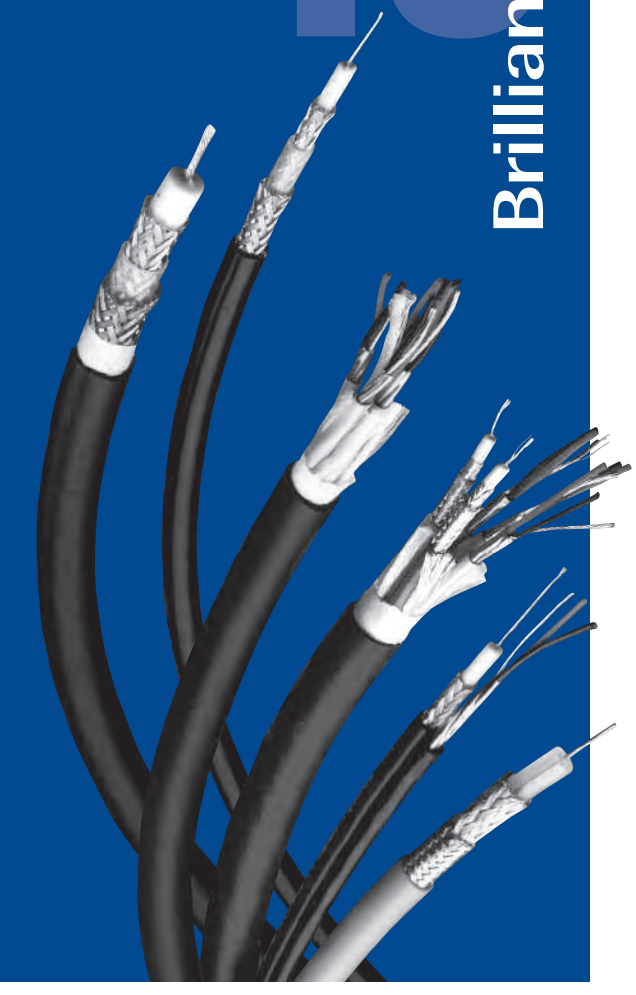
BELDEN
SENDING ALL THE RIGHT SIGNALS

BRILLIANCE®

19 Brilliance® Broadcast Cables



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Introduction

BRILLIANCE®

The Broadcasters' Choice

Perhaps there is no other industry which values reliability so highly because inferior broadcast performance has immediate, far-reaching and embarrassing results. Cable performance means assured product quality, absolute signal integrity and no system downtime. Did you watch television last night or listen to the radio this morning? Chances are the link were made with Belden cable – and with so much dedication to development and innovation, the link with Belden increases.

Belden products offer the highest performance in both critical field applications (where cable is dragged, crunched and trodden on) and permanent studio installations (where long runs are all important). Belden cables are an important link in network and cable broadcasts (e.g. BBC, CNN, NBC, NOB, ZDF), film studios (Lucas film) and corporate broadcasting (USA Today, Merrill Lynch).

Key Applications

- Television monitors
- LCD screens
- Microphones
- Lighting, DMX
- VGA on large screens
- Animation, editing
- Loudspeakers
- HD/SDI

Key Markets

- Broadcast TV and radio, music and entertainment industries
- OB vans
- Sports, entertainment stadiums/arenas, theatres, cinemas and hotels
- Airports, convention centers and other public facilities
- Race tracks and casinos
- Film studios
- Cruise ships

Key Products

Belden's commitment to product innovation and technical excellence in the broadcast industry has resulted in a range of reliable audio and video cabling products called Brilliance®. Known for sound and picture brilliance and improved signal integrity, Brilliance® embraces all Belden audio/video products.

The range includes:

- **Optical Fiber Cables:**
  - HDTV Fiber/Copper Composite Cables
    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.
  - Mobile Fiber Cables
    Broadcast truck owners and operators always appreciate the chance to reduce the size and/or weight of any component being carried. Lighter weight Belden mobile optical fiber cable with PUR jacket is extreme rugged and designed for despooling and respooling.
  - Flexible Microphone Cables
    Belden microphone cable is used for connecting low level microphones. Key properties of microphone (MIC) cables are ruggedness, flexibility, flex life and interference immunity. Low impedance MIC cables use balanced 2-, 3- or 4-conductor (quad) designs.
  - High-Conductivity Copper Cables
    All Belden microphone cables with bare copper conductors (except: BE46349) use only high-conductivity copper. The refining process, called Electrolytic Tough Pitch (ETP), 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 cables performance that is comparable to that of oxygen-free copper cables.
  - Plastic Cables
    These are recommended for lower capacitance, lower loss, greater ozone and oil resistance, lighter weight, smaller diameter.
  - Rubber (EPDM) Cables
    These are 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 Cables
    Quad connection scheme: The two blue wires (or wires directly opposite one another) are connected together to form one conductor; similarly the two white wires (or remaining wires) are connected together to form the second conductor. Conductors joined in this manner reduce the chance of induced noise.
- **Line Level Analog Audio 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 operation. For cables that are in motion during use, refer to the microphone and musical instrument cable section in this catalog.

  Belden's analog audio cable range consists of several designs to handle a variety of audio applications. Belden part no. 8451 has a paper tape separator to facilitate easy long length jacket stripping. Part no. 9451 comes with a bonded Beldfoil® shield so that the shield and jacket strip simultaneously with automatic stripping equipment. A special matte PVC jacket material is used on part no. 1883A to make it a highly flexible construction. Double-pair cables are available in a round construction (part no. 8728).
- **Analog Multi-Pair Snake Cables:** Specially designed for the broadcast industry, Belden's full family of multi-pair audio "Snake" cables feature different options and constructions for virtually every application.
  - Applications
    Snake cables are used to connect multiple audio channels in low-level (microphone) and high-level (line) configurations, 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 connected directly without the need for heat shrink tubing or costly and time-consuming preparation. 26 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.

    Belden's BE46313 Series; jacketed pairs are grey and individually numbered.

Introduction

- Mobile and Fixed Installations
  Foil-shielded multicore cables are mainly used for permanent installations while Belden's braid shield constructions are recommended for mobile (semi-permanent) applications.
- 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 the single spiral braid. The "French Braid" is featured in Belden's FleXnake® Cables (1900 Series) and quad snake cables (7880 Series).
- Beldfoil® Shield
  The foil shield of each pair is bonded to the jacket with the drain wire inside the foil. This makes the cable easier to strip. A standard stripping tool removes both the insulation and foil and greatly speeds up the installation time.

- **AES/EBU Digital Audio Cables:** The specification for digital audio was developed jointly by the Audio Engineering Society (AES) & European Broadcast Union (EBU). The key difference between twisted pair specifications for digital audio cable and standard analog audio cable is the impedance specification.

  The detailed specifications of this standard are:
  Sampling rate: from 32 KHz to 192 KHz
  Bandwidth: from 4.096 MHz to 24.5 MHz
  Impedance: 110 Ω ± 20%

Sampling Rate	Bandwidth
32 kHz	4.096 MHz
44.1 kHz	5.6448 MHz
48 kHz	6.144 MHz
96 kHz	12.228 MHz
192 kHz	24.576 MHz

  AES/EBU, with its broad tolerance, allows cables with impedances from 88 Ohm to 132 Ohm to be used. Standard analog audio cable impedance is 45 Ohm to 70 Ohm. This amount of potential 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 cables.

How to Choose a AES/EBU Cable.

Single and Double Pairs

- 9180
  26 Gage (0.14 mm²/0.5 mm), Beldfoil®, Datalene®
- 1800B
  24 Gage (0.22 mm²/0.6 mm), Beldfoil®, Datalene®
- 1802B
  24 Gage (0.22 mm²/0.6 mm), Beldfoil®, Datalene®, Double-Pairs
- 1800F
  24 Gage (0.22 mm²/0.6 mm), FrenchBraid®, Datalene®, several colors
- 1696A
  22 Gage (0.34 mm²/0.8 mm), Beldfoil®/FrenchBraid®, Datalene®

Multi-Pair Snake Cables

- 7880A Series
  26 Gage (0.14 mm²/0.5 mm),
  Beldfoil®/Overall Beldfoil®, Datalene®, Color coded
- BE46935 Series
  26 Gage (0.14 mm²/0.5 mm), Braid/Overall Braid, FRNC IEC 332-3C
- BE46266 SlimSnake™
  26 Gage (0.14 mm²/0.5 mm), Braid/Overall Braid, Halogen-Free
- 1803F Series
  24 Gage (0.22 mm²/0.6 mm),
  Beldfoil®/Overall Beldfoil®, Datalene®, Color coded

Maximum Recommended Transmission Distance at Digital Audio Data Rates

Part No.	AWG	2 MHz		4 MHz		5 MHz		6 MHz		12 MHz		25 MHz	
		ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m
110 Ohm													
9180, 7880A Series	26	1197	365	948	289	869	265	813	248	633	193	472	144
1800F	24	1233	376	922	281	764	233	666	203	423	129	279	85
1800B, 1802B, 1803F Series	24	1538	469	1282	391	1178	359	1105	337	876	267	649	198
1696A	22	2148	655	1738	530	1666	508	1538	469	1250	381	1014	309
75 Ohm													
179DT	28.5	1492	455	1197	365	1148	350	1004	306	722	220	522	159
1855A	23	3519	1073	2427	740	2175	663	1991	607	1538	469	1112	339
1505F	22	5881	1793	3772	1150	3332	1016	2985	910	2040	622	1387	423
1505A	20	4864	1483	3477	1060	3175	968	2909	887	2221	677	1538	469
1694A	18	5881	1793	4182	1275	3703	1129	3408	1039	2499	762	2001	610

Much longer transmission distance is achievable but is contingent upon system component quality.

