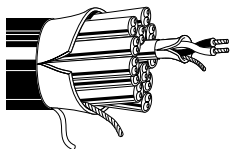
Between Conductors	12.5 pF/Ft. (41 pF/m)
Between Conductor/Shield*	25 pF/Ft. (82 pF/m)

Nominal Capacitance (24 AWG)

Between Conductors	12 pF/Ft. (39 pF/m)
Between Conductor/Shield*	26 pF/Ft. (86 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

Individually Shielded & Jacketed NEC: CMG (CEC: CMG FT4)

26 AWG (7x34)

7891A	2	500	152.4	28.0	12.7	.343	8.71
		1000	304.8	56.0	25.5		
7890A	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[†]	8	250	76.2	28.0	12.7	.541	13.74
		500	152.4	57.0	25.9		
		1000	304.8	142.0	64.4		

Fits metal shell 25-pin D-sub connectors.

7892A	12	500	152.4	85.5	37.9	.679	17.25
		1000	304.8	174.0	79.1		
7893A	16	500	152.4	109.5	49.8	.770	19.56
		1000	304.8	240.0	109.1		

Individually Shielded & Jacketed NEC: CMG (CEC: CMG FT4)

24 AWG (7x32) • Flexible

1803F	4	500	152.4	57.5	26.1	.488	12.39
		1000	304.8	107.0	48.6		
1805F	8	500	152.4	106.5	48.3	.661	16.79
		1000	304.8	211.0	95.7		
1806F	12	500	152.4	160.0	72.6	.829	21.06
		1000	304.8	330.0	149.7		
1850F	16	500	152.4	208.0	94.4	.944	23.98
		1000	304.8	407.0	184.6		
1852F	24	500	152.4	321.0	145.6	1.205	30.61
		1000	304.8	644.0	292.1		
1854F	32	1000	304.8	841.0	381.5	1.346	34.19

[†]7880A is designed to fit in 25-pin D-sub connectors used in digital console board equipment.

AES/EBU Digital Audio CableMulti-Pair Snake Cables
Individually Shielded Pairs**Individually Shielded Pairs**

NEC: CM (CEC: CM)

Product Description

24 AWG stranded (7x32) tinned copper conductors. Datalene® insulation. Twisted pairs individually Beldfoil® shielded (100% Coverage). 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.

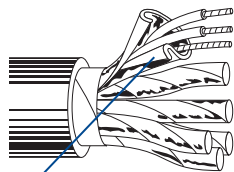
Color Code: See Chart 3 (in Technical Information Section)

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
Non UL Temperature Rating	80°C
Nominal DCR	
Conductor	24.0Ω/M' (78.7Ω/km)
Shield	15.0Ω/M' (49.2Ω/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	4.3	2.0	.266	6.76
		500	152.4	20.5	9.3		
		1000	304.8	39.0	17.7		
		10000 [†]	3048.0	390.0	176.9		

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	29.0	13.2		
		1000	304.8	51.0	23.1		

For Plenum version of 9728, see 89728.

9731	6	100	30.5	7.4	3.4	.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	9.9	4.5	.488	12.40
		500	152.4	57.0	25.8		
		1000	304.8	106.0	48.1		

For Plenum version of 9732, see 89732.

9733	11	500	152.4	75.0	34.1	.575	14.61
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9734	12	500	152.4	79.5	36.1	.575	14.61
		1000	304.8	154.0	70.0		

For Plenum version of 9734, see 89734.

9735	15	500	152.4	95.0	43.2	.639	16.23
		1000	304.8	185.0	84.1		

9736	17	500	152.4	103.5	47.0	.671	17.04
		1000	304.8	210.0	95.5		

9737	19	1000	304.8	231.0	105.0	.671	17.04
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9738	27	1000	304.8	334.0	151.8	.797	20.24
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[†] Total length may vary -10 to +5% from length shown and may contain 2 pieces. Minimum length of any one piece will be 1500 ft.

^{††} Total length may vary -10 to +20% from length shown and may contain 2 pieces. Minimum length of any one piece will be 1500 ft.

AES/EBU Digital Audio CablePlenum-Rated, Multi-Pair Snake Cables
Individually Shielded Pairs**Individually Shielded Pairs**

NEC: CMP (CEC: CMP FT6)

Product Description

24 AWG stranded (7x32) tinned copper conductors. Foam FEP insulation. Twisted pairs individually Beldfoil® shielded (100% Coverage). 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**

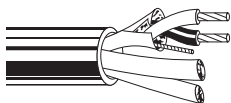
Conductor	23.3Ω/M' (76.4Ω/km)
Shield	14.4Ω/M' (47.2Ω/km)

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 • FEP = Fluorinated Ethylene Propylene

*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	26.0 28.0	11.8 12.7	.255	6.48
89729	2	500 1000	152.4 304.8	17.0 31.0	7.7 14.1	.261	6.63
89730	3	500 1000	152.4 304.8	21.5 40.0	9.8 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	.333	8.46
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	108.0	49.0	.433	10.99
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.
Unreel® carton may vary -5% to +10% from length shown.

Speaker 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.

Speaker 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 (196Ω) was used.

Speaker Wire and Cable

Electrolytic Tough Pitch (ETP) High-Conductivity Copper Speaker Cables
Parallel Zip Constructions

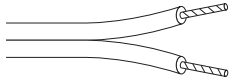


Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm

24 AWG Stranded (7x32) ETP High-conductivity Copper Conductors • Parallel: (1) Tinned, (1) Bare

PVC Insulation (Available in Clear, White, Brown or Chrome)

300V 60°C (Clear)	8782	—	2	U-1000 ▲	U-304.8	7.0	3.2	.017	.43	.058	1.47
300V 75°C (Chrome, Brown, White)				1000 ♦	304.8	6.0	2.7			x	x
										.116	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 Conductors • Parallel: (1) Tinned, (1) Bare

Clear PVC Insulation

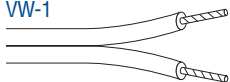
300V 60°C	9712	—	2	1000	304.8	9.0	4.1	.017	.43	.065	1.65
										x	x
										.130	3.30



20 AWG Stranded (7x28) ETP High-conductivity Copper Conductors • Parallel: (1) Tinned, (1) Bare

Clear or Chrome PVC Insulation

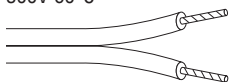
300V 60°C (Clear)	8649	—	2	1000	304.8	12.0	5.5	.018	.46	.073	1.85
300V 75°C (Chrome)										x	x
VW-1										.146	3.71



18 AWG Stranded (16x30) ETP High-conductivity Copper Conductors • Parallel: (1) Tinned, (1) Bare

Clear PVC Insulation

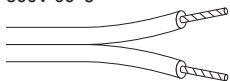
300V 60°C	9708	—	2	U-500	U-152.4	11.0	5.0	.032	.81	.110	2.79
				500	152.4	10.5	4.8			x	x
				U-1000	U-304.8	21.0	9.5			.220	5.59
				1000	304.8	21.0	9.5				



16 AWG Stranded (26x30) ETP High-conductivity Copper Conductors • Parallel: (1) Tinned, (1) Bare

Clear PVC Insulation

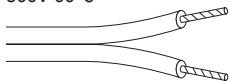
300V 60°C	9716	—	2	U-1000	U-304.8	27.0	12.2	.027	.69	.115	2.92
				1000	304.8	26.0	11.8			x	x
										.230	5.84



14 AWG Stranded (19x27) ETP High-conductivity Copper Conductors • Parallel: (1) Tinned, (1) Bare

Clear PVC Insulation

300V 60°C	9717	—	2	U-1000	U-304.8	42.0	19.1	.035	.89	.146	3.71
				1000	304.8	42.0	19.1			x	x
										.292	7.42



12 AWG Stranded (65x30) ETP High-conductivity Copper Conductors • Parallel: (1) Tinned, (1) Bare

Clear PVC Insulation

300V 60°C	9718	—	2	500	152.4	33.0	15.0	.045	1.14	.185	4.70
				1000	304.8	66.0	30.0			x	x
										.370	9.40



Speaker Wire and Cable

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



19 • Brilliance® Broadcast

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 Conductors • Cabled: (1) Tinned, (1) Bare

PVC Insulation • (Color Code: White)

UL Listed. Wires Misc. 90V 90°C VW-1	9151	—	2	U-1000	U-304.8	7.0	3.2	.012	.30	.108	2.74
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18 AWG Stranded (7x26) ETP High-conductivity Tinned Copper Conductors • Cabled

PVC Insulation • (Color Code: Black, Natural)

UL AWM Style 1007 (300V 80°C) VW-1	8460	—	2	U-1000 1000	U-304.8 304.8	18.0	8.2	.020	.51	.180	4.57
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18 AWG Stranded (19x30) ETP High-conductivity Bare Copper Conductors • Cabled

Plenum • Flamarrest® Insulation • (Color Code: Black, Natural)

75°C	1863A	NEC: CL2P	2	1000	304.8	19.0	8.6	.022	.56	.178	4.52
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16 AWG Stranded (19x29) ETP High-conductivity Tinned Copper Conductors • Cabled

PVC Insulation • (Color Code: Black & Natural for 8470; Black & Orange for 9497)

UL AWM Style 1007 (300V 80°C) VW-1	8470	—	2	500	152.4	13.0	5.9	.023	.58	.210	5.33
				U-1000	U-304.8	26.0	11.8				
				1000	304.8	26.0	11.8				



	9497	—	2	1000	304.8	30.0	13.6	.023	.58	.210	5.33
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16 AWG Stranded (19x29) ETP High-conductivity Bare Copper Conductors • Cabled

Plenum • Flamarrest Insulation • (Color Code: Black, Natural)

75°C	1862A	NEC: CL2P	2	1000	304.8	26.0	11.8	.022	.56	.202	5.13
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Speaker 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

14 AWG Stranded (19x27) ETP High-conductivity Bare Copper Conductors • Cabled

Plenum • Flamarrest® Insulation • (Color Code: Black, Natural)

150V RMS 75°C,	1861A	NEC: CL2P	2	1000	304.8	36.0	16.3	.022	.56	.236	5.99
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12 AWG Stranded (19x25) ETP High-conductivity Bare Copper Conductors • Cabled

Plenum • Flamarrest Insulation • (Color Code: Black, Natural)

150V RMS 75°C,	1860A	NEC: CL2P	2	1000	304.8	58.0	26.4	.022	.56	.270	6.86
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Speaker Wire and Cable

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



19 • Brilliance® Broadcast

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															
	300V RMS 60°C	8442	NEC:	2	Black,	100	30.5	2.4	1.0	.015	.38	.025	.64	.170	4.32
			CMG:		Red	U-500	U-152.4	7.5	3.4						
			CEC:			500	152.4	7.5	3.4						
			CMG FT4			U-1000	U-304.8	15.0	6.8						
						1000	304.8	15.0	6.8						
						10000	3048.0	150.0	68.2						

For Plenum versions of 8442, see 88442 or 82442.

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

PVC Insulation • Chrome PVC Jacket															
	300V RMS 80°C	8205	NEC:	2	Black,	100	30.5	2.6	1.2	.013	.33	.025	.64	.180	4.57
			CMG:		Red	U-500	U-152.4	9.0	4.1						
			CEC:			500	152.4	9.0	4.1						
			CMG FT4			U-1000	U-304.8	17.0	7.7						
						1000	304.8	18.0	8.2						

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

PVC Insulation • Chrome PVC Jacket															
	300V RMS 80°C	8461	NEC:	2	Black,	100	30.5	3.2	1.4	.022	.56	.028	.71	.234	5.94
			CMG:		White	U-500	U-152.4	13.5	6.1						
			CEC:			500	152.4	13.5	6.1						
			CMG FT4			U-1000	U-304.8	26.0	11.8						
						1000	304.8	27.0	12.2						

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

PVC Insulation • Chrome PVC Jacket															
	UL AWM Style 2598 (300V 60°C) (80°C non-UL)	8471	NEC:	2	Black,	U-500	U-152.4	20.0	9.1	.023	.58	.032	.81	.274	6.96
			CMG:		White	500	152.4	20.0	9.1						
			CEC:			U-1000	U-304.8	38.0	17.2						
			CMG FT4			1000	304.8	40.0	18.2						

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

PVC Insulation • Chrome PVC Jacket															
	UL AWM Style 2587 (600V 90°C)	8473	NEC:	2	Black,	U-500	U-152.4	29.0	13.2	.031	.79	.032	.81	.340	8.64
			CL3		White	500	152.4	30.5	13.9						
			CEC:			1000	304.8	58.0	26.4						
			FAS 90 FT4												

See NEC Guidelines for applicable CL3 voltage ratings (300V RMS).

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

PVC Insulation • Chrome PVC Jacket															
	UL AWM Style 2587 (600V 90°C)	8477	NEC:	2	Black,	U-500	U-152.4	41.5	18.8	.032	.81	.035	.89	.386	9.80
			CL3R		White	500	152.4	43.5	19.7						
						1000	304.8	85.0	38.6						

See NEC Guidelines for applicable CL3 voltage ratings (300V RMS).



Speaker Wire and Cable


Low-Capacitance Oxygen-Free, High-Conductivity (OFHC) Speaker Cable
Twisted Jacketed Construction




Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	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

Low Cap • 16 AWG Stranded (65x34) Oxygen-free High-Conductivity Bare Copper Conductors • Conductors Cabled • Unshielded

Polyolefin Insulation • PVC Jacket (Available in Black, White, Gray, Blue or Green)

	1307A <small>new</small>	NEC: CMR, CL3R CEC: CMG FT4	2	U-500 1000†	U-152.4 304.8	15.0 29.0	6.8 13.2	.013	.32	.022	.56	.210	5.33	19.9	65.3
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Suitable for Direct Burial applications. White and Black jackets are Sunlight-resistant.

	1308A <small>new</small>	NEC: CMR, CL3R CEC: CMG FT4	4	U-500 1000†	U-152.4 304.8	26.5 54.0	12.0 24.5	.013	.32	.026	.66	.270	6.86	19.9	65.3
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Suitable for Direct Burial applications. White and Black jackets are Sunlight-resistant.

Low Cap • 14 AWG Stranded (105x34) Oxygen-free High-Conductivity Bare Copper Conductors • Conductors Cabled • Unshielded

Polyolefin Insulation • PVC Jacket (Available in Black, White, Gray, Blue or Green)

	1309A <small>new</small>	NEC: CMR, CL3R CEC: CMG FT4	2	U-500 1000†	U-152.4 304.8	22.5 46.0	10.2 20.9	.016	.39	.027	.69	.264	6.71	20.5	67.3
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Suitable for Direct Burial applications. White and Black jackets are Sunlight-resistant.

	1310A <small>new</small>	NEC: CMR, CL3R CEC: CMG FT4	4	U-500 1000†	U-152.4 304.8	41.5 84.0	18.8 38.1	.016	.39	.033	.94	.319	8.10	20.5	67.3
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Suitable for Direct Burial applications. White and Black jackets are Sunlight-resistant.

Low Cap • 12 AWG Stranded (168x34) Oxygen-free High-Conductivity Bare Copper Conductors • Conductors Cabled • Unshielded

Polyolefin Insulation • PVC Jacket (Available in Black, White or Gray)

	1311A <small>new</small>	NEC: CMR, CL3R CEC: CMG FT4	2	U-500 500 1000†	U-152.4 152.4 304.8	36.5 36.5 74.0	16.6 16.6 33.6	.018	.46	.036	.91	.352	8.94	22.3	73.2
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Suitable for Direct Burial applications. White and Black jackets are Sunlight-resistant.