Introduction

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- **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.

  Because the impedance of the loudspeaker is quite low (typically 3 to 10 Ohm) 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. This 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. This results 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 increased 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.

- **Special Cables**
  Cables listed in this section are for special audio applications – unbalanced audio cables, DMX512 cable and CatSnake™.

  - Unbalanced Audio Cables
    Traditional unbalanced (coaxial) cables use two lines to transmit the audio signal – a hot line which carries the signal and an earth line. This is all that is required to transmit audio and is common in short cables (where noise is less of a problem).

  - DMX512 Cables
    The DMX512 standard describes a method of digital data transmission between controllers and controlled lighting equipment and accessories, including dimmers and related equipment. The cable has a nominal characteristic impedance of 100 to 120 Ohm and shielded twisted pairs approved by its manufacturer for EIA-422/EIA-485-A use at 250 Kbits/second and distances of 500 meters or more.

  - CatSnake™
    Belden now offers Brilliance CatSnake™. This is a mobile Category 5e cable which employs Belden's patented bonded-pair design, for use in high traffic areas in a broadcast studio or in any type of tactical field deployable digital audio/video installation.

  - Video Triax Cables
    Triaxial cables are used to interconnect video cameras to related equipment. They contain two isolated shields and a solid or stranded center conductor. Isolated shields allow the triax to provide multiple functions over one cable through multiplexing techniques.

    Applications include: DC power to camera, intercom to operator, teleprompter feeds, monitoring feeds and even automatic or robotic functions.

    The O.D. describes size and distance – Triax 8 for short runs, Triax 11 for long runs and Triax 14 for very long runs.

    Silver-plated copper: Typical triax cable construction in the industry is bare copper. Four of Belden's new triax cables use silver-plated copper for the inner conductor and the first shield. This construction provides exceptional electrical characteristics (attenuation and impedance stability) for excellent picture quality over extended transmission distances. These cables are also suitable for the latest digital camera triax applications.

  - Standard Analog Video Cables
    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.

    Video coax cables have a characteristic impedance of 75 Ohm. This value was not chosen arbitrarily. Physics shows that optimum attenuation characteristics occur at 77 Ohm. Materials and design lead to the selection of 75 Ohm as the optimum compromise for low power applications. Standard video coaxes are available in both solid and stranded designs.

  - Low Loss HDTV/SDI Digital Coax
    HDTV/SDI video cables usually have solid center conductors and dual shields. The dielectrics can either be foamed or for better crush resistance have foamed HDPE insulation. Tighter impedance and attenuation tolerances, superior Return Loss (RL) specifications and improved shielding give precision video cables their no-compromise performance.

Cable Selection Guide

		4 Ω Speaker			8 Ω Speaker			70 V Speaker*		
		Power (%)/Loss dB/m								
AWG	mm²	11% 0.5	21% 1.0	50% 3.0	11% 0.5	21% 1.0	50% 3.0	11% 0.5	21% 1.0	50% 3.0
11	4.00	53	116	438	109	232	871	2637	5675	21341
13	2.50	34	74	282	71	151	564	1711	3678	13834
14	2.10	27	59	226	56	120	451	1369	2942	11067
16	1.50	18	38	143	35	76	285	866	1860	6997
26	0.14	2	6	21	5	11	41	127	273	1027

The number of meter 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 11 AWG in a 4 Ohm speaker system with 11% or 0.5 dB loss is 53 m.

* 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 (196 Ohm) was used.

Introduction

The Future is HDTV

The Society of Motion Picture and Television Engineers (SMPTE) has developed several standards for serial digital video transmissions (SDI) and a 540 Mb/s format is currently under development. There is also a European standards body known as the ITU (formerly CCIR) that has developed the composite video standard for Europe known as PAL/SECAM. The most common is the 270 Mb/s SDI (Serial Digital Interface). All of the specifications differ in bandwidth requirements and transmission technology, i.e. composite, component and digital:

Data Rate	Bandwidth	Standard	Description
143 Mb/s	71.5 MHz	SMPTE 259M	NTSC
177 Mb/s	88.5 MHz	ITU-R BT.601	PAL/SECAM
270 Mb/s	135.0 MHz	SMPTE 259M	Component Video 4:3
360 Mb/s	180.0 MHz	SMPTE 259M	Component 16:9
540 Mb/s	270.0 MHz	SMPTE 344M	Component Widescreen
1.5 Gb/s	750.0 MHz	SMPTE 292M	HDTV

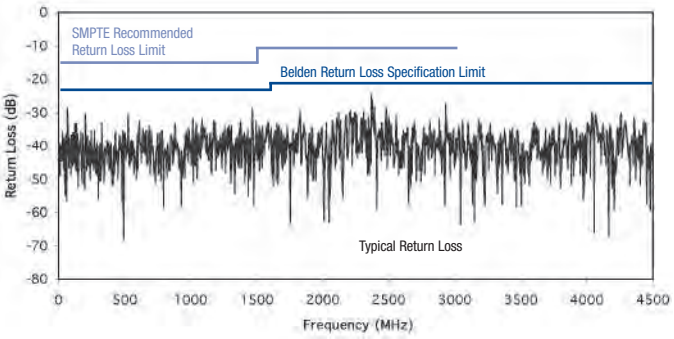
High Definition Television (HDTV) will require upgrades throughout the broadcasting industry, creating additional opportunities. International competitions such as the Olympic Games, Formula One, football and many other sporting events are very popular and demand the best broadcasting technology to guarantee viewer satisfaction.

Belden has a range of available coaxes that exceeds the SMPTE RL specification for HDTV distribution and provides maximum “RL headroom” to ensure that the user can achieve the SMPTE's requirement for signal distribution:

Specification RL Limit	RL	Frequency
SMPTE Recommendation	> 15 dB	5 - 1.5 GHz
Belden Guaranteed RL	> 23 dB	5 - 850 MHz
Belden Guaranteed RL	> 21 dB	850 MHz - 4.5 GHz

Using Belden coaxial cable will result in a minimum 6 dB of headroom to accommodate RL reduction created by connectors and patch-bays etc.

Below you will find the actual RL data of Belden 1505A. The cable is typically -30 dB:



Belden's extremely popular HDTV Brilliance® Broadcast video cables are now 4.5 GHz sweep tested! Prepared for 1080p formats, 1855, 1505A, 1694A and 7731A cables are sweep tested to 4.5 GHz. Belden has always tested every finished put-up to be certain of a top quality product. This is the only way in which damage introduced in finishing operations can be detected. This process sets Belden apart from competitors who only test in batches.

Introduction

BRILLIANCE®

Maximum Transmission Distance at Serial Digital Data Rates

Data Rate:	143 Mb/s		177 Mb/s		270 Mb/s		360 Mb/s		540 Mb/s		1.5 Gb/s		1.5 Gb/s			3.0 Gb/s	
Spec:	SMPTE 259M		ITU-R BT .601		SMPTE 259M		SMPTE 259M		SMPTE 344M		SMPTE 292M		Independent Test			SMPTE 424M	
Application:	Composite NTSC		Composite PAL		Composite Video		Component Widescreen		Component Widescreen		HDTV		HDTV			Prog. Scan HDTV	
Part No.	ft.	m	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**	132	**40**	**+6**	80	24
1855A	980	299	950	290	790	241	680	207	560	171	260	**79**	263	**80**	**+1**	150	46
1855ENH	–	–	–	–	–	–	–	–	–	–	–	**–**	328	**100**	**–**	–	–
1505A	1430	436	1360	415	1110	338	970	296	790	241	310	**94**	394	**120**	**+26**	220	67
1505F	1200	366	1071	327	857	261	732	223	588	179	225	**69**	328	**100**	**+31**	–	–
1694A	1880	573	1710	521	1.430	436	1240	378	1010	308	400	**122**	459	**140**	**+18**	270	82
7731A	2750	838	2480	756	2.040	622	1760	536	1430	436	550	**168**	656	**200**	**+32**	360	110

Crush Resistance

Manufacturers may provide very good cable and test data for their product in the laboratory or on the package spool. However, the rigors of installation can have a serious affect on the actual physical layer performance.

Any change in impedance at any point would cause a reflection. This reflection may have serious repercussions on the cable's performance.

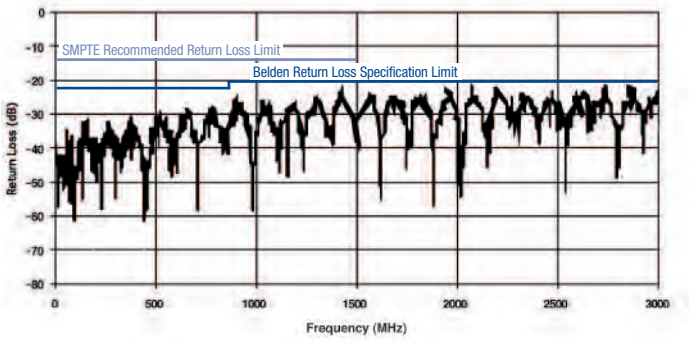
Belden products maintain superiority in crush resistance. Belden products use a gas-injected foam high-density polyethylene dielectric material in precision video cables in order to maintain:

- Better field ruggedness
- The ability to handle tighter bend radii
- More weight in cable trays
- Bending/flexing without pushing out the center pin and/or damaging attached equipment
- More rugged installation practices
- Plus various other environmental and installation benefits

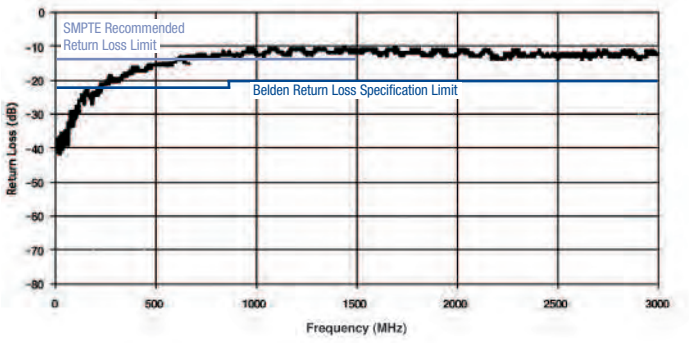
Return Loss (dB)

The tested cables were loaded with 50 N (50 Newton = 5 kilograms), according to EN50289-3-5.