	1312A <small>new</small>	NEC: CMR, CL3R CEC: CMG FT4	4	500 1000†	152.4 304.8	66.5 132.0	30.2 59.9	.018	.46	.043	1.09	.423	10.74	22.3	73.2
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Suitable for Direct Burial applications. White and Black jackets are Sunlight-resistant.

Low Cap • 10 AWG Stranded (259x34) Oxygen-free High-Conductivity Bare Copper Conductors • Conductors Cabled

Polyolefin Insulation • PVC Jacket (Available in Black, White or Gray)

	1313A <small>new</small>	NEC: CMR, CL3R CEC: CMG FT4	2	500 1000†	152.4 304.8	55.0 109.0	25.0 49.5	.019	.48	.044	1.12	.428	10.87	23.2	76.1
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Suitable for Direct Burial applications. White and Black jackets are Sunlight-resistant.

OFHC = Oxygen-Free High-Conductivity

*Capacitance between conductors.

†1000 ft. put-ups not available in Blue or Green.

Color Code Chart

Cond.	Color
1	Black
2	Red
3	White
4	Green



Speaker Wire and Cable

High-Flex Multi-Conductor Cables


Bi-amp and Tri-amp Speaker Connections



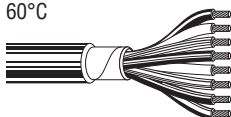
Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD	
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm

14 AWG Stranded (104x34) Bare Copper Conductors • Conductors Cabled with Fillers • Paper Wrap

PVC Insulation • Overall Matte Black PVC Jacket

High-Flex 60°C 	1810A	—	4	Red, Green, White, Black	250	76.2	26.3	11.9	.025	.64	.040	1.02	.390	9.91	
					500	152.4	55.5	25.2							
					1000	304.8	114.0	51.7							


Compatible with Neutrik Speakon® Connectors.

High-Flex 60°C 	1811A	—	8	Brown, Red, Orange, Yellow, Green, White, Blue, Black	1000	304.8	205.0	93.0	.025	.64	.040	1.02	.515	13.08	

Compatible with Neutrik Speakon® Connectors.

10 AWG Stranded (65x28) Bare High-conductivity ETP Copper Conductors • Highly Stranded for Ultra Flexibility • Rip Cord

High-grade PVC Insulation • PVC Jacket (Available in Gray)


High-Flex 75°C, UL 1581 	5T00UP	NEC: CL2 Audio Use Only	2	Black, White	500	152.4	49.5	22.5	.020	.38	.026	.66	.356	9.04
					1000	304.8	96.0	49.5						

For Plenum version of 5T00UP, see 6T00UP.

Jacket sequentially marked at 2 ft. intervals.

10 AWG Stranded (65x28) Bare Copper Conductors • 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	85.0	38.6	.011	.28	.015	.38	.308	7.82

Jacket sequentially marked at 2 ft. intervals.

Neutrik is a Liechtenstein Corporation trademark.

Special Application Audio, Communication and Instrumentation Cable

Audio Connecting Cables and Dual Channel Audio Cables



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

25 AWG Stranded (7x33) Conductor • (3) TC, (4) TCCS • Double Beldfoil® Shield (100% Coverage) • 26 AWG Stranded TC Drain Wire

FPE Insulation • Chrome PVC Jacket

Miniature 80°C	8417	—	1	—	250	76.2	3.3	1.5	.020	.51	.026	.66	.140	3.56	29	95
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25 AWG Stranded (7x33) Conductor • (3) TC, (4) TCCS • Tinned Copper Spiral Wrapped Shield (86% Coverage)

FPE Insulation • Chrome PVC Jacket

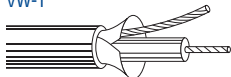
Low-Capacitance 80°C	8421	—	1	—	250	76.2	4.5	2.0	.051	1.30	.023	.58	.180	4.57	16	53
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24 AWG Uni-strand (7x32) Tinned Copper Conductor • Beldfoil Shield (100% Coverage)

Flame-retardant Polypropylene Insulation • Black PVC Jacket

UL AWM Style 1770 (300V 80°C) VV-1	9264	—	1	—	1000	304.8	14.0	6.4	.027	.69	.020	.51	.122	3.10	30	99
													.146	3.71		



Nominal impedance: 50 ohms.
Tear-drop, machine strippable coaxial cable.

Dual Channel • 30 AWG Stranded (7x38) TCCS Conductors • Individual Tinned Copper Spiral Wrapped Shield (85% Coverage)

FPE Insulation • Black PVC Jacket • Polarity Ribbed

Low-Capacitance 70°C	9454	—	2	—	100	30.5	3.5	1.6	.049	1.24	.020	.51	.160	4.06	12	39
													.320	8.13	each channel	

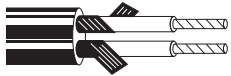


Stereo connecting cable

Dual Channel • 25 AWG Stranded (7x38) Conductors • (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	4.8	2.2	.018	.46	.020	.51	.106	2.69	36	118
													.213	5.41	each channel	



For use with head sets, stereo and language labs.

FPE = Foam Polyethylene • TC = Tinned Copper • TCCS = Tinned Copper-covered Steel

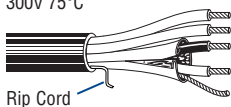
*Capacitance between conductors.

Special Application Audio, Communication and Instrumentation Cable

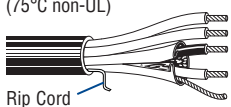
Multimedia Control Cables



19 • Brilliance® Broadcast

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m
22 AWG Stranded (7x30) TC Conductors (Data), STP w/Beldfoil®, TC Drain Wire • 18 AWG (16x30) TC Conductors (Power), Unshielded Pair																		
FPE Insulation (Data) • F-R PVC Insulation (Power) • F-R PVC Jacket (Available in Black, White or Aqua)																		
300V 75°C  Rip Cord	1502R	NEC:	1 STP	Pair:	500	152.4	20.0	9.1	Data:	.039	.99	.250	6.35	14	46	38	125	
		CMR CEC: CMG FT4	+2/C	Blue, White Cond.: Red, Black	1000	304.8	44.0	20.0	.025 Power: .013	.64 .33	22 AWG Data Pair Impedance: 100Ω							

Sequential footing marking every two feet.

22 AWG (7x30) TC Conductors, STP w/Beldfoil, TC Drain Wire • 18 AWG (16x30) TC Conductors Unshielded • Polypropylene Binder Tape																	
Plenum • Foam FEP Insulation (Data) • Flamarrest® Insulation (Power) • Natural Flamarrest Jacket																	
300V 60°C (75°C non-UL)  Rip Cord	1502P	NEC:	1 STP	Pair:	1000	304.8	31.0	14.1	Data:	.015	.381	.205	5.21	14	46	38	125
		CMP CEC: CMP FT6	+2/C	Blue, White Cond.: Red, Black					.025 Power: .011	.64 .28	22 AWG Data Pair Impedance: 100Ω						

BC = Bare Copper • DCR = DC Resistance • EPDM = Ethylene Propylene Diene Monomer • FEP = Fluorinated Ethylene Propylene • 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.

Special Application Audio, Communication and Instrumentation Cable

Microphone/Musical Instrument Cables



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

Mic • 20 AWG Stranded (19x32) High-conductivity TC Conductors, Cabled • Rayon Braid • TC Braid Shield (84% Coverage)

Polyethylene Insulation • Chrome PVC Jacket

Low-Impedance	8405	—	5	Black,	250	46.2	14.8	6.7	.016	.41	.035	.89	.281	7.14	23	76	40	131			
UL AWM Style 2094				Clear,	500	152.4	29.5	13.4													
(300V 60°C)				Green,	1000	304.8	63.0	28.6													
VW-1				Red, Blue																	



Mic • 20 AWG Stranded (26x34) High-conductivity TC Conductors, Cabled • Cotton Wrap • Rayon Braid • TC Braid Shield (85% Coverage)

Rubber Insulation • Black EPDM Rubber Jacket

Low-Impedance	8425	—	5	Blue,	100	30.5	7.8	3.5	.023	.58	.031	.79	.318	8.08	30	98	55	180
600V RMS 90°C (60°C non-UL)				Orange, Black, White, Brown	250	46.2	17.3	7.8										
	8426	—	6	(Same as 8425)	100	30.5	9.0	4.1	.023	.58	.037	.94	.342	8.69	30	98	55	180
				+ Green	250	46.2	21.0	9.5										
	8427	—	7	(Same as 8426)	100	30.5	9.8	4.5	.023	.58	.041	1.04	.355	9.02	30	98	55	180
				+ Red	250	46.2	22.3	10.1										
	8418	—	8	(Same as 8427)	100	30.5	11.0	5.0	.023	.58	.037	.94	.381	9.68	30	98	55	180
				+ Yellow	250	46.2	25.0	11.3										



EPDM = Ethylene Propylene Diene Monomer • TC = Tinned Copper

*Capacitance between conductors.

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

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 19.49 through 19.58.)

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 despoiled 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	Insulation Diameter		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m
30 AWG Stranded (7x38) .012" Tinned Copper Conductor • Tinned Copper Braid Shield (89% Coverage)																			
Foam HDPE Insulation • Black PVC Jacket																			
UL AWM Style 1375 (30V 60°C)	9221	—	100	30.5	1.5	1.0	30 AWG (7x38) .012"	.058	1.47	TC Braid 89% Shield Coverage TC 11.7Ω/M'	.097	2.46	75	78%	17.3	56.8	1	.7	2.3
			U-500	U-152.4	4.0	1.8											4	1.3	4.3
			500	152.4	4.0	1.8											5	1.6	5.2
																	10	2.2	7.2
																	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 Conductor • Tinned Copper Braid Shield (93% Coverage)																			
Polyethylene Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 60°C) (1700V non-UL)	8218	—	U-500	U-152.4	8.5	3.9	27 AWG (7x35) .017"	.100	2.54	TC Braid 93% Shield Coverage BCCS 5.7Ω/M'	.150	3.81	75	66%	20.5	67.3	1	1.2	3.9
			500	152.4	8.0	3.6											10	2.4	7.9
			U-1000	U-304.8	16.0	7.3											50	4.2	13.8
			1000	304.8	14.0	6.4											100	5.7	18.7
																	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

Miniature • 25 AWG Solid .018" Tinned Copper Conductors • Duobond® (100% Coverage) + TC Braid Shield (95% Coverage)																			
Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
1281R new	NEC: CMR CEC: CMG	1	1000	304.8	8.0	3.6	25 AWG (solid) .018" TC 34.0Ω/M'	.074	1.88	Duobond (100%) + TC Braid 5.4Ω/M'	.114	2.90	75	80%	17.0	55.8	1	.5	1.7
																	5	1.2	3.8
																	50	3.7	12.1
																	100	4.9	16.1
																	200	6.7	22.0
																	400	9.5	31.2
																	700	13.4	44.0
																	900	15.0	49.2
																	1000	15.8	51.8
																	3000	31.2	102.4

Plenum • FPFA Insulation • Black Flamarrest® Jacket																			
1282P new	NEC: CMP CEC: CMP FT6	1	1000	304.8	10.0	4.5	25 AWG (solid) .018" TC 31.8Ω/M'	.074	1.88	Duobond (100%) + TC Braid 5.8Ω/M'	.114	2.90	75	81%	17.0	55.8	1	.4	1.3
																	5	.9	3.0
																	50	3.7	12.1
																	100	5.0	16.4
																	200	7.0	23.0
																	400	10.0	32.8
																	700	14.5	47.6
																	900	17.0	55.8
																	1000	17.5	57.4
																	3000	37.0	121.4

BCCS = Bare Copper-covered Steel • DCR = DC Resistance • FPFA = Foam Perfluoroalkoxy • 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	Insulation Diameter		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m

29 AWG Solid .011" Silver-coated Copper-covered Steel Conductor • Copper-Tin Composite Shield (100% Coverage)

TFE Teflon® Insulation • Unjacketed

UL AWM	1672A*	—	500 ^{††}	152.4	7.5	3.4	29 AWG	.062	1.57	CT	.087	2.21	75	69.5%	19.5	64.0	1	1.6	5.3
Style 10245			1000 ^{††}	304.8	14.0	6.4	(solid)			Composite							10	1.8	5.9
(30V 105°C)							.011"			100% Shield							50	4.1	13.5
(1500V RMS 200°C non-UL)							SCCCS			Coverage							100	6.5	21.3
							205.0Ω/M'			10.0Ω/M'							200	9.0	29.5
							672.4Ω/km			33.5Ω/km							400	12.8	42.0
																	700	18.0	59.1
																	1000	22.1	72.5



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	1.6	5.3
Style 10245			500 [†]	152.4	9.5	4.3	(solid)			Composite							10	1.8	5.9
(30V 105°C)			1000 ^{††}	304.8	17.0	7.7	.011"			100% Shield							50	4.1	13.5
(1500V RMS 200°C non-UL)							SCCCS			Coverage							100	6.5	21.3
							205.0Ω/M'			10.0Ω/M'							200	9.0	29.5
							672.4Ω/km			33.5Ω/km							400	12.8	42.0
																	700	18.0	59.1
																	1000	22.1	72.5



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

29 AWG Solid .011" Silver-plated Copper Conductor • Copper-Tin Composite Shield (100% Coverage)

TFE Teflon Insulation • Unjacketed

UL AWM	1672B*	—	100 [†]	30.5	2.5	1.1	29 AWG	.062	1.57	CT	.087	2.21	75	69.5%	19.5	64.0	1	1.2	3.9
Style 10245			500 [†]	152.4	7.5	3.4	(solid)			Composite							10	1.8	5.9
(30V 105°C)			1000 [†]	304.8	14.0	6.4	.011"			100% Shield							50	4.1	13.5
(1500V RMS 200°C non-UL)							SPC			Coverage							100	6.5	21.3
							11.0Ω/M'			10.0Ω/M'							200	9.0	29.5
							36.9Ω/km			33.5Ω/km							400	12.8	42.0
																	700	18.0	59.1
																	1000	22.1	72.5



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.

†May contain more than one piece. Minimum length of any one piece is 25 ft.

††500 ft. put-up: Exact 5 pieces (maximum), 50 feet minimum length
1000 ft. put-up: Exact 8 pieces (maximum), 50 feet minimum length

Teflon is a DuPont trademark.



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	Insulation Diameter		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m

23 AWG Solid Bare Copper-covered Steel Conductor • Bare Copper Braid Shield (95% Coverage)

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	38.0	17.2	(solid)			95% Shield							10	1.1	3.6
(30V 60°C)		CEC:	1000	304.8	39.0	17.7	.023"			Coverage							50	2.4	7.9
VW-1		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
																	900	11.1	36.4
																	1000	12.0	39.4

150V RMS (UL), 1700V RMS (non-UL)
Non-contaminating Black PVC Jacket. Suitable for Indoor and Outdoor applications.

22 AWG Solid Bare Copper-covered Steel Conductor • Bare Copper Braid Shield (85% Coverage)

Polyethylene Insulation • Black PVC Jacket																			
UL AWM	9244	NEC:	U-500	U-152.4	18.0	8.2	22 AWG	.146	3.71	BC Braid	.242	6.15	75	66%	19.4	63.6	1	.6	2.0
Style 1354		CMX:	U-1000	U-304.8	35.0	15.9	(solid)			85% Shield							10	1.1	3.6
(30V 80°C)		CEC:	1000	304.8	36.0	16.4	.025"			Coverage							50	2.4	7.9
VW-1		CMX:	3280	1000.0	118.1	53.8	BCCS			4.5Ω/M'							100	3.4	11.2
							50.0Ω/M'			14.8Ω/km							200	4.9	16.1
							164.0Ω/km										400	7.0	23.0
																	700	9.7	31.8
																	900	11.1	36.4
																	1000	12.0	39.4

150V RMS (UL), 1700V RMS (non-UL)
Suitable for Indoor and Outdoor applications.