75 Ohm Brilliance® precision video cable 1505A: RL 28 dB - 850 MHz, 22dB - 3 GHz



Manufacturer X: RL 12 dB - 850 MHz, 11 dB - 3 GHz



Introduction

Connector Cross

Belden	Type	ADC	Bomar	Damar + Hagen	Fischer	Lemo	Neutrik	Radiall	Telegärtner	Trompeter	Vitelec
179DT	0.3/1.4	BNC-31	–	–	–	–	NBTC75 BF14	–	–	–	–
152xA	0.3/1.42 RGB	–	–	on request	–	FGG.3B.244.CL.CD82	NBTC75 BF14	R142.004.000	J01002A0027	-D7	VB10-2036
12xxR	0.45/1.9 RGB	BNC-16	–	1-xxxx-2100	–	9.1.04	NBTC75 BNN5	–	9.1.04	105-2053-9	–
14xxB	0.5/2.3 RGB	BNC-13	–	1-3397-3602	–	–	NBTC75 BVV5	–	–	-D1	–
1865A	0.5/2.4	BNC-12	–	on request	–	FFS0A.250.NTAC40	NBTC75 BXX6	R142.078.161	J01002F1350	-D1	VB10-2063
1855A	0.6/2.6	BNC-13	SBC1855A	1-6097-2100	–	FFS0A.250.NTAC47	NBNC75 BDD6	R142.081.320	J01002A0030	-D1	–
1855ENH	0.6/2.8	BNC-26	–	1-4271-2100	–	FFS0A.250.NTAE63	NBNC75 BFG7	R142.082.027	J01002A0018	-D24	–
8241	0.6/3.7	BNC-2	–	1-1190-2100	–	on request	NBNC75 BLP7	R142.016.000	J01002A0003	-D3	–
1505A	0.8/3.7	BNC-1	SBC1505A	1-4253-2100	–	FFS0A.250.NTAE63	NBNC75 BLP9	R142.084.161	J01002A0031	-D2	–
8281	0.8/4.9	BNC-3	–	1-1194-2100	–	on request	NBNC75 BXY9	R142.090.161	J01002A0014	-D10	VB10-2026
1694A	1.0/4.6	BNC-8	SBC1694A	1-4482-2100	–	on request	NBNC75 BTU11	R142.086.161	J01002A0010	-D4	VB10-2024
1694F	1.0/5.7	BNC-8F-N	–	–	–	–	–	–	–	–	–
7731A	1.6/7.2	BNC-25	SBC7731A	1-5044-2100	–	FFA.4E.675.CTAC10	NBLC75 BVZ17	R142.186.000	J01002A1940	-D5	–
7783A	Triax 8	ProAx™	–	Serie47	1051 A004-5	FFA.4E.675.CTAC85	–	–	–	305-1365-1	–
1856A	Triax 9	ProAx™	–	Serie47	1051 A004-5	FFA.4E.675.CTAC95	–	–	–	305-0088-2	–
7784A	Triax 11	ProAx™	–	Serie47	1051 A004-5	FFA.4E.675.CTAC11	–	R142.017.000	–	305-1289-1	–
7785A	Triax 14	ProAx™	–	Serie47	1051 A004-4	on request	–	–	–	–	–

ProAx™ is an ADC Krone trademark.

Multicore Cables

- **Video Multicore Cables**
  Belden's video multicore cables (RGBs) are designed for high resolution VGA on large screens, HDTV, Hi-Res CAD, animation, editing and special effects.

  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 the composite video format.

  Bundled coaxial cables are available in 3-, 4- or 5-conductor versions and are color coded for easy identification. Cable selection depends on whether the component transmission is RGB (3 cdr.), RGB and Sync (4 cdr.) or RGB, Sync and Hold (5 cdr.).

  All Belden RGB cables are pre-timed to less than 4.0 ns/m delay difference between each coax. This allows for cut-and-connect installation with no TDR or Vectorscope timing required.

- **Banana Peel® - RGB Cable without a Jacket**
  Series 1281 is an enhanced version of traditional RGB cables and feature 25 AWG solid copper center conductors for lower attenuation and easier termination. Flexible PVC jackets and high frequency Beldfoil® foil shields are used in combination with Belden's unique interlocked serve copper shield for 100% coverage. The unique shielding design also prevents the shields from bunching up when flexed, yet the shield is easier to comb out than a full braid.

  Banana Peel® hi-res composite video cables will decrease labor costs because the overall jacket has been eliminated. Without the overall jacket, a whole step in the termination process has been removed. In addition, the individual cable components are all instantly identifiable (the individual cables are color-coded and the print legends are immediately visible). Jacketed RGB cables are also notoriously difficult to strip for termination – Banana Peel® RGBs overcome this problem.

  Exceptional Benefits:
  - Labor saving
  - Easy identification
  - Smaller outer diameter than jacketed version
  - More flexible than jacketed version

Availability

Most of our Brilliance® broadcast cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a Brilliance® broadcast cable in this catalog section that meets your technical requirements contact Technical Support at +31-77-3875-414 or techsupport.venlo@belden.com.

Corresponding Literature

Technical Bulletins

TB-65: Digital studio guide
TB E100: Video multicores
TB E101: Belden exceeds the standards of HD
TB E104: Flame retardant triax and coax

Product Bulletins

NP151: Siamese cables (9451D)
NP152: Star quad cables
NP183: 1505F, flexible version of 1505A
NP198: Mini High-Res RGBs (127xR)
NP207: DigiTruck (179DT)
NP217: Banana Peel® Mini-RGBs (Serie1281)
NP228: CatSnake™ (1305A)
NP233: 1694F, Flexible version of 1694A
NP234: Banana Peel® designed SDI RGBs (1855S5/1505S5)
NP108E: SlimSnake™ halogen-free AES/EBU multi-pair cable

Optical Fiber Cables

SMPTE 311M HDTV Cables

BRILLIANCE®

Description	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Shielding Material	Nominal OD inch	Nominal OD mm	Component	Description	Shielding Material & Nom. DCR	Jacket Material & Colors	Component OD inch	Component OD mm
SMPTE 311M • 2 Power Conductors • SM Fiber w/24 and 16 AWG • Stranded (7x32 and 65x34) TC • Overall 95 % Tinned Copper Braid																
PVC Insulation • Black Belflex® Jacket																
	7804C	NEC:	328	100	33.1	15.0	–	+ 95 % TC Braid	0.362	9.20	2 x Fiber	2 Breakout Fibers SM/125µ/900µ core/clad/buffer	Unshielded	PVC Blue Yellow	0.079	2.00
		CMR	500	152	47.6	21.6										
		CEC:	1000	305	95.9	43.5										
		CMG FT4	1640	500	152.6	69.2										
			3280	1000	314.8	142.8					2 x Data	2 Conductors 24 AWG 0.61 mm (7x32) TC	Unshielded	PVC Red Grey	0.050	1.27
											2 x Power	2 Conductors 16 AWG 1.5 mm (65x34) TC	Unshielded	PVC Black White	0.093	2.36

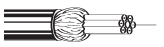
Plenum version and other conductor counts/diameters available by special order.
Fibers and aramid fillers contained within a 0.008″ (2.0 mm) diameter PVC breakout jacket.

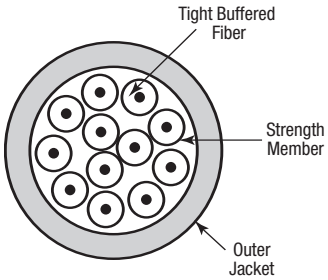
Description	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Shielding Material	Nominal OD inch	Nominal OD mm	Component	Description	Shielding Material & Nom. DCR	Jacket Material & Colors	Component OD inch	Component OD mm
SMPTE 311M • 4 Power Conductors • SM Fiber w/24 and 20 AWG • Stranded (7x32 and 19x32) TC • Overall 95 % Tinned Copper Braid																
PVC Insulation • Black Belflex® Jacket																
	7804R	NEC:	328	100	32.8	14.9	–	+ 95 % TC Braid	0.362	9.20	2 x Fiber	2 Fibers SM/125µ/900µ core/clad/buffer	Unshielded	PVC Blue Yellow	0.035	0.89
		CMR	500	152	48.9	22.2										
		CEC:	1000	305	99.0	44.9										
		CMG FT4	1640	500	157.4	71.4										
			3280	1000	324.7	147.3					2 x Data	2 Conductors 24 AWG 0.61 mm (7x32) TC	Unshielded	PVC Red Grey	0.050	1.27
											4 x Power	4 Conductors 20 AWG 0.94 mm (19x32) TC	Unshielded	PVC Black White White/Black Black/White	0.063	1.60

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

Tactical Mobile Optical Fiber

Description	Part No.	No. of Fibers	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Fiber Size µm	Nom. Buffer/Tube OD inch	Nom. Buffer/Tube OD mm	Strength Members	Nominal OD inch	Nominal OD mm	Central Element mm	Pulling Tension N	Crush Resistance kN/m	Energy kJ/m	Bending radii cable (mm) static	Bending radii cable (mm) dynamic
GMMT • Intex Mobile • Tight Buffer • Designed for Despooling and Respooling • **A/I-VQ(ZN)11Y**																		
Dry Construction • PUR Jacket (Orange or Black)																		
-30/70°C IEC 60332-1			6888	2100			Ø 280 ± 15			Longitudinal watertightness Swellable Reinforced Yarn			no					
	GMMTx04	4			143.5	65.1					0.23	5.8	800	4	580	58	87	
	GMMTx06	6			175.9	79.8					0.25	6.3	950	4	725	63	95	
	GMMTx08	8			217.6	98.7					0.28	7.0	1100	4	890	70	105	





Color coding of the buffered fibers: White, Red, Blue, Yellow, Green, Violet, Brown, Black
Optical characteristics see page 16.21.

TC = Tinned Copper • DCR = DC resistance

Microphone and Musical Instrument Cables

Two-Conductor, Low-Impedance Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Color Code
24 AWG • Stranded (105x44) 0.6 mm High-Conductivity (Oxygen-Free) BC • Conductors Cabled with Fillers • 97 % BC Double Spiral Braid																		
PVC Insulation • Matte Black PVC Jacket																		
300V RMS 80°C	**9397**		500 1000	152 305	12.1 24.1	5.5 10.9	0.61 mm 24 AWG (105x44) BC	0.048	1.22	Overall Double Spiral + 97 % BC Braid	0.176	4.47	47	–	CDR/CDR CDR/SCR	47 86	154 283	White, Green
 0.22 mm²			Pulling Tension: 44 N															
24 AWG • Stranded (32x0.1) 0.6 mm Bare Copper • Conductors Cabled with Fillers • 92 % Bare Copper Spiral Serve Braid																		
Polyethylene Insulation • PVC Jacket (Red, Yellow, Green, Blue, Grey, White and Black)																		
100V RMS 60°C	**BE46349**		328 1640 3280	100 500 1000	9.3 46.3 92.6	4.2 21.0 42.0	0.6 mm 24 AWG (32x0.1) BC	0.057	1.45	Overall Spiral Serve + 92 % BC Braid	0.240	6.10	–	–	CDR/CDR CDR/SCR	18 34	60 110	Red, Blue
 0.25 mm²			Pulling Tension: 44 N															
20 AWG • Stranded (26x34) 0.9 mm High-Conductivity (Oxygen-Free) TC • Cotton Wrap • Conductors Cabled • Rayon Braid • 85 % TC Braid																		
EPDM Rubber Insulation • EPDM Jacket (Black, Red, Yellow and Blue)																		
600V RMS 90°C	**8412**		100 250 U-500 500 U-1000 1000	31 76 U-152 152 U-305 305	5.2 12.1 24.0 24.0 46.0 47.1	2.4 5.5 10.9 10.9 20.9 21.4	0.94 mm 20 AWG (26x34) TC	0.083	2.11	Overall 85 % TC Braid	0.262	6.65	52	–	CDR/CDR CDR/SCR	30 55	98 180	White, Black
 0.52 mm²			Pulling Tension: 445 N Red, Yellow or Blue available in 305 m put-up only.															

Three-Conductor, Low-Impedance Cables

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Color Code
24 AWG • Stranded (105x44) 0.6 mm High-Conductivity (Oxygen-Free) Bare Copper • Double Spiral Braid • 97% Bare Copper Braid																		
PVC Insulation • Matte Black PVC Jacket																		
300V RMS 80°C	**9398**		1000	305	25.1	11.4	0.61 mm 24 AWG (105x44) BC	0.048	1.22	Overall Double Spiral + 97% BC Braid	0.185	4.70	47	–	CDR/CDR CDR/SCR	40 110	131 361	White, Green, Brown
 0.22 mm²			Pulling Tension: 200 N															

TC = Tinned Copper • BC = Bare Copper • EPDM = Ethylene Propylene Diene Monomer • DCR = DC resistance
SCR = Capacitance between one conductor and other conductors connected to shield. • CDR = Capacitance between conductors

Microphone and Musical Instrument Cables

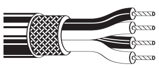
Four-Conductor, Star-Quad

BRILLIANCE®

28 AWG • Stranded (19x40) 0.4 mm High-Conductivity (Oxygen-Free) Silver-Plated Copper Alloy • 78% Tinned Copper Braid

Polypropylene Insulation • Matte PVC Jacket (Red, Yellow, Blue, Beige and Black)

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance			Color Code
			ft.	m	lbs.	kg		inch	mm		inch	mm				pF/ft.	pF/m	
100V RMS 60°C	**1804A***		100 ▲500	31 152	1.6 4.5	0.7 2.0	0.38 mm 28 AWG (19x40) SPC	0.030	0.76	Overall 78% TC Braid	0.115	2.92	40	–	CDR/CDR CDR/SCR	40 60	131 196	see chart below



0.09 mm²

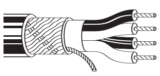
31 m put-up available in Black only.

2/c 23 AWG equivalent DCR when connected to a 3-pin XLR.
Pulling Tension: 106 N

26 AWG • Stranded (30x40) 0.5 mm High-Conductivity (Oxygen-Free) BC • Conductors Cabled • 95% TC French Braid® • 28 AWG BC Drain Wire

Polyethylene Insulation • Matte PVC Jacket (Red, Green, Yellow, Blue, Grey and Black)

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance			Color Code
			ft.	m	lbs.	kg		inch	mm		inch	mm				pF/ft.	pF/m	
100V RMS 60°C	**1172A***		500 1000	152 305	13.5 27.0	6.1 12.2	0.53 mm 26 AWG (30x40) BC	0.045	1.14	Overall French Braid® 95% TC + Drain Wire (28 AWG BC)	0.190	4.83	39	–	CDR/CDR CDR/SCR	39 57	129 188	see chart below



0.14 mm²

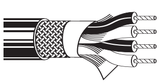
152 m put-up available in Black only.

2/c 23 AWG equivalent DCR when connected to a 3-pin XLR.
Pulling Tension: 164 N

24 AWG • Stranded (41x40) 0.6 mm High-Conductivity (Oxygen-Free) Bare Copper • Conductors Cabled • 95% Tinned Copper Braid

Polyethylene Insulation • Matte PVC Jacket (Red, Green, Yellow, Blue, Grey and Black)

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance			Color Code
			ft.	m	lbs.	kg		inch	mm		inch	mm				pF/ft.	pF/m	
100V RMS 75°C	**1192A***		100 500 1000	31 152 305	4.1 16.5 37.0	1.9 7.5 16.8	0.58 mm 24 AWG (41x40) BC	0.056	1.42	Overall 95% TC Braid	0.245	6.22	40	–	CDR/CDR CDR/SCR	39 57	129 188	see chart below



0.22 mm²

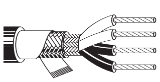
31 m put-up available in Black only.
152 m put-up available in Blue or Black only.

2/c 21 AWG equivalent DCR when connected to a 3-pin XLR.
Pulling Tension: 93 N

20 AWG • Stranded (26x34) 0.9 mm High-Conductivity (Oxygen-Free) TC • Cotton Wrap • Conductors Cabled • Rayon Braid • 85% TC Braid

EPDM Rubber Insulation • Cotton Wrap • Black EPDM Rubber Jacket

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance			Color Code
			ft.	m	lbs.	kg		inch	mm		inch	mm				pF/ft.	pF/m	
600V RMS 90°C	**8424**		100 250 U-500 500 1000	31 76 U-152 152 305	6.8 16.8 32.0 32.6 64.1	3.1 7.6 14.5 14.8 29.1	0.91 mm 20 AWG (26x34) TC	0.083	2.11	Overall 85% TC Braid	0.294	7.47	52	–	CDR/CDR CDR/SCR	47 59	154 194	Black, White, Red, Green



0.52 mm²

2/c 17 AWG equivalent DCR when connected to a 3-pin XLR.
Pulling Tension: 387 N

TC = Tinned Copper • BC = Bare Copper • SPC = Silver-Plated Copper • DCR = DC resistance
SCR = Capacitance between one conductor and other conductors connected to shield. • CDR = Capacitance between conductors
* One Blue conductor and one White conductor are striped for use in MIDI and other four conductor applications.
▲ May contain more than one piece. Min. length of any one piece is 15 m (50 ft.).