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
300V RMS (non-UL)			500	152.4	17.0	7.7	(solid)			95% Shield							10	.9	3.0
			U-1000	U-304.8	36.0	16.3	.025"			Coverage							50	2.0	6.6
			1000	304.8	37.0	16.8	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

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.

Standard Analog Video Cable

75 Ohm Coax
RG-59/U Type



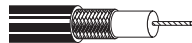
19 • Brilliance® Broadcast

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

22 AWG Stranded (7x30) .030" Bare Copper Conductor • Bare Copper Braid Shield (95% Coverage)

Foam Polyethylene Insulation • Black PVC Jacket

UL AWM	9659	NEC:	U-500	U-152.4	19.0	8.6	22 AWG	.146	3.71	BC Braid	.242	6.15	75	78%	17.3	56.7	1	.3	1.0
Style 1354		CMX	U-1000	U-304.8	37.0	16.8	(7x30)			95% Shield							10	.9	3.0
(30V 80°C)		CEC:	1000	304.8	38.0	17.2	.030"			Coverage							50	2.1	6.9
VW-1, FT-1		CMX					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	8.9	29.2	
																900	10.1	33.1	
																1000	10.9	35.8	



Non-contaminating PVC Jacket. For CCTV, Indoor and Outdoor applications.

UL AWM	9259	NEC:	100	30.5	4.1	1.9	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	18.0	8.2	(7x30)			95% Shield							10	.9	3.0
(30V 80°C)		CEC:	500	152.4	16.5	7.5	.030"			Coverage							50	2.1	6.9
300V RMS (UL)		CM	U-1000	U-304.8	35.0	15.9	BC			2.6Ω/M'							100	3.0	9.8
			1000	304.8	37.0	16.8	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



For CCTV, Indoor and Outdoor 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
300V RMS (UL)		CMP	500	152.4	16.0	7.3	(7x30)			95% Shield							10	.9	3.0
		CEC:	1000	304.8	32.0	14.5	.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
																	900	10.1	33.1
																	1000	11.0	36.1



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
300V RMS (UL)		CMP	1000	304.8	30.0	13.6	(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 • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene

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

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		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m

20 AWG Solid .032" Bare Copper-covered Steel Conductor • Bare Copper Braid Shield (80% Coverage)

Foam Polyethylene Insulation • Black PVC Jacket																			
75°C	9240	—	1000†	304.8	31.0	14.1	20 AWG (solid) .032" BCCS 44.5Ω/M' 146.0Ω/km	.143	3.63	BC Braid 80% Shield Coverage 5.6Ω/M' 18.4Ω/km	.241	6.12	75	78%	17.3	56.7	1	.6	2.0
100% Sweep tested. 5 MHz to 850 MHz.																			
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																			

20 AWG Solid .032" Bare Copper-covered Steel Conductor • Bare Copper Braid Shield (95% Coverage)

Foam Polyethylene Insulation • Black Polyethylene Jacket																			
80°C	8212	—	U-500	U-152.4	16.5	7.5	20 AWG (solid) .032" BCCS 44.5Ω/M' 146.0Ω/km	.143	3.63	BC Braid 95% Shield Coverage 2.6Ω/M' 8.5Ω/km	.242	6.15	75	78%	17.3	56.7	1	.6	2.0
100% Sweep tested. 5 MHz to 450 MHz.																			
500 152.4 15.0 6.8																			
U-1000 U-304.8 31.0 14.1																			
1000 304.8 33.0 15.0																			
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 PVC Jacket

80°C	9274	NEC: CM CEC: CM	500	152.4	15.5	7.0	20 AWG (solid) .032" BCCS 44.5Ω/M' 146.0Ω/km	.143	3.63	BC Braid 95% Shield Coverage 3.5Ω/M' 11.5Ω/km	.240	6.10	75	82%	16.3	53.5	1	.6	2.0
100% Sweep tested. 5 MHz to 450 MHz.																			
1000 304.8 35.0 15.9																			
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																			

20 AWG Solid .032" Bare Copper Conductor • Bare Copper Braid Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 75°C) 60°C (UL)	1426A	NEC: CM	U-1000	U-304.8	35.0	15.9	20 AWG (solid) .032" BC 10.0Ω/M' 32.8Ω/km	.145	3.68	BC Braid 95% Shield Coverage 2.6Ω/M' 8.5Ω/km	.242	6.15	75	83%	16.3	53.5	1	.3	1.0
100% Sweep tested. 5 MHz to 450 MHz.																			
10 1.0 3.3																			
50 1.9 6.2																			
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 Conductor • Duofoil® or Duobond® + Aluminum Braid Shield (40% Coverage)

Gas-injected Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	9275	NEC: CATV CM CEC: CM	U-500	U-152.4	12.0	5.5	20 AWG (solid) .032" BCCS 44.5Ω/M' 146.0Ω/km	.144	3.66	Duofoil + 40% Aluminum Braid 17.0Ω/M' 55.8Ω/km	.237	6.02	75	83%	16.2	53.1	See Chart on page 6.88		
100% Sweep tested. 5 MHz to 550 MHz.																			
U-1000* U-304.8 23.0 10.4																			
1000 304.8 24.0 10.9																			

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

80°C	9100	NEC: CATV CM CEC: CM	U-500	U-152.4	12.0	5.5	20 AWG (solid) .032" BCCS 44.5Ω/M' 146.0Ω/km	.144	3.66	Duobond II + 40% Aluminum Braid 17.0Ω/M' 55.8Ω/km	.237	6.02	75	83%	16.2	53.1	See Chart on page 6.88		
100% Sweep tested. 5 MHz to 1 GHz.																			

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

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

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

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



Standard Analog Video Cable


75 Ohm Coax
RG-6/U Type




19 • Brilliance® Broadcast

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

21 AWG Solid .028" Bare Copper-covered Steel Conductor • Bare Copper Double Braid Shields (98% 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"			98% Shield Coverage							10	.8	2.6
							BCCS										50	1.9	6.2
							32.0Ω/M'			100% Sweep tested. 5 MHz to 450 MHz.							100	2.7	8.9
							105.0Ω/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 Conductor • Bare Copper Double Braid Shields (98% Coverage)


Foam Polyethylene Insulation • Black PVC Jacket																			
80°C	9290	NEC: 1000	304.8	59.0	26.8	18 AWG (solid)	.180	4.57	(2) BC Braids	.288	7.32	75	81%	17.3	56.7	1	.2	.7	
		CEC: 2000	609.6	118.0	53.5	.037"			98% Shield Coverage								10	.7	2.3
		CM				BC				100% Sweep tested. 5 MHz to 450 MHz.							50	1.7	5.6
		CM				7.5Ω/M'											100	2.5	8.2
						24.6Ω/km											200	3.6	11.8
																	400	5.0	16.4
																	700	7.2	23.6
																	900	8.3	27.2
																	1000	8.8	28.9

Suitable for Indoor and Outdoor applications.


18 AWG Solid .040" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (60% Coverage)

Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
UL AWM Style 1354 (30V 80°C)	9248	NEC: U-500	U-152.4	16.5	7.5	18 AWG (solid)	.180	4.57	Duofoil + 60% TC Braid	.270	6.86	75	82%	16.2	53.1	1	.3	1.0	
		CM	500	152.4	15.0	6.8	.040"										10	.7	2.3
		CEC: U-1000	U-304.8	32.0	14.5	BC				For Plenum versions of 9248, see 89248 or 82248.							50	1.5	4.9
		CM	1000	304.8	33.0	15.0	6.4Ω/M'										100	2.0	6.6
			1640	500.0	55.8	25.3	21.0Ω/km										200	2.8	9.2
			3280	1000.0	108.2	49.2				100% Sweep tested. 5 MHz to 450 MHz.							400	4.0	13.1
																	700	5.3	17.4
																	900	6.1	20.0
																	1000	6.5	21.3

18 AWG Solid .040" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (65% Coverage)

Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C	89248	NEC: CMP	1000	304.8	33.0	15.0	18 AWG (solid)	.170	4.32	Duofoil + 65% TC Braid	.222	5.64	75	82%	16.5	54.1	1	.3	1.0
		CEC: CMP FT6	2000	609.6	64.0	29.0	.040"										10	.7	2.3
							6.4Ω/M'			100% Sweep tested. 5 MHz to 450 MHz.							50	1.5	4.9
							21.0Ω/km										100	2.1	6.9
																	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	1000	304.8	31.0	14.1	18 AWG (solid)	.170	4.32	Duofoil + 65% TC Braid	.222	5.64	75	82%	16.5	54.1	1	.3	1.0
		CEC: CMP FT6					.040"										10	.7	2.3
							6.4Ω/M'			100% Sweep tested. 5 MHz to 450 MHz.							50	1.6	5.2
							21.0Ω/km										100	2.2	7.2
																	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 • FEP = Fluorinated Ethylene Propylene • 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.



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) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m

18 AWG Stranded (7x26) .048" Tinned Copper Conductor • Bare Copper Braid Shield (97% Coverage)

Flame-retardant Semi-foam Polyethylene Insulation • Black PVC Jacket																			
80°C	8238	NEC: CM CEC: CM	500 1000	152.4 304.8	59.0 117.0	26.8 53.2	18 AWG (7x26) .048" TC 6.1Ω/M' 20.0Ω/km	.285	7.24	BC Braid 97% Shield Coverage 1.2Ω/M' 3.9Ω/km	.405	10.29	75	66%	20.5	67.2	1 10 50 100 200 400 700 900 1000	.2 .7 1.3 2.0 2.9 4.2 5.8 6.8 7.1	.6 2.2 4.3 6.6 9.5 13.8 19.0 22.3 23.3

Suitable for Indoor and Outdoor applications.

Polyethylene Insulation • Black PVC Jacket*																			
60°C	8261	CEC: CXC	500 1000	152.4 304.8	52.5 104.0	23.9 47.3	18 AWG (7x26) .048" TC 6.1Ω/M' 20.0Ω/km	.285	7.24	BC Braid 97% Shield Coverage 1.2Ω/M' 3.9Ω/km	.405	10.29	75	66%	20.5	67.2	1 10 50 100 200 400 700 900 1000	.2 .7 1.3 2.0 2.9 4.2 5.8 6.8 7.1	.6 2.2 4.3 6.6 9.5 13.8 19.0 22.3 23.3

*Non-contaminating PVC jacket. Suitable for Indoor and Outdoor applications.

14 AWG Solid .064" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (60% Coverage)

Gas-injected Foam HDPE Insulation • Black PVC Jacket																			
80°C	9292	—	1000	304.8	75.0	36.8	14 AWG (solid) .064" BC 2.6Ω/M' 8.5Ω/km	.280	7.11	Duofoil + 60% TC Braid 3.0Ω/M' 9.8Ω/km	.405	10.29	75	84%	16.1	52.8	1 10 50 100 200 400 700 900 1000	.2 .5 .9 1.3 1.6 2.3 3.3 4.0 4.3	.6 1.6 3.0 4.3 5.3 7.6 10.8 13.1 14.1

Suitable for Indoor and Outdoor applications.

14 AWG Solid .064" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (63% Coverage)

Plenum • Foam FEP Insulation • Black FEP Jacket																			
200°C	89292	NEC: CMP CATVP CEC: CMP FT6	500† 1000†	152.4 304.8	40.5 81.0	18.4 36.7	14 AWG (solid) .064" BC 2.5Ω/M' 8.2Ω/km	.274	6.96	Duofoil + 63% TC Braid 3.0Ω/M' 9.8Ω/km	.346	8.79	75	83%	16.2	53.1	1 10 50 100 200 400 700 900 1000	.2 .4 1.0 1.5 2.2 3.3 4.5 5.2 5.5	.5 1.3 3.3 4.9 7.2 10.8 14.8 17.1 18.0

14 AWG Solid .064" Bare Copper Conductor • Bare Copper Braid Shield (97% Coverage)

Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket																			
80°C	8213	—	500 1000 2000	152.4 304.8 609.6	44.0 87.0 172.0	20.0 39.5 78.2	14 AWG (solid) .064" BC 2.6Ω/M' 8.5Ω/km	.285	7.24	BC Braid 97% Shield Coverage 1.1Ω/M' 3.6Ω/km	.405	10.29	75	84%	16.1	52.8	1 10 50 100 200 400 700 900 1000	.2 .4 .9 1.3 1.9 2.9 4.1 4.8 5.2	.6 1.1 3.0 4.3 6.2 9.5 13.5 15.7 17.1

Suitable for Indoor and Outdoor applications.

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • 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 19.56). 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) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m

28.5 AWG Solid .012" Bare Copper Conductor • Duobond® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

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

DigiTruck®	179DT	NEC:	500 [▲]	152.4	5.0	2.3	28.5 AWG	.056	1.42	Duobond (100%)	.100	2.54	75	77%	17.4	57.4	1	1.2	3.9
SDI/HDTV	new	CMR	1000	304.8	8.0	3.6	(solid)			+ TC Braid							5	1.9	6.1
Digital Video		CEC:					.012"			(95% Cov.)							10	2.4	7.8
75°C		CMG FT4					BC			8.9Ω/M'							67.5	5.9	19.3
							108Ω/M'			29.2Ω/km							71.5	6.0	19.6
							350Ω/km										100	6.9	22.6
																	135	7.9	25.8
																	270	10.8	35.4
																	360	12.5	41.0
																	540	15.4	50.5
																	720	17.9	58.7
																	750	18.3	60.0
																	1000	21.3	69.9
																	1500	26.3	86.3
																	2000	30.8	101.1
																	2250	32.8	107.6
																	3000	38.3	125.7

▲500 ft. put-up available in Black only.

25 AWG Stranded (19x37) .021" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

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

SDI/HDTV	1865A	NEC:	1000	304.8	14.0	6.4	25 AWG	.094	2.39	Duofoil (100%)	.150	3.81	75	82%	16.5	54.1	1	.5	1.5
Digital Video		CMR					(19x37)			+ TC Braid							3.6	1.0	3.1
75°C		CEC:					.021"			(95% Cov.)							10	1.6	5.2
		CMG FT4					BC			5.4Ω/M'							71.5	3.7	12.1
							27.4Ω/M'			17.7Ω/km							135	5.0	16.4
							89.9Ω/km										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 Conductor • Duofoil (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

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

SDI/HDTV	1855A	NEC:	500 [▲]	152.4	9.0	4.1	23 AWG	.102	2.59	Duofoil (100%)	.159	4.03	75	82%	16.3	53.5	1	.4	1.3
Digital Video		CMR	1000	304.8	16.0	7.3	(solid)			+ TC Braid							3.6	.8	2.6
75°C		CEC:					.023"			(95% Cov.)							10	1.2	3.9
		CMG FT4					BC			7.6Ω/M'							71.5	3.1	10.0
							20.1Ω/M'			24.9Ω/km							135	3.8	12.5
							65.9Ω/km										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.

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 Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White or Black.