Color Code

Pair No.	Color
1	Blue
2	White
3	Blue with White Stripe
4	White with Blue Stripe

Line Level Analog Audio Cables

Single- and Double-Pair Cables
Audio-Connect

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Color Code

24 AWG • Stranded (7x32) 0.6 mm Tinned Copper Conductors • Twisted Pair • Overall **Beldfoil®** Shield • 24 AWG Tinned Copper Drain Wire

Polypropylene Insulation • Grey PVC Jacket

300V RMS	**1883A**	NEC:	U-1000	U-305	11.0	5.0	0.61 mm	0.040	1.02	Overall	0.123	3.12	52	–	CDR/CDR	31	101	Black, Red
		CMR	1000	305	11.0	5.0	24 AWG			Beldfoil®					CDR/SCR	58	190	
		CEC:					(7x32) TC			+ Drain Wire								
		CMG FT4								(24 AWG TC)								

0.22 mm²

U-305 m put-up also available in Brown, Red, Orange, Yellow, Green, Blue, Violet, White or Black.
Jacket and shield are bonded so both can be removed with automatic stripping equipment.
Pulling Tension: 71 N

24 AWG • Stranded (19x36) 0.6 mm High-Conductivity (Oxygen-Free) Tinned Copper • Twisted Pair • Overall **Beldfoil®** Shield (Unbonded) • 24 AWG Tinned Copper Drain Wire • Noise Reducing Tape

High-density Polyethylene Insulation • Black PVC Jacket

200V RMS	**9452**		U-500	U-152	6.6	3.0	0.61 mm	0.040	1.02	Overall	0.135	3.43	56	–	CDR/CDR	30	98	Black, Red
75°C			500	152	6.0	2.7	24 AWG			Beldfoil®					CDR/SCR	58	190	
			U-1000	U-305	12.0	5.4	(19x36) TC			+ Drain Wire								
			1000	305	12.0	5.4				(24 AWG TC)								

Shorting Fold

0.22 mm²

Pulling Tension: 79 N

22 AWG • Stranded (7x30) 0.8 mm Tinned Copper • Twisted Pair • Overall **Beldfoil®** Shield • 22 AWG Tinned Copper Drain Wire

Polypropylene Insulation • PVC Jacket (Black, Grey, Brown, Red, Orange, Yellow, Green, Blue, Violet and White)

300V RMS	**9451**	NEC:	U-500	U-152	8.0	3.6	0.76 mm	0.050	1.27	Overall	0.135	3.43	45	–	CDR/CDR	35	115	Black, Red
75°C		CMR	500	152	8.0	3.6	22 AWG			Beldfoil®					CDR/SCR	67	220	
1-Pair		CEC:	T-1000	T-305	18.0	8.2	(7x30) TC			+ Drain Wire								
		CMG FT4	U-1000	U-305	16.0	7.3				(22 AWG TC)								
			5000	1524	75.0	34.0												

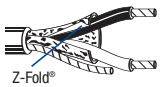
0.34 mm²

U-152 m, 152 m and T-305 m put-ups available in Grey only.
The jacket and shield are bonded so both can be removed with automatic stripping equipment. Drain wire is inside foil shield.
Pulling Tension: 120 N

22 AWG • Stranded (7x30) 0.8 mm TC • Twisted Pair • Overall **Beldfoil®** Shield (Unbonded) • 22 AWG Tinned Copper Drain Wire

Polyethylene Insulation • Paper Wrap • PVC Jacket (Black or Grey)

300V RMS	**8451**	NEC:	100	31	2.3	1.0	0.76 mm	0.050	1.27	Overall	0.138	3.51	45	–	CDR/CDR	34	112	Black, Red
75°C		CMR	U-500	U-152	8.5	3.9	22 AWG			Beldfoil®					CDR/SCR	67	220	
		CEC:	500	152	8.0	3.6	(7x30) TC			+ Drain Wire								
		CMR	U-1000	U-305	16.0	7.3				(22 AWG TC)								
			1000	305	16.0	7.3												



Z-Fold®

0.34 mm²

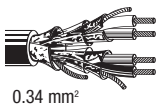
31 m put-up available in Black only.
Pulling Tension: 120 N

Belden's miniature type broadcast audio and instrumentation cables occupy 1/2 to 2/3 less space than standard cables. Unique paper separator facilitates jacket stripping.

22 AWG • Stranded (7x30) 0.8 mm Tinned Copper • Dual Pairs • Overall **Beldfoil®** Shield (Unbonded) • 24 AWG Tinned Copper Drain Wire

Polypropylene Insulation • Chrome PVC Jacket

80°C	**8728**	NEC:	U-500	U-152	15.0	6.8	0.76 mm	0.050	1.27	Individual	0.215	5.46	50	–	CDR/CDR	35	115	Black, Red,
UL AWM Style 2717		CM	500	152	15.5	7.0	22 AWG			Beldfoil®					CDR/SCR	62	203	Green, White
		CEC:	U-1000	U-305	30.0	13.6	(7x30) TC			+ Drain Wire								
		CM	1000	305	31.0	14.1				(24 AWG TC)								
										+ Overall								
										Beldfoil®								



0.34 mm²

Meets NEC Article 800

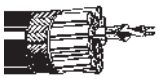
Each pair Beldfoil shielded with individual drain wire plus polyester film over each shield.
Pulling Tension: 161 N

TC = Tinned Copper • DCR = DC resistance • SCR = Capacitance between one conductor and other conductors connected to shield. • CDR = Capacitance between conductors

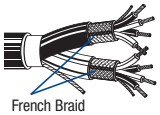
Analog Multi-Pair Snake Cables

Flexible, Field Use, Rugged-Stage Cables
Individually Shielded and Jacketed Pairs

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Color Code
26 AWG • Stranded (18x0.1) 0.5 mm TC • Each Pair Individually **TC Spiral Braid** • Numbered PVC Jackets • **Overall > 80 % TC Braid**																		
Polyethylene Insulation • Overall Black PVC Jacket																		
100V RMS 75°C							0.48 mm 26 AWG (18x0.1) TC	0.041	1.05	Individual Spiral Serve > 90 % TC Braid + Overall Braid			95	–	CDR/CDR CDR/SCR	18 34	60 110	White, Red
								Jacketed Pairs O.D.: 0.122	3.10									
0.14 mm²	**BE46312**	4-Pair	1640	500	212.5	96.4					0.492	12.50						
	BE46313	8-Pair	1640	500	323.6	146.8					0.591	15.00						
	BE46315	12-Pair	1640	500	374.6	169.9					0.638	16.20						
	BE46305	16-Pair	1640	500	470.0	213.2					0.709	18.00						
	BE46306	24-Pair	820	250	343.9	156.0					0.882	22.40						
	BE46948	40-Pair	820	250	555.6	252.0					1.075	27.30						

Super-Flexible, High-Performance Cables, Star Quad
Individually Shielded and Jacketed Pairs

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Color Code
26 AWG • Stranded (19x38) 0.5 mm High-Conductivity (Oxygen-Free) Bare Copper • Each Pair 95 % Bare Copper **French Braid®** • 26 AWG Tinned Copper Drain Wire • Numbered and Color Coded PVC Jackets																		
Polyethylene Insulation • Overall Black PVC Jacket with 20 AWG Tinned Copper Drain Wire																		
300V RMS 60°C							0.51 mm 26 AWG (19x38) BC	0.045	1.14	Individual French Braid® 95 % BC + Drain Wire (26 AWG TC)			40	–	CDR/CDR CDR/SCR	39 57	129 188	see chart below
								Jacketed Pairs O.D.: 0.157	3.99									
French Braid																		Pulling Tension:
0.14 mm² Star-Quad	**7884A**	2-Pair	250 † 500 † 1000	76 152 305	27.0 49.0 98.0	12.2 22.2 44.5					0.458	11.63						396 N
	7885A	4-Pair	250 † 500 † 1000	76 152 305	36.3 70.5 136.0	16.5 32.0 61.7					0.498	12.65						792 N
	7886A	8-Pair	† 500 † 1000	152 305	146.5 314.0	66.5 142.4					0.782	19.86						1584 N
	7887A	12-Pair	250 † 500 † 1000	76 152 305	89.5 177.5 365.0	40.6 80.5 165.6					0.828	21.03						2380 N
	7888A	16-Pair	250 † 500 † 1000	76 152 305	114.0 238.5 468.0	51.7 108.2 212.3					0.938	23.83						3172 N
	7889A	24-Pair	† 500 † 1000	152 305	396.0 798.0	179.6 362.0					1.232	31.29						4759 N
2/c 21 AWG equivalent DCR when connected to a 3-pin XLR.																		

TC = Tinned Copper • BC = Bare Copper • DCR = DC resistance
SCR = Capacitance between one conductor and other conductors connected to shield.
CDR = Capacitance between conductors
† Length may vary -10 % to 0 % from length shown.

Color Code

Pair No.	Color
1	Blue
2	White

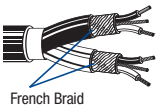
Pair No.	Color
3	Blue with White Stripe
4	White with Blue Stripe

Analog Multi-Pair Snake Cables

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

BRILLIANCE®

De-scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance			Color Code
			ft.	m	lbs.	kg		inch	mm		inch	mm				pF/ft.	pF/m	
24 AWG • Stranded (41x40) 0.6 mm High-Conductivity (Oxygen-Free) Bare Copper • Each Pair Individually 93% **French Braid®** • 24 AWG Tinned Copper Drain Wire • Numbered and Color Coded PVC Jackets																		
Polyolefin Insulation • Overall Black PVC Jacket																		
300V RMS 60°C							0.58 mm 24 AWG (41x40) BC	0.040	1.02	Individual French Braid® 93% + Drain Wire (24 AWG TC)			60	–	CDR/CDR CDR/SCR	26 48	86 156	Red, Black
								Jacketed Pairs O.D.: 0.119	3.02									
0.22 mm²																		Pulling Tension:
1902A	2-Pair		250	76	12.0	5.4					0.330	8.38						258 N
			† 500	152	27.5	12.5												
			† 1000	305	53.0	24.0												
1904A	4-Pair		250	76	19.8	9.0					0.333	8.45						534 N
			† 500	152	40.5	18.4												
			† 1000	305	78.0	35.4												
1906A	6-Pair		250	76	28.5	12.9					0.449	11.40						801 N
			† 500	152	55.5	25.2												
			† 1000	305	111.0	50.3												
1908A	8-Pair		250	76	36.0	16.3					0.480	12.20						1023 N
			† 500	152	72.5	32.9												
			† 1000	305	141.0	64.0												
1912A	12-Pair		250	76	51.8	23.5					0.602	15.30						1557 N
			† 500	152	102.5	46.5												
			† 1000	305	203.0	92.1												
1916A	16-Pair		250	76	71.0	32.2					0.681	17.30						2091 N
			† 500	152	138.0	62.6												
			† 1000	305	279.0	126.6												
1924A	24-Pair		250	76	108.0	49.0					0.827	21.00						3114 N
			† 500	152	214.5	97.3												
			† 1000	305	437.0	198.2												
1932A	32-Pair		250	76	135.3	61.4					0.969	24.60						4173 N
			† 500	152	274.0	124.3												
			† 1000	305	539.0	244.5												



French Braid

TC = Tinned Copper • BC = Bare Copper • DCR = DC resistance • SCR = Capacitance between one conductor and other conductors connected to shield. • CDR = Capacitance between conductors
† Length may vary -10% to 0% from length shown.

Analog Multi-Pair Snake Cables

Beldfoil® High-Performance Cables
Individually Shielded and Jacketed Pairs

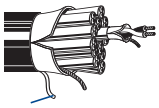
BRILLIANCE®

De-scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance			Color Code
			ft.	m	lbs.	kg		inch	mm		inch	mm				pF/ft.	pF/m	

24 AWG • Stranded (7x32) 0.6 mm High-Conductivity (Oxygen-Free) Tinned Copper • Each Pair **Beldfoil®** Shielded • 24 AWG Tinned Copper Drain Wire • Numbered and Color Coded PVC Jackets • Overall **Beldfoil®** Shield • Rip Cord

Polyolefin Insulation • Overall Black PVC Jacket with 18 AWG Tinned Copper Drain Wire

300V RMS 75°C		NEC: CM CEC: CM					0.61 mm 24 AWG (7x32) TC	0.040	1.02	Individual Beldfoil® + Drain Wire (24 AWG TC) + Overall Beldfoil®			60	–	CDR/CDR CDR/SCR	31 58	102 190	Brown, Red
								Jacketed Pairs O.D.: 0.111	2.82									



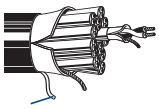
Rip Cord

																		Pulling Tension:
0.22 mm²	**1508A**	1-Pair	500 1000	152 305	6.5 11.0	2.9 5.0					0.131	3.33						73 N
	1509C	2-Pair	500 1000	152 305	24.0 46.0	10.9 20.9					0.301	7.65						246 N
	1510C	4-Pair	500 1000	152 305	35.5 72.0	16.1 32.7					0.352	8.94						393 N
	1511C	6-Pair	500 1000	152 305	52.0 102.0	23.6 46.3					0.418	10.61						544 N
	1512C	8-Pair	500 1000	152 305	65.5 124.0	29.7 56.2					0.452	11.48						676 N
	1513C (DT-12)	12-Pair	500 1000	152 305	89.5 178.0	40.6 80.7					0.561	14.25						980 N
	1514C	16-Pair	500 1000	152 305	122.5 241.0	55.6 109.3					0.628	15.95						1273 N
	1515C	20-Pair	500 1000	152 305	142.5 288.0	64.6 130.6					0.770	19.56						1567 N
	1516C	24-Pair	500 1000	152 305	180.5 371.0	81.9 168.3					0.807	20.50						1861 N
	1517C	26-Pair	500 1000	152 305	187.5 385.0	85.0 174.6					0.823	20.90						2007 N
	1518C	32-Pair	500 1000	152 305	236.5 481.0	107.3 218.2					0.897	22.78						2448 N
	1519C	52-Pair	500 1000	152 305	372.5 731.0	169.0 331.6					1.117	28.37						3916 N

24 AWG • Stranded (7x32) 0.6 mm High-Conductivity (Oxygen-Free) Tinned Copper • Each Pair **Beldfoil®** Shielded • 24 AWG Tinned Copper Drain Wire • Numbered FRNC Jackets • Overall **Beldfoil®** Shield • Rip Cord

Polyolefin Insulation • Overall Black FRNC/LSNH Jacket with 18 AWG Tinned Copper Drain Wire

300V RMS 75°C		NEC: CM CEC: CM					0.61 mm 24 AWG (7x32) TC	0.040	1.02	Individual Beldfoil® + Drain Wire (24 AWG TC) + Overall Beldfoil®			60	–	CDR/CDR CDR/SCR	28 55	92 180	Brown, Red
								Jacketed Pairs O.D.: 0.111	2.82									



Rip Cord

																		Pulling Tension:
0.22 mm²	**1508ENH**	1-Pair	1640 3280	500 1000	21.0 42.4	9.5 19.1					0.131	3.33						73 N
	1509ENH	2-Pair	1640	500	79.1	35.9					0.301	7.65						246 N
	1512ENH	8-Pair	1640 3280	500 1000	215.4 430.8	97.7 195.4					0.453	11.50						676 N

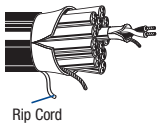
TC = Tinned Copper • DCR = DC resistance • SCR = Capacitance between one conductor and other conductors connected to shield. • CDR = Capacitance between conductors

Analog Multi-Pair Snake Cables

Beldfoil® High-Performance Cables, Long Runs
Individually Shielded and Jacketed Pairs

BRILLIANCE®

De-scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance			Color Code
			ft.	m	lbs.	kg		inch	mm		inch	mm				pF/ft.	pF/m	
22 AWG • Stranded (7x30) 0.8 mm High-Conductivity (Oxygen-Free) Tinned Copper • Each Pair **Beldfoil®** Shielded • 22 AWG Tinned Copper Drain Wire • Numbered and Color Coded PVC Jackets • Overall **Beldfoil®** Shield • Rip Cord																		
Polyolefin Insulation • Overall Matte Black PVC Jacket with Stranded 18 AWG Tinned Copper Drain Wire, except 1814 with 22 AWG																		
300V RMS 60°C		NEC: CMR CEC: CMG FT4					0.76 mm 22 AWG (7x30) TC	0.050	1.27	Individual Beldfoil® + Drain Wire (22 AWG TC) + Overall Beldfoil®			50	66	CDR/CDR CDR/SCR	31.0 56.1	102 184	Red, Black
								Jacketed Pairs O.D.: 0.133	3.38									
0.35 mm²																		Pulling Tension:
	1814R	2-Pair	500 1000	152 305	30.0 59.0	13.6 26.8					0.330	8.38						283 N
	1815R	4-Pair	500 1000	152 305	45.0 91.0	20.4 41.3					0.383	9.74						485 N
	1816R	6-Pair	500 1000	152 305	65.0 131.0	29.5 59.4					0.462	11.73						838 N
	1817R	8-Pair	500 1000	152 305	80.0 152.0	36.3 68.9					0.503	12.78						1081 N
	1818R	12-Pair	500 1000	152 305	121.0 241.0	54.9 109.3					0.638	16.21						1623 N
	1819R	16-Pair	500 1000	152 305	180.0 364.0	81.6 165.1					0.776	19.71						2052 N
	1820R	20-Pair	500 1000	152 305	216.0 442.0	98.0 200.5					0.865	21.97						2538 N
	1821R	24-Pair	500 1000	152 305	263.5 518.0	119.5 235.0					0.969	24.61						3024 N
	1822R	26-Pair	500 1000	152 305	280.5 552.0	127.2 250.4					0.989	25.12						3266 N
	1823R	32-Pair	500 1000	152 305	335.5 692.0	152.2 313.9					1.072	27.23						3995 N

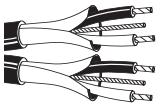


TC = Tinned Copper • DCR = DC resistance • SCR = Capacitance between one conductor and other conductors connected to shield. • CDR = Capacitance between conductors