Precision Video Cable for Analog and Digital

Miniature RG-59/U Type



19 • Brilliance® Broadcast

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

23 AWG Stranded (7x32) .023" Bare Compacted Copper Conductor* • Tinned Copper Braid Shield (95% Coverage)

Polyethylene Insulation • Black Polyethylene Jacket																			
80°C	8279	—	500	152.4	13.0	5.9	23 AWG (7x32)	.146	3.71	TC + 95% Shield	.220	5.59	75	66%	21.0	68.9	1	.4	1.1
			1000	304.8	29.0	13.2	.023" BCC			4.5Ω/M'							3.6	.6	2.0
							19.1Ω/M'			14.8Ω/km							10.0	1.2	3.9
							62.6Ω/km										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 Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

Polyethylene Insulation • Black Polyethylene Jacket																			
80°C	9209	—	U-500	U-152.4	15.0	6.8	23 AWG (solid)	.146	3.71	Duofoil + 95% TC Braid	.220	5.59	75	66%	21.0	68.9	1	.4	1.2
			U-1000	U-304.8	29.0	13.2	.022" BC			4.5Ω/M'							3.6	.5	1.8
							20.4Ω/M'			14.8Ω/km							10.0	1.2	3.8
							66.9Ω/km										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 Style 1354 (30V 75°C)	9209A	NEC: CMR CEC: CMG FT4	U-1000	U-304.8	35.0	15.9	23 AWG (solid)	.146	3.71	Duofoil + 95% TC Braid	.220	5.59	75	66%	21.0	68.9	1	.4	1.2
							.022" BC			4.5Ω/M'							3.6	.5	1.8
							20.4Ω/M'			14.8Ω/km							10.0	1.2	3.8
							66.9Ω/km										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 • TC = Tinned Copper

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

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

Precision Video Cable for Analog and Digital

RG-59/U Type and 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.	dB/100m

20 AWG Solid .032" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

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

SDI/HDTV	1505A	NEC:	500 [▲]	152.4	15.5	7.0	20 AWG (solid)	.145	3.68	Duofoil + 95%	.233	5.92	75	83%	16.3	53.5	1	.3	1.0
Digital Video		CMR	1000 [◆]	304.8	35.0	15.9				TC Braid							3.6	.6	1.8
75°C		CEC:	5000 [◆]	1524.0	165.0	74.8	.032"			BC	3.8Ω/M'						10	.9	2.9
		CMG FT4								10.0Ω/M'	12.5Ω/km						71.5	2.1	6.9
										32.8Ω/km							135	2.7	8.9

For Plenum version of 1505A, see 1506A.
Also available in bundled versions. See 7794A through 7798A.
100% Sweep tested. 5 MHz to 3 GHz.

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

Plenum • Foam FEP Teflon® Insulation • Flamarrest® Jacket (Available in 10 colors)*

SDI/HDTV	1506A	NEC:	500 [▼]	152.4	14.5	6.6	20 AWG (solid)	.133	3.38	Duofoil + 95%	.196	4.98	75	84%	16.1	52.8	1	.3	1.0
Digital Video		CMR	1000	304.8	29.0	13.2				TC Braid							3.6	.6	2.0
75°C		CEC:					.032"			BC	3.2Ω/M'						10	1.1	3.4
		CMPT FT6								10.0Ω/M'	10.5Ω/km						71.5	2.3	7.4
										32.8Ω/km							135	3.2	10.5

100% Sweep tested. 5 MHz to 3 GHz.

*500 ft. put-up available in Black or Natural only.
◆1000 ft. put-up available in all ten colors: Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, Natural or Black.

22 AWG Stranded (7x29) .031" Bare Compacted Copper Conductor* • Tinned Copper/Bare Copper Double Braid Shield (98% Coverage)

Polyethylene Insulation • PVC Jacket (Matte Red, Blue, Green, Gray or Black)

High-Flex	8281F	—	500 [*]	152.4	34.5	15.7	22 AWG (7x29)	.198	4.90	TC Double Braid	.305	7.75	75	66%	21.0	68.9	1	.3	.9
60°C			1000	304.8	67.0	30.4	.031"			98% Shield							3.6	.5	1.7
										BCC Coverage	1.7Ω/M'						10.0	.9	2.9
										12.2Ω/M'	5.6Ω/km						71.5	2.5	8.0
										40.0Ω/km							135	3.6	11.6

100% Sweep tested. 5 MHz to 830 MHz.

*500 ft. put-up available in Black only.

22 AWG Stranded (7x29) .031" Bare Compacted Copper Conductor* • Tinned Copper/Bare Copper Double Braid Shield (95% Coverage)

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

High-Flex	1505F	NEC:	1000	304.8	45.0	20.4	22 AWG (7x29)	.145	3.68	TC Double Braid	.242	6.15	75	80%	17.0	55.7	1	.2	.7
SDI/HDTV		CM					.031"			95% Shield							3.6	.5	1.6
Video Patch		CEC:								BCC Coverage	2.4Ω/M'						10	.9	2.9
75°C		CM								12.2Ω/M'	7.8Ω/km						71.5	2.5	8.2
										40.0Ω/km							135	3.5	11.5

100% Sweep tested. 5 MHz to 3 GHz.

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

BC = Bare Copper • BCC = Bare Compacted Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • 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.

Teflon is a DuPont trademark.



For more information, contact Belden Technical Support: **1-800-BELDEN-1** • www.belden.com

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.	dB/100m

20 AWG Solid .031" Bare Copper Conductor • Tinned Copper/Bare Copper Double Braid Shield (98% Coverage)

Polyethylene Insulation • Gray PVC Jacket †																			
60°C	9231	NEC:	500	152.4	39.0	17.7	20 AWG (solid) .031"	.198	5.03	TC Double Braid	.305	7.75	75	66%	21.0	68.9	1	.3	1.0
VW-1		CMH	1000	304.8	76.0	34.5											98% Shield Coverage	3.6	.5
		CEC:															10.0	.8	2.6
		CMH FT1															71.5	2.0	6.6
																	135	3.5	11.5
																	270	4.3	14.1
																	360	5.0	16.4
																	540	6.2	20.3
																	720	7.2	23.6
																	750	7.4	24.3
																	1000	9.1	29.8

†Non-contaminating PVC jacket

Polyethylene Insulation • Clear Polyethylene Jacket																			
Indoor Use	9141	—	1000	304.8	73.0	33.2	20 AWG (solid) .031"	.200	5.06	TC Double Braid	.305	7.75	75	66%	20.0	65.6	1	.3	1.0
80°C																	98% Shield Coverage	3.6	.5
																	10.0	.8	2.6
																	71.5	2.0	6.6
																	135	3.5	11.5
																	270	4.3	14.1
																	360	5.0	16.4
																	540	6.2	20.3
																	720	7.2	23.6
																	750	7.4	24.3
																	1000	9.1	29.8

20 AWG Solid .031" Bare Copper Conductor • Tinned Copper/Bare Copper Double Braid Shield (98% Coverage)

Polyethylene Insulation • Polyethylene Jacket (Available in Red, Yellow, Green, Blue, White, Orange or Black)																			
80°C	8281	—	500 [▲]	152.4	37.5	17.0	20 AWG (solid) .031"	.198	5.03	TC Double Braid	.305	7.75	75	66%	21.0	68.9	1	.3	.8
				1000	304.8	74.0											33.6	98% Shield Coverage	3.6
																	10.0	.8	2.6
																	71.5	2.1	6.9
																	135	3.0	9.8
																	270	4.3	14.1
																	360	5.1	16.6
																	540	6.3	20.7
																	720	7.4	24.3
																	750	7.6	24.9
																	1000	9.2	30.2

[▲]500 ft. put-up not available in White.

Flame-retardant Semi-Foam Polyethylene Insulation • PVC Jacket (Available in 9 colors)*																			
UL AWM Style 1354 (30V 80°C)	8281B	NEC:	1000	304.8	84.0	38.1	20 AWG (solid) .031"	.198	5.03	TC Double Braid	.305	7.75	75	66%	21.0	68.9	1	.3	.8
		CMR															98% Shield Coverage	3.6	.5
		CEC:															10.0	.8	2.6
		CMG FT4															71.5	2.1	6.9
																	135	3.0	9.8
																	270	4.4	14.4
																	360	5.1	16.6
																	540	6.6	21.5
																	720	7.8	25.4
																	750	8.0	26.2
																	1000	10.2	33.5

*8281B available in Red, Orange, Yellow, Green, Blue, Purple, Gray, White or Black.

20 AWG Solid .031" Bare Copper Conductor • Tinned Copper/Bare Copper Double Braid Shield (98% Coverage)

Plenum • FEP Insulation • Black Fluorocopolymer Jacket																			
150°C	88281	NEC:	500	152.4	44.5	20.2	20 AWG (solid) .031"	.185	4.70	TC Double Braid	.271	6.88	75	70%	19.0	62.4	1	.2	.7
		CMP	1000	304.8	86.0	39.1											98% Shield Coverage	3.6	.5
		CEC:															10.0	.8	2.6
		CMP FT6															71.5	2.3	7.5
																	135	3.3	10.8
																	270	5.1	16.7
																	360	6.1	20.0
																	540	8.0	26.2
																	720	9.7	31.8
																	750	10.0	32.8
																	1000	12.3	40.3

Suitable for Outdoor and Direct Burial applications.

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • TC = Tinned Copper

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

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



Precision Video Cable for Analog and Digital

Low Loss Serial Digital Coax
RG-6/U and 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.	dB/ 100m

RG-6/U Type • 18 AWG Solid .040" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

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

SDI/HDTV	1694A	NEC:	500 [▲]	152.4	20.5	9.3	18 AWG	.180	4.57	Duofoil	.274	6.96	75	82%	16.2	53.1	1	.2	.8
Digital Video		CMR	1000	304.8	45.0	20.5	(solid)			+ 95%							3.6	.5	1.5
75°C		CEC:	4500	1371.6	202.5	91.9	.040"			TC Braid							10	.7	2.4
		CMG FT4					BC			2.8Ω/M'	For Plenum version of 1694A, see 1695A.						71.5	1.6	5.2
						6.4Ω/M'			9.2Ω/km								135	2.1	6.9
						21.0Ω/km											270	3.0	9.7
																	360	3.4	11.3
																	540	4.3	13.9
																	720	4.9	16.1
																	750	5.0	16.4
																	1000	5.9	19.3
																	1500	7.3	24.0
																	2250	9.1	30.0
																	3000	10.7	35.0

*500 ft. put-up available in Black only.

Gas-injected Foam HDPE Insulation • Black Low-Smoke, Zero-Halogen Jacket

SDI/HDTV	1694SB	NEC:	1000	304.8	46.0	20.9	18 AWG	.180	4.57	Duofoil	.274	6.96	75	82%	16.2	53.1	1	.2	.8
Digital Video		CMG-LS					(solid)			+ 95%							3.6	.5	1.5
75°C		CEC:					.040"			TC Braid							10	.7	2.4
		CMG-LS FT4					BC			2.8Ω/M'	100% Sweep tested. 5 MHz to 4.5 GHz.						71.5	1.6	5.2
		Limited Smoke				6.4Ω/M'			9.2Ω/km								135	2.1	6.9
						21.0Ω/km											270	3.0	9.7
																	360	3.4	11.3
																	540	4.3	13.9
																	720	4.9	16.1
																	750	5.0	16.4
																	1000	5.9	19.3
																	1500	7.3	24.0
																	2250	9.1	30.0
																	3000	10.7	35.0

Black jacket suitable for Indoor, Outdoor and Aerial applications.

*500 ft. put-up available in Black or Natural only.

RG-11/U Type • 14 AWG Solid .064" Bare Copper Conductor • Duofoil (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

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

SDI/HDTV	7731A	NEC:	500 [*]	152.4	46.5	21.1	14 AWG	.280	7.11	Duofoil	.400	10.2	75	85%	16.0	52.4	1	.2	.5
Digital Video		CMR	1000	304.8	95.0	43.1	(solid)			+ 95%							3.6	.3	1.0
75°C		CEC:	4000	1219.2	388.0	176.0	.064"			TC Braid							10	.5	1.5
		CMG FT4					BC			1.5Ω/M'	100% Sweep tested. 5 MHz to 3 GHz.						71.5	1.1	3.6
						2.5Ω/M'			4.9Ω/km								135	1.5	4.8
						8.2Ω/km											270	2.1	6.9
																	360	2.5	8.0
																	540	3.1	10.0
																	720	3.6	11.7
																	750	3.7	12.0
																	1000	4.3	14.1
																	1500	5.5	18.0
																	2250	6.9	22.6
																	3000	8.2	26.9

*500 ft. put-up available in Red or Black only.

Plenum • Foam FEP Teflon Insulation • Fluorocopolymer Jacket (Available in 10 colors)**

SDI/HDTV	7732A	NEC:	500 [*]	152.4	45.0	20.5	14 AWG	.274	6.96	Duofoil	.348	8.84	75	83%	16.3	53.5	1	.2	.5
Digital Video		CMR	1000	304.8	90.0	40.8	(solid)			+ 95%							3.6	.3	.9
150°C		CEC:	2000 [▼]	609.6	176.0	80.0	.064"			TC Braid							10	.4	1.3
		CMG FT6					BC			1.6Ω/M'	100% Sweep tested. 5 MHz to 3 GHz.						71.5	1.2	4.1
						2.5Ω/M'			5.3Ω/km								135	1.8	5.8
						8.2Ω/km											270	2.6	8.5
																	360	3.1	10.2
																	540	3.9	12.8
																	720	4.6	15.0
																	750	4.7	15.4
																	1000	5.5	18.0
																	1500	6.9	22.7
																	2250	9.2	30.2
																	3000	10.2	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 • FEP = Fluorinated Ethylene Propylene • HDPE = High-density Polyethylene • TC = Tinned Copper

Teflon is a DuPont trademark.

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, Purple, Gray or White.

** Available in Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray or Natural.



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

Miniature • 23 AWG Solid .023" Bare Copper Conductors • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)


Gas-injected Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: See chart below)

SDI/HDTV Digital Video 75°C/60°C (UL) (1855A Bundled)	7787A	NEC: CMR CEC: CMG FT4	3	500 1000	152.4 304.8	47.5 94.0	21.6 42.7	23 AWG (solid) .023"	.102 Coax OD: .159	2.55 + 95% 4.03	Duofoil TC Braid 7.6Ω/M'	.432 10.97	75	83%	16.5	54.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2500 3000	.4 .8 1.2 3.1 3.8 5.4 6.2 7.7 9.1 9.5 10.5 13.0 16.9 18.5	1.3 2.6 3.9 10.0 12.5 17.7 20.3 25.3 29.8 31.2 34.4 42.6 55.4 60.7	
								20.1Ω/M' 65.9Ω/km			24.9Ω/km									
	7788A	NEC: CMR CEC: CMG FT4	4	1000	304.8	110.0	49.9	same as above	.102 Coax OD: .159	2.55 + 95% 4.03	same as above	.481 12.22					750 1000 1500 2500 3000	9.5 10.5 13.0 16.9 18.5	31.2 34.4 42.6 55.4 60.7	
	7789A	NEC: CMR CEC: CMG FT4	5	500 1000	152.4 304.8	73.0 142.0	33.1 64.4	same as above	.102 Coax OD: .159	2.55 + 95% 4.03	same as above	.539 13.69								
	7790A	NEC: CMR CEC: CMG FT4	6	500 1000	152.4 304.8	88.5 176.0	40.2 79.8	same as above	.102 Coax OD: .159	2.55 + 95% 4.03	same as above	.597 15.16								
	7791A	NEC: CMR CEC: CMG FT4	10	500 1000	152.4 304.8	155.5 304.0	70.5 137.9	same as above	.102 Coax OD: .159	2.55 + 95% 4.03	same as above	.796 20.22								
	7792A	NEC: CMR CEC: CMG FT4	12	500 1000	152.4 304.8	178.5 367.0	81.0 166.5	same as above	.102 Coax OD: .159	2.55 + 95% 4.03	same as above	.825 20.96								

Sweep tested 5 MHz to 3 GHz.

RG-59/U Type • 20 AWG Solid .032" Bare Copper Conductors • Duofoil (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: See chart below)

SDI/HDTV Digital Video 75°C/60°C (UL) (1505A Bundled)	7794A	NEC: CMR CEC: CMG FT4	3	500 1000	152.4 304.8	94.5 187.0	43.0 84.8	20 AWG (solid) .032"	.145 Coax OD: .235	3.68 + 95% 5.97	Duofoil TC Braid 3.8Ω/M'	.631 16.03	75	83%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2500 3000	.3 .6 .9 2.1 2.7 3.8 4.4 5.5 6.4 6.5 7.6 9.4 12.4 13.8	1.0 1.8 2.9 6.9 8.9 12.5 14.4 18.0 21.0 21.3 24.9 30.8 40.7 45.3	
								10.0Ω/M' 32.8Ω/km			12.5Ω/km									
	7795A	NEC: CMR CEC: CMG FT4	4	500 1000	152.4 304.8	116.5 237.0	53.0 107.7	same as above	.145 Coax OD: .235	3.68 + 95% 5.97	same as above	.706 17.93					1000 1500 2500 3000	7.6 9.4 12.4 13.8	24.9 30.8 40.7 45.3	
	7796A	NEC: CMR CEC: CMG FT4	5	500 1000	152.4 304.8	153.0 299.0	69.4 135.6	same as above	.145 Coax OD: .235	3.68 + 95% 5.97	same as above	.790 20.07								
	7798A	NEC: CMR CEC: CMG FT4	10	500 1000	152.4 304.8	319.5 625.0	145.2 284.1	same as above	.145 Coax OD: .235	3.68 + 95% 5.97	same as above	1.166 29.62								

Sweep tested 5 MHz to 3 GHz.

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

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

Color Code Chart

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



VideoFLEX® Snake Cable for Precision Digital and Analog

RG-59/U and RG-6/U Types



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

RG-59/U • 20 AWG Solid .032" Bare Copper Conductors • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

Plenum • Foam FEP Insulation • Plenum-Grade PVC Jackets (Color Code: See chart below) • **Center Spine • No Overall Jacket**

	300V RMS	1283S3 <small>new</small>	NEC: CMP CEC: CMP	3	250 500 1000	76.2 152.4 304.8	26.3 54.0 103.0	11.9 24.5 46.7	20 AWG (solid) .032" BC 10.0Ω/M' 32.8Ω/km	.133 3.38	Duofoil (95%) + TC Braid 3.8Ω/M' 12.5Ω/km	.422 10.72	75	83%	16.2 53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2500 3000	.3 .6 .9 2.1 2.7 3.8 4.4 5.5 6.4 6.5 7.6 9.4 12.4 13.8	1.0 2.0 2.9 6.9 8.9 12.5 14.4 18.0 21.0 21.3 24.9 30.8 40.7 45.3
		1283S5 <small>new</small>	NEC: CMP CEC: CMP	5	250 500 1000	76.2 152.4 304.8	43.5 88.0 174.0	19.7 39.9 78.9	same as above	.133 3.38	same as above	.529 13.44						
		1283S6 <small>new</small>	NEC: CMP CEC: CMP	6	250 500 1000	76.6 152.4 304.8	59.0 108.0 209.0	26.8 49.0 94.8	same as above	.133 3.38	same as above	.588 14.94						
	Sweep tested. 5 MHz to 3 GHz.																	

Suitable for Indoor and Outdoor applications.

RG-6/U Type • 18 AWG Solid .040" Bare Copper Conductors • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • Overall Matte Black PVC Jacket (Color Code: See chart below)

	SDI/HDTV Digital Video 75°C/60°C (UL) (1694A Bundled)	7710A	NEC: CMR CEC: CMG FT4	3	500 1000	152.4 304.8	137.5 285.0	62.4 129.3	18 AWG (solid) .040" BC 6.4Ω/M' 21.0Ω/km	.180 4.57 .275 6.99	Duofoil + 95% TC Braid 3.0Ω/M' 9.9Ω/km	.770 19.56	75	82%	16.2 53.1	1 3.58 5 7 10 67.5 71.5 88.5 100 135 143 180 270 360 540 720 750 1000 1500 2000 2250 3000	.24 .45 .54 .63 .72 1.57 1.60 1.75 1.84 2.10 2.16 2.42 2.97 3.43 4.25 4.95 5.00 5.89 7.33 8.57 9.14 10.67	.8 1.5 1.8 2.1 2.4 5.2 5.3 5.7 6.0 6.9 7.1 7.9 9.8 11.3 13.9 16.2 16.4 19.3 24.1 28.1 30.0 35.0
		7711A	NEC: CMR CEC: CMG FT4	4	500 1000	152.4 304.8	179.5 350.0	81.4 158.8	same as above	.180 4.57 .275 6.99	same as above	.900 22.86						
		7712A	NEC: CMR CEC: CMG FT4	5	500 1000	152.4 304.8	216.5 454.0	98.2 205.9	same as above	.180 4.57 .275 6.99	same as above	.970 24.64						
		7713A	NEC: CMR CEC: CMG FT4	10	500 1000	152.4 304.8	463.0 904.0	210.0 410.0	same as above	.180 4.57 .275 6.99	same as above	1.386 35.20						
	Sweep tested 5 MHz to 3 GHz.																	

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • 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. 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	Purple
5	Yellow	10	Black



Precision Video Cable for Analog and Digital Parallel Digital Video



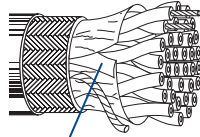
19 • Brilliance® Broadcast

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

28 AWG Stranded (7x36) TC Conductors • Twisted Pairs • Overall Beldfoil® + TC Braid Shield (65% Coverage) • TC Drain Wire[†]

Datalene® Insulation • Chrome PVC Jacket

UL AWM Style 2919 (30V 80°C)	8142	NEC:	12.5	See	100	30.5	6.8	3.1	65.0Ω/M'	3.1Ω/M'	.375	9.52	120	78%	11.0	36.1	20.0	65.6	
		CL2	(12 pairs + 1 single)	Chart 5	500	152.4	33.0	15.0	213.0Ω/km	10.1Ω/km									
				(Tech Info Section)	1000	304.8	66.0	30.0											

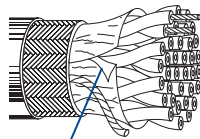


Shorting Fold

24 AWG Stranded (7x32) TC Conductors • Twisted Pairs • Overall Beldfoil + TC Braid Shield (65% Coverage) • TC Drain Wire^{††}

Datalene Insulation • Chrome PVC Jacket

UL AWM Style 2919 (30V 80°C)	8112	NEC: CM	12.5	See	100	30.5	9.2	4.2	24.0Ω/M'	2.4Ω/M'	.440	11.18	100	78%	12.5	41	22	72.2	
		NEC: CM	(12 pairs + 1 single)	Chart 5	500	152.4	51.0	23.1	78.7Ω/km	7.9Ω/km									
				(Tech Info Section)	1000	304.8	101.0	45.8											



Shorting Fold

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.

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

† Drain wire is 28 AWG stranded tinned copper

†† Drain wire is 24 AWG stranded tinned copper

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

Precision Video Cable for Analog and Digital

Digital Video Time Code and

Precision Video Twinax



Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m
110 Ohm • 26 AWG Stranded (7x34) .018" TC Conductors • Twisted Pair • Beldfoil® Shield (100% Coverage) • 26 AWG Stranded TC Drain Wire																			
Datalene® Insulation (Color Code: Black, White) • PVC Jacket (Chrome or Purple)																			
75°C	9180	NEC: CMR CEC: CMG FT4	1000	304.8	10.0	4.5	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	76%	13.0	42.7	.38 .77 1.0 1.5 2.0 3.1 4.1 5.6 8.2 11.3 12.3 24.6	.8 1.2 1.3 1.5 1.7 1.9 2.1 2.4 2.8 3.1 3.2 4.2	2.6 4.0 4.3 5.0 5.6 6.3 7.0 8.0 9.3 10.3 10.6 14.0



Shorting Fold

Twinax • 124 Ohm • 16 AWG Solid .051" BC Conductors • Duofoil® (100% Coverage) + TC Braid Shield (90% Coverage)

Foam Polyethylene Insulation (Color Code: Clear, Blue) • Black PVC Jacket																			
UL AWM Style 2448 (30V 60°C)	9860	NEC: CMX CEC: CMX	500	152.4	52.0	23.6	16 AWG (solid) .051" BC 4.2Ω/M' 13.8Ω/km	.322	8.18	Duofoil + 90% TC Braid 1.3Ω/M' 4.3Ω/km	.440	11.18	124	78%	10.9	35.8	1 10 50 100 200 400	.2 .7 1.8 2.9 4.1 6.2	.6 2.3 5.9 9.5 13.5 20.3



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

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

Maximum Transmission Distance at Serial Digital Data Rates

Data Rate:	143 Mb/s		177 Mb/s		270 Mb/s		360 Mb/s		540 Mb/s		1.5 Gb/s	
Spec:	SMPTE 259M		ITU-R BT. 601		SMPTE 259M		SMPTE 259M		SMPTE 344M*		SMPTE 292M	
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 19.78.



For more information, contact **Belden Technical Support: 1-800-BELDEN-1 • www.belden.com**

Video Triax Cable

RG-59/U Type

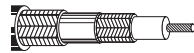


Triaxial cable is used to interconnect video cameras to related equipment. Triax cables contain 2 isolated shields and a solid or stranded center conductor. Isolated shields allow the triax to provide multiple functions over 1 cable through multiplexing techniques. Examples include: DC power to camera, 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.

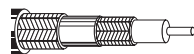
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.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

22 AWG Stranded (19x34) .031" Bare Copper Conductor • Double Bare Copper Braid Shields (95% Coverage)

Foam Polyethylene Insulation • Belflex® Jacket (Red, Yellow, Green, Blue, Purple or Black.) Polyethylene Insulation between Braids																			
High-Flex 75°C	1857A	—	500	152.4	42.5	19.3	22 AWG (19x34) .031"	.143	3.63	(2) BC Braids 95% Coverage Inner: BC 14.0Ω/M' 45.9Ω/km	.360	9.14	75	79%	17.0	55.8	1	.3	1.0
			1000	304.8	86.0	39.1											3.6	.5	1.6
																			
1000 304.8 86.0 39.1 14.0Ω/M' 45.9Ω/km 2.5Ω/M' 8.2Ω/km 100% Sweep tested. 5 MHz to 3 GHz. 540 6.8 22.3 720 8.1 26.6 750 8.4 27.6 1000 10.1 33.1 1500 13.3 43.6 2250 17.6 57.7 3000 21.4 70.2																			

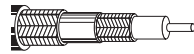
Suitable for Outdoor applications: Black for permanent installations, all colors for field deployable use.

20 AWG Solid .032" Bare Copper Conductor • Double Bare Copper Braid Shields (80% Coverage)

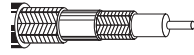
Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket (Polyethylene Insulation between Braids)																			
80°C	8232	—	500	152.4	31.0	14.1	20 AWG (solid) .032"	.145	3.68	(2) BC Braids 95% Coverage Inner: BC 10.0Ω/M' 32.8Ω/km	.315	8.00	75	83%	16.2	53.1	1	.3	1.0
			1000	304.8	60.0	27.3											3.6	.6	2.0
																			
2000 609.6 118.0 53.6 10.0Ω/M' 32.8Ω/km 2.5Ω/M' 8.2Ω/km For Plenum version of 8232, see 88232. 360 4.8 15.7 540 5.9 19.4 720 7.0 23.0 750 7.1 23.3 1000 8.3 27.2 1500 10.5 34.4 2250 13.4 44.0 3000 15.9 52.2																			

Suitable for Outdoor and Direct Burial applications.
Suitable for Aerial applications when supported by a messenger wire.

Gas-injected Foam HDPE Insulation • Black PVC Jacket (PVC Insulation between Braids)

75°C 60°C (UL)	8232A	NEC: CMR CEC: CMG FT4	1000	304.8	68.0	30.8	20 AWG (solid) .032"	.145	3.68	(2) BC Braids 95% Coverage Inner: BC 10.0Ω/M' 32.8Ω/km	.315	8.00	75	83%	16.2	53.1	1	.3	1.0
			1000	304.8	60.0	27.3											3.6	.6	2.0
																			
1000 304.8 60.0 27.3 10.0Ω/M' 32.8Ω/km 2.5Ω/M' 8.2Ω/km For Plenum version of 8232A, see 88232. 360 4.8 15.7 540 5.9 19.4 720 7.0 23.0 750 7.1 23.3 1000 8.3 27.2 1500 10.5 34.4 2250 13.4 44.0 3000 15.9 52.2																			

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

200°C	88232	NEC: CMP CEC: CMP	500†	152.4	29.0	13.2	20 AWG (solid) .032"	.140	3.56	(2) BC Braids 95% Coverage Inner: BC 10.0Ω/M' 32.8Ω/km	.245	6.22	75	80%	16.9	55.4	1	.4	1.3
			1000†	304.8	61.0	27.7											3.6	.8	2.6
																			
1000 304.8 61.0 27.7 10.0Ω/M' 32.8Ω/km 2.6Ω/M' 8.5Ω/km 100% Sweep tested. 5 MHz to 3 GHz. 540 6.6 21.6 720 7.7 25.3 750 7.9 25.9 1000 9.4 30.8 1500 12.1 39.7 2250 15.6 51.2 3000 18.7 61.3																			

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • HDPE = High-density Polyethylene

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

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

Hypalon is a DuPont trademark.



Video Triax Cable

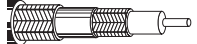
RG-59/U Type



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

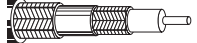
20 AWG Solid .032" Bare Copper Conductor • Double Bare Copper Braid Shields (95% Coverage)

Gas-injected Foam HDPE Insulation • Belflex® Jacket (Red, Yellow, Green, Blue or Black) Polyethylene Insulation between Braids

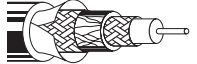
75°C	1856A	—	1000	304.8	83.0	37.7	20 AWG (solid) .032"	.145	3.68	(2) BC Braids 95% Coverage	.360	9.14	75	83%	16.2	53.1	1	.3	1.0
							10.1Ω/M' 33.1Ω/km			Inner: 2.5Ω/M' 8.2Ω/km							71.5	2.2	7.2
										Outer: 1.6Ω/M' 5.3Ω/km				100% Sweep tested. 5 MHz to 3 GHz.			135	3.0	9.8
																	270	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

Suitable for Outdoor applications: Black for permanent installations, all colors for field deployable use.