AES/EBU Digital Audio Cables

Single- and Double-Pair Cables
Audio-Connect

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 ft.	Nominal Attenuation dB/ 100 m
26 AWG • Stranded (7x34) 0.5 mm Tinned Copper • Twisted Pair • **Beldfoil®** • 26 AWG Tinned Copper Drain Wire																			
Datalene® Insulation • PVC Jacket (Chrome or Violet)																			
300V RMS 75°C	**9180**	NEC: CMG CEC: CMG FT4	1000	305	10.0	4.5	0.48 mm 26 AWG (7x34) TC	0.049	1.24	Overall Beldfoil® + Drain Wire (26 AWG TC)	0.144	3.66	110	76%	13.0	42.6	2.0 4.1 5.6 11.3 12.3 24.6	1.7 2.1 2.4 3.1 3.2 4.2	5.5 7.0 7.9 10.1 10.4 13.8
 Shorting Fold																			
0.14 mm² Digital Video Time Code			Color Code: Black, White Pulling Tension: 46 N																
24 AWG • Stranded (7x32) 0.6 mm Tinned Copper • Twisted Pair • Overall **Beldfoil®** Shield • 24 AWG Tinned Copper Drain Wire																			
Datalene® Insulation • PVC Jacket (Grey or Violet)																			
300V RMS 60°C	**1800B**	NEC: CMG CEC: CMG FT4	500 U-1000 1000 5000	152 U-305 305 1524	8.0 17.0 16.0 90.0	3.6 7.7 7.3 40.8	0.61 mm 24 AWG (7x32) TC	0.068	1.73	Overall Beldfoil® + Drain Wire (24 AWG TC)	0.177	4.50	110	76%	12.0	39.3	2.0 4.1 5.6 11.3 12.3 24.6	1.3 1.6 1.8 2.2 2.3 3.1	4.3 5.2 5.8 7.3 7.5 10.1
 0.22 mm²			152 m put-up available in Grey only. 1524 m put-up available in Violet only. Color Code: Red, Black							The jacket and shield are bonded so both can be removed with automatic stripping equipment. Pulling Tension: 73 N									
24 AWG • Stranded (7x32) 0.6 mm Tinned Copper • Dual Twisted Pairs • Individual **Beldfoil®** Shield • 24 AWG Tinned Copper Drain Wire																			
Datalene® Insulation • PVC Jacket (Grey or Violet)																			
300V RMS 60°C	**1802B**	NEC: CMG CEC: CMG FT4	500 U-1000 1000	152 U-305 305	16.5 35.0 37.0	7.5 15.9 16.8	0.61 mm 24 AWG (7x32) TC	0.068	1.73	Individual Beldfoil® + Drain Wire (24 AWG TC)	0.180 x 0.360	4.57 x 9.14	110	76%	12.0	39.3	2.0 4.1 5.6 11.3 12.3 24.6	1.3 1.6 1.8 2.2 2.3 3.1	4.3 5.2 5.8 7.3 7.5 10.1
 0.22 mm²			Color Code: Red, Black							The jacket and shield are bonded so both can be removed with automatic stripping equipment. Pulling Tension: 73 N									
24 AWG • Stranded (41x40) 0.6 mm High-Conductivity (Oxygen-Free) Bare Copper • Twisted Pair with Fillers • Conductors Cabled with Fillers • 95% Tinned Copper **French Braid®** • 26 AWG Bare Copper Drain Wire																			
Datalene® Insulation • Matte PVC Jacket (Red, Yellow, Green, Blue, Grey and Black)																			
300V RMS 60°C	**1800F**	NEC: CL2R	500 U-1000 1000	152 U-305 305	12.0 26.0 24.0	5.4 11.8 10.9	0.58 mm 24 AWG (41x40) BC	0.058	1.47	Overall French Braid® 95% TC + Drain Wire (26 AWG BC)	0.211	5.36	110	76%	12.0	39.3	2.0 4.1 5.6 11.3 12.3 24.6	1.3 2.2 2.9 4.5 4.8 7.1	4.3 7.3 9.5 14.9 15.7 23.3
 French Braid																			
0.22 mm²			152 m and 305 m put-ups available in Black only. Color Code: Red, Black							Pulling Tension: 184 N									
22 AWG • Stranded (7x30) 0.8 mm TC • Twisted Pair with Fillers • Overall **Beldfoil®** Shield (Unbonded) • 90% TC **French Braid®** • 24 AWG Tinned Copper Drain Wire																			
Datalene® Insulation • Black High-Flex Matte PVC Jacket																			
300V RMS 60°C	**1696A**		250 500 U-1000 1000	76 152 U-305 305	8.0 14.5 30.0 32.0	3.6 6.6 13.6 14.5	0.76 mm 22 AWG (7x30) TC	0.082	2.08	Overall French Braid® 90% TC + Drain Wire (24 AWG TC)	0.234	5.94	110	76%	13.0	42.6	2.0 4.1 5.6 11.3 12.3 24.6	0.9 1.1 1.3 1.7 1.8 2.4	2.9 3.6 4.3 5.7 5.8 7.9
 Z-Fold®																			
0.34 mm²			Color Code: Light Blue, White Pulling Tension: 249 N																

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

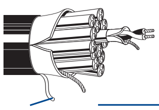
AES/EBU Digital Multi-Pair Snake Cables

Beldfoil® High-Performance Cable, Low-Capacitance Individually Shielded and Jacketed Pairs

BRILLIANCE®

26 AWG • Stranded (7x34) 0.5 mm High-Conductivity (Oxygen-Free) TC • Each Pair **Beldfoil®** Shielded • 26 AWG Tinned Copper Drain Wire • Numbered and Color Coded PVC Jackets • Overall **Beldfoil®** Shield • Rip Cord

Datalene® Insulation • Overall Matte Black PVC Jacket with 26 AWG Tinned Copper Drain Wire



Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/100 ft.	Nominal Attenuation dB/100 m
300V RMS 80°C		NEC: CMG CEC: CMG FT4					0.48 mm 26 AWG (7x34) TC	0.054 Jacketed Pairs O.D.: 0.136	1.37 3.45	Individual Beldfoil® + Drain Wire (26 AWG TC) + Overall Beldfoil®			110	76%	13.0	42.7	2.0 4.0 5.0 6.0 12.0 25.0	1.7 2.1 2.3 2.5 3.2 4.2 Pulling Tension:	5.5 6.9 7.5 8.1 10.4 13.8
Rip Cord 0.14 mm²	7891A	2-Pair	500 1000	152 305	28.0 56.0	12.7 25.4					0.343	8.71						107 N	
	7890A	4-Pair	100 250 500 1000	31 76 152 305	8.2 18.0 31.0 61.0	3.7 8.2 14.1 27.7					0.399	10.13						200 N	
	7880A	8-Pair (Fits D-Sub connectors)	† 250 500 1000	76 152 305	28.0 57.0 142.0	12.7 25.9 64.4					0.541	13.74						374 N	
	7892A	12-Pair	500 1000	152 305	85.0 174.0	38.6 78.9					0.679	17.25						574 N	
	7893A	16-Pair	500 1000	152 305	109.5 240.0	49.7 108.9					0.770	19.56						761 N	

Color Code: Red, Black

Fire Resistant, Installation Cable, FRNC/LSNH IEC 332-3C Individually Shielded and Jacketed Pairs

26 AWG • Stranded (18x0.1) 0.5 mm TC • Each Pair Individually **Tinned Copper Spiral Braid** • Numbered FRNC/LSNH Jackets • **Overall > 90% Tinned Copper Braid**

Polyethylene Insulation • Overall Grey FRNC/LSNH Jacket with 26 AWG Tinned Copper Drain Wire

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/100 ft.	Nominal Attenuation dB/100 m
100V RMS 70°C		IEC 332-3C					0.5 mm 26 AWG (18x0.1) TC	0.044 Jacketed Pairs O.D.: 0.114	1.13 2.90	Individual Spiral Serve > 90% TC Braid + Overall Braid	0.488	12.39	110	60%	17.4 Burning Energy:	57.0	0.1 1.0 4.0 10.0	0.3 0.7 1.9 3.7 Pulling Tension:	0.9 2.2 6.3 12.0
0.14 mm²	YE00193	1-Pair	1640	500	13.4	6.1					0.114	2.90			–			–	
	BE46959	1-Pair	1640	500	24.3	11.0					0.154	3.90			283 kJ/m			85 N	
	BE46923	2-Pair	1640	500	102.1	46.3					0.331	8.40			913 kJ/m			150 N	
	BE46925	4-Pair	1640	500	134.5	61.0					0.374	9.50			1271 kJ/m			250 N	
	BE46935	8-Pair	1640	500	245.6	111.4					0.492	12.50			2023 kJ/m			400 N	
	BE46936	10-Pair	1640	500	278.0	126.1					0.524	13.30			2325 kJ/m			500 N	
	BE46937	12-Pair	1640	500	301.6	136.8					0.559	14.20			2644 kJ/m			600 N	
	BE46938	16-Pair	1640	500	392.9	178.2					0.630	16.00			3292 kJ/m			750 N	

Color Code: White, Blue

TC = Tinned Copper • DCR = DC resistance

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

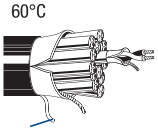
AES/EBU Digital Multi-Pair Snake Cables

SlimSnake™, Installation Cable, Halogen-Free
Individually Shielded and Jacketed Pairs

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/100 ft.	Nominal Attenuation dB/100 m
26 AWG • Stranded (7x0.16) 0.5 mm TC • Each Pair Individually **TC Spiral Braid** • Numbered PA Jackets • Overall > 90 % TC Braid																			
Foam Polyethylene Insulation • Overall Purple Halogen-Free Jacket																			
100V RMS 70°C 							0.5 mm 26 AWG (7x0.16) TC	0.043 Jacketed Pairs O.D.: 0.114	1.10 2.90	Individual Spiral Serve > 90% TC Braid + Overall Braid			110	60%	15.2	50.0	0.1 1.0 6.0 10.0	0.3 0.7 2.9 4.9 Pulling Tension:	0.9 2.3 9.5 16.0
0.14 mm^2	**BE46273** 1-Pair		820 1640	250 500	5.7 11.2	2.6 5.1					0.110	2.80						–	
	BE46202 1-Pair		820 1640	250 500	6.6 12.1	3.0 5.5					0.154	3.90						–	
	BE46203 2-Pair		820 1640	250 500	42.1 84.2	19.1 38.2					0.319	8.10						150 N	
	BE46204 4-Pair		820 1640	250 500	57.3 114.4	26.0 51.9					0.354	9.00						250 N	
	BE46266 8-Pair		820 1640	250 500	85.8 171.5	38.9 77.8					0.406	10.30						400 N	
	BE46208 10-Pair		820 1640	250 500	97.0 193.8	44.0 87.9					0.480	12.20						500 N	
	BE46205 12-Pair		820 1640	250 500	124.1 248.2	56.3 112.6					0.504	12.80						600 N	
	BE46207 16-Pair		820 1640	250 500	171.7 343.3	77.9 155.7					0.602	15.30						750 N	
	Color Code: White, Blue																		

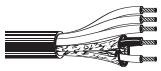
Beldfoil® High-Performance Cable, Low-Capacitance, Long-Runs
Individually Shielded and Jacketed Pairs