Gas-injected Foam HDPE Insulation • Belflex® Jacket (Red, Yellow, Green, Blue, Purple or Black) PVC Insulation between Braids

75°C	1856B	NEC: CMR CEC: CMG FT4	1000	304.8	86.0	39.1	20 AWG (solid) .032"	.145	3.68	(2) BC Braids 95% Coverage	.360	9.14	75	83%	16.2	53.1	1	.3	1.0
60°C (UL)							10.1Ω/M' 33.1Ω/km			Inner: 2.5Ω/M' 8.2Ω/km							71.5	2.2	7.2
										Outer: 1.6Ω/M' 5.2Ω/km				100% Sweep tested. 5 MHz to 3 GHz.			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	—	500	152.4	39.5	18.0	20 AWG (solid) .032"	.145	3.68	(2) BC Braids 95% Coverage	.360	9.14	75	82%	16.3	53.5	1	.3	1.0
VW-1			1000	304.8	77.0	35.0	10.1Ω/M' 33.1Ω/km			Inner: 2.5Ω/M' 8.3Ω/km							71.5	2.1	6.9
										Outer: 2.6Ω/M' 8.6Ω/km				100% Sweep tested. 5 MHz to 3 GHz.			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.



For more information, contact Belden Technical Support: **1-800-BELDEN-1** • www.belden.com

Video Triax Cable

RG-11/U Type



19 • Brilliance® Broadcast

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

15 AWG Stranded (19x27) .064" Bare Copper Conductor • Double Bare Copper Braid Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • Belflex® Jacket (Red, Yellow, Green, Blue, Purple or Black) Polyethylene Insulation between Braids

High-Flex 75°C	1858A	—	500	152.4	80.5	36.5	15 AWG (19x27) .064"	.312	7.92	(2) BC Braids 95% Coverage	.520	13.20	75	78%	17.3	56.8	1	.1	.5
			1000	304.8	157.0	71.2											3.6	.3	1.0
BC Inner: 3.1Ω/M' 8.9Ω/km 1.8Ω/M' 5.2Ω/km 100% Sweep tested. 5 MHz to 850 MHz. Outer: 1.4Ω/M' 4.6Ω/km																			
71.5 1.2 3.9 135 1.8 5.9 270 2.6 8.5 360 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 applications: Black for permanent installations, all colors for field deployable use.

Plenum • Foam FEP Teflon® Insulation • Black Fluorocopolymer Jacket (Fluorocopolymer Insulation between Braids)

125°C	1859A	NEC:	500	152.4	66.5	30.2	15 AWG (19x27) .064"	.285	7.24	(2) BC Braids 95% Coverage	.406	10.30	75	80%	16.5	54.1	1	.1	.5
		CMP	1000	304.8	134.0	60.9											3.6	.2	.7
CEC: CMP FT6 BC Inner: 3.1Ω/M' 8.9Ω/km 1.4Ω/M' 4.6Ω/km 100% Sweep tested. 5 MHz to 850 MHz. Outer: 1.4Ω/M' 4.6Ω/km																			
71.5 1.3 4.3 135 1.9 6.2 270 3.0 9.8 360 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.
Suitable for Aerial applications when supported by a messenger wire.

15 AWG Stranded (19x27) .064" Bare Copper Conductor • Double Bare Copper Braid Shield (90% Coverage)

Gas-injected Foam HDPE Insulation • Yellow PVC Jacket (Polyethylene Insulation between Braids)

UL AWM Style 1641 (30V 75°C) VW-1	9192	NEC:	1000	304.8	150.0	68.2	15 AWG (19x27) .064"	.312	7.92	(2) BC Braids 90% Coverage	.520	13.20	75	78%	17.3	56.8	1	.1	.5
		CL2X															3.6	.3	1.0
BC Inner: 3.1Ω/M' 8.9Ω/km 1.6Ω/M' 5.2Ω/km 100% Sweep tested. 5 MHz to 850 MHz. Outer: 1.6Ω/M' 5.2Ω/km																			
71.5 1.2 3.9 135 1.8 5.9 270 2.6 8.5 360 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 applications: Black for permanent installations, all colors for field deployable use.

Gas-injected Foam HDPE Insulation • Paper Tape Separator • Black Hypalon® Jacket (Polyethylene Insulation between Braids)

UL AWM Style 1641 (30V 75°C) VW-1	9232	—	500	152.4	76.5	34.7	15 AWG (19x27) .064"	.312	7.92	(2) BC Braids 90% Coverage	.520	13.20	75	78%	17.3	56.8	1	.1	.5
			1000	304.8	145.0	65.9											3.6	.3	1.0
BC Inner: 3.1Ω/M' 8.9Ω/km 1.6Ω/M' 5.2Ω/km 100% Sweep tested. 5 MHz to 850 MHz. Outer: 1.6Ω/M' 5.2Ω/km																			
71.5 1.2 3.9 135 1.8 5.9 270 2.6 8.5 360 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 • FEP = Fluorinated Ethylene Propylene • 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.
Teflon is a DuPont trademark.



For more information, contact Belden Technical Support: **1-800-BELDEN-1** • 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.	dB/100m

14 AWG Solid .064" Bare Copper Conductor • Double Bare Copper Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket (Polyethylene Insulation between Braids)

80°C	8233	—	500	152.4	63.0	28.6	14 AWG (solid)	.285	7.24	(2) BC Braids 95% Coverage	.475	12.07	75	84%	16.1	52.8	1	.2	.7
			1000	304.8	122.0	55.5	.064"			Inner: BC							3.6	.3	1.0
			2000	609.6	240.0	109.1	2.5Ω/M'			Outer: 1.6Ω/M'							10	.4	1.3
							8.2Ω/km			5.2Ω/km							71.5	1.1	3.6
										1.4Ω/M'							135	1.5	4.9
										4.6Ω/km							270	2.3	7.5
																	360	2.7	8.9
																	540	3.5	11.5
																	720	4.2	13.8
																	750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
																	3000	12.0	39.4

Suitable for Outdoor and Direct Burial applications.

Gas-injected Foam HDPE Insulation • Black PVC Jacket (PVC Insulation between Braids)

75°C	8233A	NEC:	1000	304.8	136.0	61.7	14 AWG (solid)	.285	7.24	(2) BC Braids 95% Coverage	.475	12.07	75	84%	16.1	52.8	1	.2	.7
60°C (UL)		CMR:	2000	609.6	266.0	120.7	.064"			Inner: BC							3.6	.3	1.0
		CEC:	4000	1219.2	572.0	259.5	2.5Ω/M'			Outer: 1.6Ω/M'							10	.4	1.3
		CMG:					8.2Ω/km			5.2Ω/km							71.5	1.1	3.6
										1.4Ω/M'							135	1.5	4.9
										4.6Ω/km							270	2.3	7.5
																	360	2.7	8.9
																	540	3.5	11.5
																	720	4.2	13.8
																	750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
																	3000	12.0	39.4

Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket (PE Insulation between Braids; Flooding Compound on Outer Braid)

Flooded	7803A	—	500	152.4	64.0	29.1	14 AWG (solid)	.285	7.24	(2) BC Braids 95% Coverage	.475	12.07	75	84%	16.1	52.8	1	.2	.7
80°C			1000	304.8	123.0	55.9	.064"			Inner: BC							3.6	.3	1.0
			3000	914.4	381.0	173.2	2.5Ω/M'			Outer: 1.6Ω/M'							10	.4	1.3
							8.2Ω/km			5.2Ω/km							71.5	1.1	3.6
										1.4Ω/M'							135	1.5	4.9
										4.6Ω/km							270	2.3	7.5
																	360	2.7	8.9
																	540	3.5	11.5
																	720	4.2	13.8
																	750	4.3	14.1
																	1000	5.2	17.1
																	1500	7.1	23.3
																	2250	9.6	31.5
																	3000	12.0	39.4

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.

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) TC Conductors • TC Braid Shield (95% Coverage)

PVC Insulation • Black Belflex® Jacket

	7804R	NEC:	328	100.0	33.1	15.0	(2) Fibers:	.035	.89	36 AWG	.362	9.20	.14	.45
		CMR:	500	152.4	47.5	21.6	SM/125µ/900µ			TC Braid				
		CEC:	1000	304.8	96.0	43.5	(core/clad/buffer)			95% Shield				
		CMG FT4	1640	500.0	152.5	69.2	(2) Cond.:	.050	1.27	Coverage				
			3280	1000.0	314.9	142.8	24 AWG			2.9Ω/M'				
							(7x32)			9.5Ω/km				
						.024"								
						Tinned Copper								
						23.3Ω/M'								
						76.4Ω/km								
						(4) Cond.:	.063	1.60						
						20 AWG								
						(19x32)								
						.037"								
						Tinned Copper								
						8.8Ω/M'								
						28.9Ω/km								

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) TC Conductors • TC Braid Shield (95% Coverage)

PVC Insulation • Black Belflex® Jacket

	7804C	NEC:	328	100.0	32.8	14.9	(2) Breakout	.079	2.00	38 AWG	.362	9.20	.14	.45
		CMR:	500	152.4	49.0	22.2	Fibers:			TC Braid				
		CEC:	1000	304.8	99.0	44.9	SM/125µ/900µ			95% Shield				
		CMG FT4	1640	500.0	157.4	71.4	(core/clad/buffer)			Coverage				
			3280	1000.0	324.7	147.3	(2) Cond.:	.050	1.27	2.8Ω/M'				
							24 AWG			9.2Ω/km				
						(7x32)								
						.024"								
						Tinned Copper								
						23.3Ω/M'								
						76.4Ω/km								
						(2) Cond.:	.093	2.36						
						16 AWG								
						(65x34)								
						.059"								
						Tinned Copper								
						4.3Ω/M'								
						14.1Ω/km								

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

▲Fibers and aramid fillers contained within a .008 in (2.0mm) diameter PVC breakout jacket.

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

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

Composite Camera Cable

Television Camera and CCTV Cables

RG-59/U Type Coax with Shielded Twisted Pair(s)



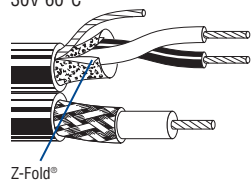
19 • Brilliance® Broadcast

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	Overall Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m

22 AWG Stranded (7x30) Conductors • BC Coax w/BC Braid Shield (95% Coverage) • TC Twisted Pair w/Beldfoil® Shield (100% Cov.) + Drain Wire

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	32.5 62.0	14.7 28.1	(1) Coax: 22 AWG (7x30) .030" BC 15.0Ω/M' 49.2Ω/km	.146 3.71 .242 6.15	BC Braid 95% Shield Coverage	.290 7.37 x x .470 11.94	75	78%	17.3	56.8	1 5 10 50 100	.3 .7 1.0 2.1 3.0	1.0 2.3 3.3 6.9 9.8	
							(2) Cond: 22 AWG (7x30) .030" TC 15.0Ω/M' 49.2Ω/km	.054 1.37 .112 2.84	Pair: Beldfoil Shielded 100% Shield Coverage w/ 22 AWG Drain Wire		35	58%	51.0	167.3				
							Black, Red											36.1Ω/km

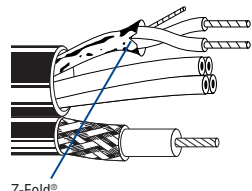


Siamese Type Construction

22 AWG Stranded (7x30) Conductors • BC Coax w/BC Braid Shield (95% Cov.) • (3) TC STP Individually Beldfoil Shielded (100% Cov.) w/Drain Wire

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 3.71 .242 6.15	BC Braid 95% Shield Coverage	.290 7.37 x x .561 14.25	75	78%	17.3	56.8	1 5 10 50 100 400	.3 .7 1.0 2.1 3.0 7.4	1.0 2.3 3.3 6.9 9.8 24.3	
							(3) Pairs: 22 AWG (7x30) .030" TC 15.0Ω/M' 49.2Ω/km	.054 1.37 .116 2.95	Each Pair: Individually Beldfoil Shielded 100% Shield Coverage w/ 22 AWG Drain Wire		35	58%	51.0	167.3				
							Red & Black, Orange & Brown, Green & White											36.1Ω/km



Siamese Type Construction

BC = Bare Copper • DCR = DC Resistance • STP = Shielded Twisted Pairs • TC = Tinned Copper
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. **1-800-BELDEN-1**. Request quotations of cables not listed.

Composite Camera Cable

Audio and Video, ENG and EFP Cables
Multiple Coax with Shielded Twisted Pairs

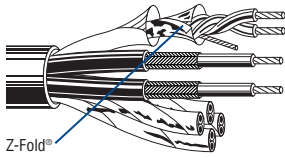


Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.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

12-conductor EFP and ENG Camera Cable

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

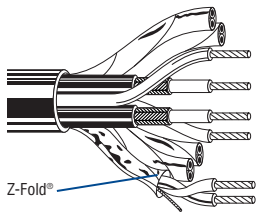
75°C VW-1	9170	—	1000	304.8	113.0	51.4	(2) Coax: 25 AWG (7x33) .022" BC 31.2Ω/M' 102.0Ω/km Black, Black with Hash Marks	.100	2.54	Each Coax: TC Braid 93% Shield Coverage 6.0Ω/M' 19.7Ω/km	.490	12.45	75	78%	17.3	56.8	1	.4	1.3	10	1.5	4.9	50	3.8	12.5	100	5.6	18.4	300	10.6	34.8	500	13.8	45.3
							(5) Pairs: 24 AWG (7x32) .024" TC 24.0Ω/M' 78.0Ω/km Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow	.044	1.12	Each Pair: Beldfoil® Shielded 100% Shield Coverage with 24 AWG Drain Wire 18.0Ω/M' 59.1Ω/km			66%	27.0	88.6																			



14-conductor EFP and ENG Camera Cable

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

75°C	9171	—	500 1000	152.4 304.8	97.5 193.0	44.3 87.7	(2) Coax: 22 AWG (7x30) .030" BC 15.0Ω/M' 49.2Ω/km Black, Black with Hash Marks	.146	3.71	Each Coax: BC Braid 95% Shield Coverage 2.5Ω/M' 8.6Ω/km	.585	14.86	75	78%	17.3	56.8	1	.3	1.0	2	.6	2.0	10	1.0	3.3	50	2.3	7.5	100	3.2	10.5
							(5) Pairs: 22 AWG (7x30) .030" TC 15.0Ω/M' 49.2Ω/km Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow	.054	1.37	Each Pair: Beldfoil Shielded 100% Shield Coverage with 22 AWG Drain Wire 11.6Ω/M' 38.0Ω/km			51.0	167.3																	
							(2) Cond: 16 AWG (26x30) .060" TC 4.0Ω/M' 13.1Ω/km Black, White	.092	2.34																						



BC = Bare Copper • DCR = DC Resistance • EFP = Electronic Field Production • ENG = Electronic News Gathering • TC = Tinned Copper
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference. 1-800-BELDEN-1. Request quotations of cables not listed.

Composite Camera Cable

Television Camera and CCTV Cables



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 (100% coverage).

(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 (100% coverage). Other two groups are unshielded.

(3) 75 Ohm Coaxial Cables — 25 AWG: (7x33) .021" (.53mm) bare copper-covered steel. Polyethylene insulation. Core OD .121" (3.07mm). Tinned copper braid shield (95% coverage) plus cotton braid. Coax OD .178" (4.52mm).

Overall: Tinned copper braid shield (85% coverage). Black thermoplastic elastomer jacket.

Specifications

Conductor		
(25) Conductors		Tinned Copper
(3) Coax		Bare Copper-covered Steel
Insulation		
Conductors		PVC
Coax		PE
Shield		
(4) 18 AWG Conductors		Beldfoil + PE Tape
(7) 22 AWG Conductors		Beldfoil + PE Tape
(14) 22 AWG Conductors		Unshielded
(3) Coax		95% TC Braid + Cotton Braid
Overall		85% Tinned Copper Braid
Jacket		Black TPE
Nominal OD		.730" (18.54mm)
Nominal Impedance (Coax)		75Ω
Temperature Rating		80°C

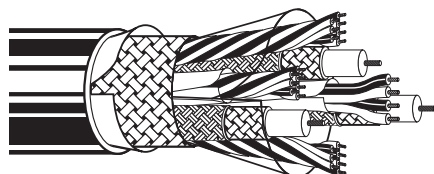
Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight	
		Ft.	m	Lbs.	kg

TPE TV Camera

28-conductor

8286	500†	152.4	163.0	73.9
	1000†	304.8	323.0	146.5

† 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) tinned copper. Foam polyethylene insulation. Core OD .146" (3.71mm). Bare copper braid shield (95% coverage). Black PVC jacket. Coax OD .208" (5.28mm).

Overall: Tinned copper braid shield (80% coverage). Gray PVC jacket.

Specifications

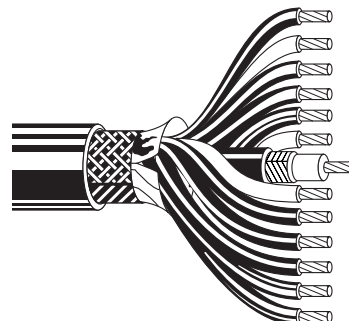
Conductor		
(12) Conductors		Tinned Copper
(1) Coax		Tinned Copper
Insulation		
Conductors		PVC
Coax		Foam PE
Shield		
(12) Conductors		Unshielded
(1) Coax		95% Bare Copper Braid
Overall		80% Tinned Copper Braid
Jacket		Gray PVC
Nominal OD		.406" (11.70mm)
Nominal Impedance (Coax)		75Ω
Temperature Rating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

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

Remote Control and Video

13-conductor

9262	NEC	100	30.5	15.0	6.8
	CL2X	1000	304.8	160.0	72.6



Composite Camera Cable

Television Camera and CCTV Cables



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 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 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.

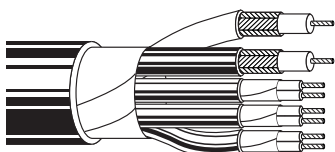
**Capacitance between one conductor and other conductors connected to shield.

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



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 high-density polyethylene insulation. Core OD .088" (2.24mm). Tinned copper braid shield (95% coverage). PVC jacket, color coded. Coax OD .142" (3.61mm).

Overall: Tinned copper braid shield (85% coverage). Chrome PVC jacket.

Specifications

Conductor			
(11) Conductors			Tinned Copper
(2) Coax			Bare Copper-covered Steel
Insulation			
Conductors			PVC
Coax			Foam PE
Shield			
(7) Conductors			Unshielded
(2) Conductors			Beldfoil
(2) Conductors			Mylar Tape
(2) Coax			95% Tinned Copper Braid
Overall			85% Tinned Copper Braid
Jacket			Chrome PVC
Nominal OD			.550" (13.97mm)
Nominal Impedance (Coax)			75Ω
Temperature Rating			60°C
Approvals/Rating			
UL AWM Style			2497
NEC Rating			CL2X

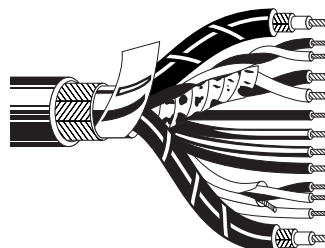
Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight	
		Ft.	m	Lbs.	kg

Camera Extension Cable

13-conductor

9254	NEC	250 [†]	30.5	45.5	20.7
	CL2X	1000 [†]	304.8	177.0	80.5

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



Mylar is a DuPont trademark.



RGB Component Video 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. COMPONENT video and RGB cabling is ideal for use in graphics, animation and computer display applications.

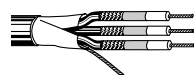
These bundled coaxial cables are available in 3, 4, 5 and 6 conductor versions and are color coded for easy identification. Cable selection depends on whether the component transmission

is RGB (3 conductor), RGB and Sync (4 conductor), or RGB, Sync and Hold (5 conductor). 6 conductor designs are used for digital audio (AES 3id) and SPDIF (Sony-Phillips Digital Interface) applications, and for specialized component video, multi-channel video, or combination applications.

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	Nominal Core OD		Shielding Materials	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.

Miniature • 30 AWG Stranded (7x38) .012" TC Conductors • Coax: Duofoil® (100% Cov.) + TC Braid (90% Cov.) • Overall Beldfoil® Shield
Foam HDPE Insulation • Inner PVC Jackets (Color Code: See chart below) • **Overall Black PVC Jacket**

 UL AWM Style 1354 (30V 60°C)	1520A	NEC: CL2	3	500	152.4	23.0	10.4	30 AWG (7x38) .012" TC 100.0Ω/M' 328.0Ω/km	.056	1.42	Coaxes: Duofoil + 90% TC Braid Overall: Beldfoil 9.5Ω/M' 31.2Ω/km	.283	7.19	75	78%	17.3	56.7	1	.8	2.6
				1000	304.8	50.0	22.7		.102	2.59		5	1.5					4.9		
												10	2.2					7.2		
												30	4.0					13.1		
																	50	5.4	17.7	
																		100	8.2	26.9
																		200	12.5	41.0
																		400	18.9	62.0
																		700	26.5	86.9
																		900	30.8	101.0
																		1000	32.8	107.6
	1521A	NEC: CL2	4	500	152.4	31.0	14.1	same as above	.056	1.42	same as above	.310	7.87							
				1000	304.8	60.0	27.3		Coax OD: .102	2.59										
	1522A	NEC: CL2	5	500	152.4	34.5	15.6	same as above	.056	1.42	same as above	.338	8.59							
				1000	304.8	67.0	30.4		Coax OD: .102	2.59										

High-Flex • 26 AWG Stranded (7x34) .019" Bare Copper Conductors • Duofoil (100% Coverage) + TC Braid Shield (93% Coverage)

Foam HDPE Insulation • Inner PVC Jackets (Color Code: See chart below) • **Overall Matte Black PVC Jacket**

 60°C	1406B	—	3	1000†	304.8	79.0	35.8	26 AWG (7x34) .019" BC 41.5Ω/M' 136.0Ω/km	.089	2.29	Duofoil + 93% TC Braid 8.6Ω/M' 28.2Ω/km	.388	9.86	75	78%	17.3	56.7	1	.6	2.0
												5	1.3					4.3		
												10	1.8					5.9		
												30	3.1					10.2		
																		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
	1407B	—	4	1000†	304.8	100.0	45.5	same as above	.089	2.29	same as above	.455	11.56							
									Coax OD: .146	3.71										
	1417B	—	5	1000†	304.8	110.0	49.9	same as above	.089	2.29	same as above	.477	12.12							
									Coax OD: .146	3.71										

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

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

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

Color Code Chart

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



RGB Component Video Cable

Bundled RGB Coaxial Cables

CM Rated



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

26 AWG Stranded (7x34) .019" BC Conductors • Duofoil® (100% Coverage) + TC Braid Shield (93% Coverage) • Overall Polyester Tape

Foam HDPE Insulation • Inner PVC Jackets (Color Code: See chart below) • Overall Black PVC Jacket

	UL AWM Styles 1354 and 2668 (30V 60°C)	1164B	NEC:	3	500 [†]	152.4	38.0	17.2	26 AWG (7x34)	.089	2.29	Duofoil	.388	9.86	75	78%	17.3	56.7	1	.6	2.0			
			CM		1000 [†]	304.8	78.0	35.5			Coax OD:		+ 93%								5	1.3	4.3	
											.019"	.146	3.71	TC Braid								10	1.8	5.9
											BC			8.6Ω/M'								30	3.1	10.2
											41.5Ω/M'			28.2Ω/km								50	3.9	12.8
											136.1Ω/km											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:	4	1000 [†]	304.8	105.0	47.7	same as above	.089	2.29	same as above	.455	11.56										
			CM							Coax OD:														
										.146	3.71													
		1418B	NEC:	5	500 [†]	152.4	61.5	27.9	same as above	.089	2.29	same as above	.477	12.12										
			CM		1000 [†]	304.8	119.0	54.0		Coax OD:														
										.146	3.71													

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

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

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

Color Code Chart

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



RGB Component Video Cable

Banana Peel® Unjacketed Bundles Mini Hi-Res Component Video
CMR and CMP Rated



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

Miniature • 25 AWG Solid .018" TC Conductors • Duobond® (100% Coverage) + TC Interlocked Serve Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • PVC Jackets (Color Code: See chart below) • Center Spine • No Overall Jacket

	1281S3 <small>new</small>	NEC: CMR CEC: CMG	3	500 [†] 1000 [†]	152.4 304.8	17.0 31.0	7.7 14.1	25 AWG (solid) .018" TC 34.0Ω/M' 111.6Ω/km	.074	1.88	Duobond (100%) + TC Serve (95%) 5.4Ω/M' 17.7Ω/km	Single: .114 2.90 Overall: .246 6.25	75	80%	17.0	55.8	1 5 50 100 200 400 750 900 1000 3000	.52 1.2 3.7 4.9 6.7 9.5 13.4 15.0 15.8 31.2	1.6 3.8 12.1 16.1 22.0 31.2 44.0 49.2 51.8 102.4
	1281S4 <small>new</small>	NEC: CMR CEC: CMG	4	500 [†] 1000 [†]	152.4 304.8	23.5 44.0	10.7 20.0	same as above	.074	1.88	same as above	Single: .114 2.90 Overall: .275 6.99							
	1281S5 <small>new</small>	NEC: CMR CEC: CMG	5*	250 [†] 500 [†] 1000 [†]	76.2 152.4 304.8	16.0 28.5 55.0	7.3 12.9 25.0	same as above	.074	1.88	same as above	Single: .114 2.90 Overall: .308 7.82							
	1281S6 <small>new</small>	NEC: CMR CEC: CMG FT4	6*	500 [†] 1000 [†]	152.4 304.8	33.5 68.0	15.2 30.8	same as above	.074	1.88	same as above	Single: .114 2.90 Overall: .342 8.69							

Plenum • FPFA • Flamarrest® Jackets (Color Code: See chart below) • Center Spine • No Overall Jacket

	1282S3 <small>new</small>	NEC: CMP CEC: CMP	3	500 1000	152.4 304.8	18.5 34.0	8.4 15.4	25 AWG (solid) .018" TC 34.0Ω/M' 111.6Ω/km	.075	1.91	Duobond (100%) + TC Serve (95%) 5.4Ω/M' 17.7Ω/km	Single: .114 2.90 Overall: .246 6.25	75	81%	16.8	55.1	1 5 50 100 200 400 750 1000 2250 3000	.50 1.2 3.8 5.2 7.1 10.0 14.3 16.9 25.5 33.9	1.6 3.9 12.1 17.1 23.1 32.9 47.0 55.4 83.6 111.3
	1282S4 <small>new</small>	NEC: CMP CEC: CMP	4	500 1000	152.4 304.8	25.5 49.0	11.6 22.2	same as above	.075	1.91	same as above	Single: .114 2.90 Overall: .275 6.99							
	1282S5 <small>new</small>	NEC: CMP CEC: CMP	5*	250 500 1000	76.2 152.4 304.8	18.0 33.0 67.0	8.2 15.0 30.4	same as above	.075	1.91	same as above	Single: .114 2.90 Overall: .308 7.82							
	1282S6 <small>new</small>	NEC: CMP CEC: CMP	6*	500 1000	152.4 304.8	39.5 80.0	17.9 36.3	same as above	.075	1.91	same as above	Single: .114 2.90 Overall: .342 8.69							

DCR = DC Resistance • FPFA = Foam Perfluoroalkoxy • 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.

*Also available with all Black jackets.

Color Code Chart:

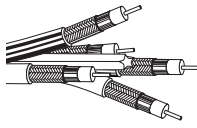
Cond.	Color	Cond.	Color
1	Red	4	Yellow
2	Green	5	Black
3	Blue	6	White



RGB Component Video CableBanana Peel® Unjacketed VideoFLEX® Bundles; RG-59/U Type
Plenum Rated

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

RG-59/U • 20 AWG Solid .032" Bare Copper Conductors • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)**Plenum • Foam FEP Insulation • Plenum-Grade PVC Jackets** (Color Code: See chart below) • **Center Spine • No Overall Jacket**

300V RMS 	1283S3 new	NEC:	3	250	76.2	26.3	11.9	20 AWG	.133	3.38	Duofoil (95%)	.422	10.72	75	83%	16.2	53.1	1	.3	1.0	
		CMP:		500	152.4	54.0	24.5	(solid)				+ TC Braid							3.6	.6	2.0
		CEC:		1000	304.8	103.0	46.7	.032"				3.8Ω/M'								10	.9
		CMP					10.0Ω/M'				12.5Ω/km								71.5	2.1	6.9
							32.8Ω/km												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

100% Sweep tested. 5 MHz to 3 GHz.
U.S. Patent 7,049,523

Suitable for Indoor and Outdoor applications.

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • 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.**Color Code Chart:**

Cond.	Color	Cond.	Color
1	Red	4	Yellow
2	Green	5	Black
3	Blue	6	White

For more information, contact Belden Technical Support: **1-800-BELDEN-1** • www.belden.com

RJ-45 Cables for Audio and Video Applications

4-Pair UTP Cables for RGB Video

NanoSkew™ Non-Data and Brilliance VideoTwist® Low-Skew Data Rated Types



For economy, some system designers seek to use UTP (unshielded twisted pair) cable for video applications. However, Digital Video and Digital Data are processed and viewed differently. Digital Video contains much more information, requiring more bandwidth than Ethernet data. In addition, video has to be streaming — viewable live and continuously — whereas data can be sent in packets, resent as necessary, and given time to recompile. Such delays are unacceptable in video. Be cautious, digital signals are not all the same thing!

Delay Skew should be kept to a minimum for component video and RGB applications for better picture quality and the ability to transmit over longer distances. Delay skew is the difference in the time of arrival of the components transmitted over different cable components — pairs in the case of UTP. Skew is inherent in all cables, but especially in UTP cables because the pairs are normally

twisted to differing degrees for Ethernet data purposes, specifically to reduce crosstalk. Obviously picture clarity is lost when the red, green, and blue components arrive out of time with each other, and varying twist rates cause exactly that to occur.

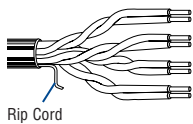
Cables in this section are NanoSkew, a UTP cable with no Ethernet data rating (all pairs have the same twist rate), and Brilliance VideoTwist Cat 5e and Cat 6 rated cables with lower, carefully monitored skew relative to standard data cables. Cables designed only for data applications meet their own skew requirements, but those are too high for better video transmission, and may be varied by manufacturers without notice. For guaranteed low and consistent skew performance from UTP cables, only NanoSkew or VideoTwist should be used. The Cat 5e and Cat 6 rated versions are ideal for KVM and blade-edge computer applications.

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Nominal OD		Max. DCR (Ω/100m)	Nom. Imped. (Ω)	Min. RL (dB)	Freq. (MHz)	Max. Atten. (dB/100m)
				Ft.	m	Lbs.	kg	Inch	mm					

Nanoskew™ 24 AWG Solid BC Conductors • Twisted Pairs • Skew 2.2ns/100m nom. • Rip cord • See Color Code Chart (below)

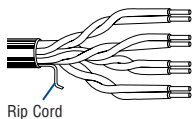
Non-Plenum • Polyolefin Insulation • Maroon PVC Jacket

300V RMS	7987R <small>new</small>	NEC: CMR CEC: CMG	4	U-1000 U-1640	U-304.8 U-500.0	20.0 32.8	9.1 14.9	.195	4.95	9.0	100	15.0	1	2.0
													4	4.1
													8	5.8
													10	6.5
													16	8.2
													20	9.3
													25	10.4
													31.25	11.7
													62.5	17.0
													100	22.0
													155	28.1
													200	32.0
													250*	36.4
													350*	44.8



Plenum • FEP Insulation • Maroon Flamarrest® PVC Jacket

300V RMS	7987P <small>new</small>	NEC: CMP CEC: CMP	4	U-1000 U-1640	U-304.8 U-500.0	22.0 36.1	10.0 16.4	.200	5.08	9.0	100	15.0	(same as above)	
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Third party verified to TIA/EIA-568-B.2, Category 5e

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

*Values provided for information only.

Color Codes: DataTwist 5e

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown



RJ-45 Cables for Audio and Video Applications

4-Pair UTP Cables for RGB Video & Wireless LAN

NanoSkew® Non-Data and Brilliance VideoTwist® Low-Skew Data Rated Types



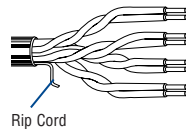
19 • Brilliance® Broadcast

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										

Nanoskew™ Category 5e • 24 AWG Bonded-Pairs Solid Bare Copper Conductors • Skew 9.0ns/100m Nominal • Rip Cord

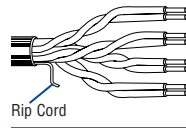
Non-Plenum • Polyolefin Insulation (Color Code: See Chart Below) • Green PVC Jacket

300V RMS	7988R <small>new</small>	NEC: CMR CEC: CMG FT4	4	U-1000 U-1640	U-304.8 U-500.0	22.0 36.1	10.0 16.4	.008 .20	.204	5.18	9.0	3.0	66.0	1	2.0	65.3	60.3	60.8	100±15	20.0
														4	4.1	53.3	49.2	48.7	100±15	23.0
														8	5.8	48.8	43.0	42.7	100±15	24.5
														10	6.5	47.3	40.8	40.8	100±15	25.0
														16	8.2	44.3	36.0	36.7	100±15	25.0
														20	9.3	42.8	33.5	34.7	100±15	25.0
														25	10.4	41.3	30.9	32.8	100±15	24.3
														31.25	11.7	39.9	28.2	30.9	100±15	23.6
														62.5	17.0	35.4	18.4	24.8	100±15	21.5
														100	22.0	32.3	10.3	20.8	100±15	20.1
														155	28.1	29.5	2.0	16.9	100±25	15.8
														200	32.4	27.8	1.0	14.7	100±25	15.0



Plenum • FEP Insulation (Color Code: See Chart Below) • Green Flamarrest® Jacket

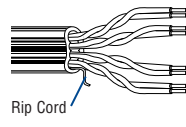
300V RMS	7988P <small>new</small>	NEC: CMP CEC: CMP FT6	4	U-1000 U-1640	U-304.8 U-500.0	23.0 37.7	10.4 17.1	.008 .20	.193	4.90	9.0	3.0	66.0	(same as 7988R above)						
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Nanoskew™ Category 6 • 23 AWG Bonded-Pairs Solid Bare Copper Conductors • Skew 10.0ns/100m Nominal • Rip Cord

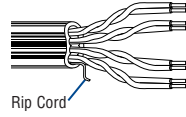
Non-Plenum • Polypropylene Insulation (Color Code: See Chart Below) • Blue PVC Jacket

300V RMS	7989R <small>new</small>	NEC: CMR CEC: CMG FT4	4	1000 1640	304.8 500.0	32.0 52.5	14.5 23.8	.009 .23	.365	9.27	9.0	3.0	49.2	1	2.0	72.3	70.3	64.8	100±15	20.0
														4	3.8	63.3	59.5	52.7	100±15	23.0
														8	5.3	58.8	53.4	46.7	100±15	24.5
														10	6.0	57.3	51.3	44.8	100±15	25.0
														16	7.6	54.3	46.7	40.7	100±15	25.0
														20	8.5	52.8	44.3	38.7	100±15	25.0
														25	9.5	51.4	41.8	36.8	100±15	24.3
														31.25	10.7	49.9	39.2	34.9	100±15	23.6
														62.5	15.4	45.4	30.0	28.8	100±15	21.5
														100	19.8	42.3	22.5	24.8	100±15	20.1
														155	25.2	39.5	14.3	20.9	100±22	18.8
														200	29.0	37.8	8.8	18.7	100±22	18.0
														250	32.8	36.3	3.5	16.8	100±32	17.3



Plenum • FEP Teflon® Insulation (Color Code: See Chart Below) • Blue Flamarrest Jacket

300V RMS	7989P <small>new</small>	NEC: CMP CEC: CMP FT6	4	1000 1640	304.8 500.0	41.0 62.3	18.6 28.3	.009 .23	.365	9.27	9.0	3.0	49.2	(same as 7989R above)							



ACR = Attenuation Crosstalk Ratio • BC = Bare Copper • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • FEP = Fluorinated Ethylene Propylene • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • TC = Tinned Copper • UTP = Unshielded Twisted Pair(s)

Not RoHS compliant at time of printing. Please check with Belden Technical Support for current compliance information at 1-800-BELDEN-1.

Teflon is a DuPont trademark.

Color Codes

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

RJ-45 Cables for Audio and Video Applications

4-Pair ScTP Cat 5e Indoor/Outdoor for Wireless LAN and High-Flex and Rugged Cat 5e Patch Cable

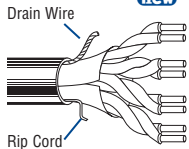


Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										

Wireless LAN • 24 AWG Solid BC Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • Stranded TC Drain Wire

Non-Plenum • Polyolefin Insulation (Color Code: See Chart Below) • **Oil- and Sun-Resistant Black PVC Jacket**

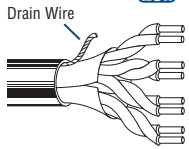
300V RMS	1300A <small>new</small>	NEC: CMR, CMX CEC: CMG FT4	4	500	152.4	18.5	8.4	.010	.25	.265	6.73	9.3	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0
				1000	304.8	34.0	15.4								4	4.1	53.3	49.0	48.7	100±15	23.0
															8	5.8	48.8	43.0	42.7	100±15	24.5
															10	6.5	47.3	41.0	40.8	100±15	25.0
															16	8.2	44.3	36.0	36.7	100±15	25.0
															20	9.3	42.8	33.5	34.7	100±15	25.0
															25	10.4	41.3	30.9	32.8	100±15	24.3
															31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5
															100	22.0	32.3	11.0	20.8	100±15	20.1



Shield bonded to jacket. Jacket sequentially marked at 2 ft. intervals.

Non-Plenum • Polypropylene Insulation (Color Code: See Chart Below) • **Black Low-Smoke, Zero-Halogen Jacket**

300V RMS	1300SB <small>new</small>	NEC: CMG-LS CEC: CMG-LS FT4 Limited Smoke	4	1000	304.8	35.0	15.9	.010	.25	.260	6.60	9.3	3.0	330	1	2.0	62.3	60.3	60.8	100±15	20.0
															4	4.1	53.3	49.2	48.7	100±15	23.0
															8	5.8	48.8	43.0	42.7	100±15	24.5
															10	6.5	47.3	40.8	40.8	100±15	25.0
															16	8.2	44.3	36.1	36.7	100±15	25.0
															20	9.3	42.8	33.5	34.7	100±15	25.0
															25	10.4	41.3	30.9	32.8	100±15	24.3
															31.25	11.7	39.9	28.2	30.9	100±15	23.6
															62.5	17.0	35.4	18.4	24.8	100±15	21.5
															100	22.0	32.3	10.3	20.8	100±15	20.1

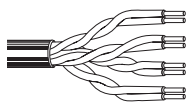


LSZH and ABS Type Approved
Jacket sequentially marked at 2 ft. intervals.

Hi-Flex Patch • 24 AWG Bonded Pairs Stranded (7x32) Bare Copper Conductors

Non-Plenum • Polyolefin Insulation (Color Code: See Chart Below) • **Black Industrial-Grade PVC Jacket**

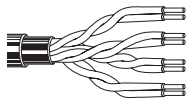
300V RMS	1304A <small>new</small>		4	500	152.4	14.5	6.6	.009	.22	.245	6.22	9.0	3.0	66	1	2.4	65.3	62.9	60.8	100±12	20.0
				1000	304.8	28.0	12.7								4	4.8	56.3	51.5	48.7	100±12	23.0
															8	6.8	51.8	45.0	42.7	100±12	24.5
															10	7.7	50.3	42.6	40.8	100±12	25.0
															16	9.7	47.3	37.5	36.7	100±12	25.0
															20	11.0	45.8	34.8	34.7	100±12	25.0
															25	12.4	44.3	31.9	32.8	100±15	24.3
															31.25	13.9	42.9	29.0	30.9	100±15	23.6
															62.5	20.2	38.4	18.3	24.8	100±15	21.5
															100	26.0	35.3	9.2	20.8	100±18	20.1
															300	48.6	28.2	—	11.2	100±20	18.0
															350	53.2	27.2	—	9.9	100±22	17.0



Jacket sequentially marked at 2 ft. intervals.

Non-Plenum • Polyolefin Insulation (Color Code: See Chart Below) • **PVC Inner Jacket • Matte Black PVC Outer Jacket**

300V RMS	1305A <small>new</small>		4	500	152.4	23.0	10.4	.009	.22	.295	7.49	9.0	3.0	66	1	2.4	65.3	62.9	60.8	100±12	20.0
				1000	304.8	42.0	19.1								4	4.8	56.3	51.5	48.7	100±12	23.0
															8	6.8	51.8	45.0	42.7	100±12	24.5
															10	7.7	50.3	42.6	40.8	100±12	25.0
															16	9.7	47.3	37.5	36.7	100±12	25.0
															20	11.0	45.8	34.8	34.7	100±12	25.0
															25	12.4	44.3	31.9	32.8	100±15	24.3
															31.25	13.9	42.9	29.0	30.9	100±15	23.6
															62.5	20.2	38.4	18.3	24.8	100±15	21.5
															100	26.0	35.3	9.2	20.8	100±18	20.1
															300	48.6	28.2	—	11.2	100±20	18.0
															350	53.2	27.2	—	9.9	100±22	17.0



Jacket sequentially marked at 2 ft. intervals.

ACR = Attenuation Crosstalk Ratio • BC = Bare Copper • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • FEP = Fluorinated Ethylene Propylene • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • TC = Tinned Copper • UTP = Unshielded Twisted Pair(s)

Teflon is a DuPont trademark.

Color Codes

Pair No.	Color Combination
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown



For more information, contact Belden Technical Support: 1-800-BELDEN-1 • www.belden.com

S-Video Cable

High-Flex S-Video Cables



The S-video format, also known as Y/C or Super VHS (SVHS) 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 S-Video cables have been designed specifically for use in this format. Belden's S-Video cables are available in two popular constructions; a Zip style dual coax and a Round jacketed version. The Zip construction provides for quick and easy termination. The Round design provides better aesthetics and is more rugged. Both cables are highly flexible.

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

30 AWG Stranded (7x38) .012" Tinned Copper Conductors • Tinned Copper Serve Shield (90% Coverage)

Foam HDPE Insulation • Matte Black PVC Jacket (One Coax Printed and Striped for Identification)																						
Parallel Zip Construction	1807A	—	U-500	U-152.4	8.0	3.6	30 AWG (7x38) .012" TC	.058	1.47	TC Serve	.110	2.79	75	78%	17.3	56.7	1	.6	2.0			
			500	152.4	7.5	3.4											90% Shield	x	x	5	1.4	4.6
			U-1000	U-304.8	15.0	6.8											Coverage	.230	5.84	10	2.1	6.9
			1000	304.8	14.0	6.4											TC			30	3.8	12.5
																	100.0Ω/M'			50	5.1	16.7
																	328.0Ω/km			100	7.6	24.9
																	For Plenum version of 1807A, see 7700A.					
																200	11.3	37.1				
																400	16.9	55.4				
																700	23.3	76.4				
																900	26.9	88.2				
																1000	28.6	93.8				

Foam HDPE Insulation • Matte Black PVC Jacket (Inner PVC Jackets Color Code: Black and Yellow)																						
Round Construction	1808A	—	U-500	U-152.4	14.5	6.6	30 AWG (7x38) .012" TC	.058	1.47	TC Serve	.255	.84	75	78%	17.3	56.7	1	.6	2.0			
			500	152.4	16.5	7.5											90% Shield			5	1.4	4.6
			U-1000	U-304.8	31.0	14.1											Coverage	.100	2.54	10	2.1	6.9
			1000	304.8	33.0	15.0											TC			30	3.8	12.5
																	100.0Ω/M'			50	5.1	16.7
																	328.0Ω/km			100	7.6	24.9
																	Available in Plenum versions by special order only.					
																200	11.3	37.1				
																400	16.9	55.4				
																700	23.3	76.4				
																900	26.9	88.2				
																1000	28.6	93.8				

30 AWG Stranded (7x38) .012" Tinned Copper Conductors • Tinned Copper "French Braid" Shield (98% Coverage)

Plenum • Foam FEP Teflon® Insulation • Black Flamarrest® Jacket (One Coax Printed and Striped for Identification)																						
Parallel Zip Construction	7700A	NEC: 500 CMP: 1000 CEC: CMP FT6	U-500	U-152.4	8.5	3.9	30 AWG (7x38) .012" TC	.053	1.35	TC	.107	2.72	75	78%	17.3	56.7	1	.7	2.3			
			500	152.4	17.0	7.7											"French Braid"	x	x	5	1.7	5.6
			U-1000	U-304.8	34.0	15.4											98% Shield	.214	5.44	10	2.3	7.5
			1000	304.8	36.0	16.3											Coverage			30	4.1	13.4
																	100.0Ω/M'			50	5.3	17.4
																	328.0Ω/km			100	7.6	24.9
																	Available in Plenum versions by special order only.					
																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 • FEP = Fluorinated Ethylene Propylene • HDPE = High-density Polyethylene • TC = Tinned Copper

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.

Teflon is a DuPont trademark.



For more information, contact Belden Technical Support: **1-800-BELDEN-1** • www.belden.com

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		3.0 Gb/s	
Spec:		SMPTE 259M		ITU-R BT. 601		SMPTE 259M		SMPTE 259M		SMPTE 344M		SMPTE 292M		SMPTE 292M	
Application:		Composite NTSC		Composite PAL		Component Video		Component Widescreen		Component Widescreen		HDTV		Progressive Scan HDTV	
Part No.	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	
179DT	500	152	450	137	380	116	340	104	280	85	110	34	80	24	
1855A	980	299	950	290	790	241	680	207	560	171	260	79	150	46	
1505A	1430	436	1360	415	1110	338	970	296	790	241	310	94	220	67	
8281	1430	436	1280	390	1000	305	870	265	700	213	260	79	160	49	
1694A	1880	573	1710	521	1430	436	1240	378	1010	308	400	122	270	82	
7855A	2730	832	2330	710	1670	509	1480	451	1200	366	470	143	330	101	
7731A	2750	838	2480	756	2040	622	1760	536	1430	436	550	168	360	110	

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)