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/100 ft.	Nominal Attenuation dB/100 m
24 AWG • Stranded (7x32) 0.6 mm High-Conductivity (Oxygen-Free) TC • Each Pair **Beldfoil**® Shielded • 24 AWG Tinned Copper Drain Wire • Numbered and Color Coded PVC Jackets • Overall **Beldfoil**® Shield • Rip Cord																			
Datalene® Insulation • Overall Matte Black PVC Jacket with 16 AWG Tinned Copper Drain Wire																			
300V RMS 60°C  Rip Cord		NEC: CMG CEC: CMG FT4					0.61 mm 24 AWG (7x32) TC	0.068 Jacketed Pairs O.D.: 0.167	1.73 4.24	Individual Beldfoil® + Drain Wire (24 AWG TC) + Overall Beldfoil®			110	76%	12.0	39.4	2.0 4.0 5.0 6.0 12.0 25.0	1.3 1.6 1.7 1.8 2.3 3.1 Pulling Tension:	4.3 5.1 5.6 5.9 7.5 10.1
0.22 mm^2	**1803F** 4-Pair		500 1000	152 305	57.5 107.0	26.1 48.5					0.488	12.39						367 N	
	1805F 8-Pair		500 1000	152 305	106.5 211.0	48.3 95.7					0.661	16.79						609 N	
	1806F 12-Pair		500 1000	152 305	160.0 330.0	72.6 149.7					0.829	21.06						890 N	
	1850F 16-Pair		500 1000	152 305	208.0 407.0	94.3 184.6					0.944	23.98						1174 N	
	1852F 24-Pair		500 1000	152 305	321.0 644.0	145.6 292.1					1.205	30.61						1779 N	
	1854F 32-Pair		1000	305	841.0	381.5					1.346	34.19						2356 N	
	Color Code: Red, Black																		

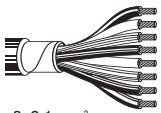
TC = Tinned Copper • DCR = DC resistance

Speaker Cables

BRILLIANCE®

De-scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Shielding Material	Nominal OD inch	Nominal OD mm	Compo-nent	Description	Shielding Material & Nom. DCR	Insulation Material & Colors	Component Jacket Material & Colors	Component OD inch	Component OD mm
26 AWG • 2 CDR (Audio) Stranded (18x0.1) 0.5 mm BC **+ 3 CDR (Power)** Stranded (32x0.2) 1.2 mm BC • Conductors Cabled with Fillers																
Polyethylene Insulation • Overall Matte Black PVC Jacket																
300V RMS 60°C	**BE43908**		328 1640	100 500	37.5 187.4	17.0 85.0	Unshielded	0.461	11.7	1xAudio	1-Pair 26 AWG 0.48 mm (18x0.1) BC	Overall 90% BC Braid	PE Black Red	PVC Black	0.044	1.12
 2x0.14 mm² (Audio) 3x1.20 mm² (Power)										1xPower	3 Conductors 18 AWG 1.15 mm (32x0.2) BC	Unshielded	PVC Brown Blue Green/Yellow	PVC Black	0.083	2.10
							Pulling Tension: 200 N									

De-scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Color Code
16 AWG • 2 Conductor • Stranded (25x0.23) 1.5 mm Bare Copper																		
PVC Insulation • Overall Matte Black PVC Jacket (Grey or Black)																		
300V RMS 60°C	**BE46382** 2 CDR		328 1640 3280	100 500 1000	15.9 79.8 159.4	7.2 36.2 72.3	1.5 mm 16 AWG (25x0.23) BC	0.098	2.50	Unshielded	0.276	7.00	12	–	CDR/CDR	35	115	Black, Red
 2x1.5 mm²																		
							1000 m put-up available in Black only. Pulling Tension: 240 N											

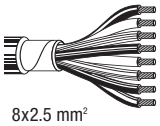
De-scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Color Code
14 AWG • 4 or 8 Conductor • Stranded (104x34) 1.9 mm Bare Copper • Conductors Cabled with Fillers • Paper Wrap																		
PVC Insulation • Overall Matte Black PVC Jacket																		
300V RMS 60°C	**1810A** 4 CDR		250 500 1000	76 152 305	26.3 55.5 114.0	11.9 25.2 51.7	1.85 mm 14 AWG (104x34) BC	0.025	0.64	Unshielded	0.390	9.91	8.8	–	CDR/CDR CDR/SCR	19 57	61 187	Red, Green, White, Black
 High-Flex 4x2.1 mm²																		
							Compatible with Speakon® connectors. Pulling Tension: 889 N											
PVC Insulation • Overall Matte Black PVC Jacket																		
300V RMS 60°C	**1811A** 8 CDR		1000	305	205.0	93.0	1.85 mm 14 AWG (104x34) BC	0.025	0.64	Unshielded	0.515	13.08	8.8	–	CDR/CDR CDR/SCR	19 57	61 187	Brown, Red, Orange, Yellow, Green, White, Blue, Black
 8x2.1 mm²																		
							Compatible with Speakon® connectors. Pulling Tension: 1779 N											

BC = Bare Copper • PE = Polyethelene • DCR = DC resistance • SCR = Capacitance between one conductor and other conductors connected to shield. • CDR = Capacitance between conductors

Speakon® is a Neutrik trademark.

Speaker Cables

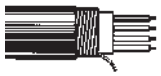
BRILLIANCE®

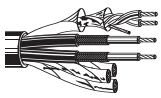
Description	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Color Code
13 AWG • 2 Conductor • Stranded (50x0.25) 2.1 mm Bare Copper																		
PVC Insulation • Overall Matte PVC Jacket (Grey or Black)																		
300V RMS 60°C	**BE46381** 2 CDR		328 1640 3280	100 500 1000	22.5 112.4 224.9	10.2 51.0 102.0	2.05 mm 13 AWG (50x0.25) BC	0.114	2.90	Unshielded	0.317	8.05	7.4	–	CDR/CDR	40	131	Black, Red
 2x2.5 mm²																		
			1000 m put-up available in Black only. Pulling Tension: 400 N															
13 AWG • 4 Conductor • Stranded (50x0.25) 2.1 mm Bare Copper • Conductors Cabled with Fillers • Paper Wrap																		
PVC Insulation • Overall Matte Black PVC Jacket																		
300V RMS 60°C	**BE46379** 4 CDR		3280	1000	399.5	181.2	2.05 mm 13 AWG (50x0.25) BC	0.114	2.90	Unshielded	0.394	10.00	7.4	–	CDR/CDR	40	131	Red, Green, White, Black
 4x2.5 mm²																		
			Pulling Tension: 200 N															
13 AWG • 8 Conductor • Stranded (300x0.1) 2.1 mm Bare Copper • Conductors Cabled with Fillers • Paper Wrap																		
PVC Insulation • Overall Matte Black PVC Jacket																		
300V RMS 60°C	**BE43907** 8 CDR		820	250	160.5	72.8	2.05 mm 13 AWG (300x0.1) BC	0.114	2.90	Unshielded	0.488	12.40	7.4	–	CDR/CDR	40	131	Red, Green, White, Black, Yellow, Purple, Brown, Blue
 8x2.5 mm²																		
			Pulling Tension: 1500 N															
11 AWG • 2 Conductor • Stranded (56x0.3) 2.6 mm Bare Copper																		
PVC Insulation • Overall Matte PVC Jacket (Grey or Black)																		
300V RMS 60°C	**BE46380** 2 CDR		328 1640 3280	100 500 1000	31.5 157.4 314.8	14.3 71.4 142.8	2.6 mm 11 AWG (56x0.3) BC	0.138	3.50	Unshielded	0.354	9.00	4.5	–	CDR/CDR	35	116	Black, Red
 2x4.0 mm²																		
			500 m put-up available in Grey only. Pulling Tension: 600 N															

BC = Bare Copper • DCR = DC resistance • SCR = Capacitance between one conductor and other conductors connected to shield. • CDR = Capacitance between conductors

Special Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Color Code
25 AWG • Stranded (7x33) 0.5 mm High-Conductivity Copper (Oxygen-Free) • (3) Strands TC, (4) Strands TCCS • Rayon Braid • 80 % TC Braid																		
Rayon Braid, Rubber Insulation • Black EPDM Rubber Jacket																		
3000 VDC 60°C	**8410**		1640	500	18.5	8.4	0.53 mm 25 AWG (3x33, 4x33) TC, TCCS	0.154	3.91	Overall 80 % TC Braid	0.245	6.22	52	–	CDR/CDR	33	108	–
																		
Pulling Tension: 267 N																		
22 AWG • Stranded (7x0.25) Tinned Copper • Dual Twisted Pairs • Aluminum-Foil • 24 AWG (7x0.20) Drain Wire • 80 % Tinned Copper Braid																		
Polyethylene Insulation • Overall Matte PVC Jacket (Black or Blue)																		
300V 70°C	**BE43906**		1640 3280	500 1000	68.8 137.3	31.2 62.3	0.75 mm 22 AWG (7x0.25) TC	0.053	1.35	Overall 80 % TC Braid + Drain Wire (24 AWG TC)	0.268	6.80	110	–	CDR/CDR	21.3	70	White, Red, Green, Black
																		
DMX512 0.34 mm²			1000 m put-up available in Black only.							22 AWG: 3105A - 1 Pair DMX512 (see Industrial section) 3107A - 2 Pair DMX512 (see Industrial section) 24 AWG: 9841, 9842, 9843 and 9844 (see Industrial section)								

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Shielding Material	Nominal OD inch	Nominal OD mm	Component	Description	Shielding Material & Nom. DCR	Insulation Material & Colors	Component Jacket Material & Colors	Component OD inch	Component OD mm
(2) Coax 20 AWG • Solid 0.8 mm Bare Copper • **Duofoil®** • **(4) Audio** 22 AWG (7x30) Tinned Copper Shielded Pair																
Gas-Injected FPE Insulation (Coax) • Polypropylene Insulation (Conductors) • Black F-R PVC Jacket																
300V RMS 75°C	**1347A**	NEC: CMR CEC: CMR FT4	500 1000	152 305	232.2 108.6	105.3 49.3	–	0.630	16.00	2 x Video	2-Coax (1505A) 20 AWG 0.8 mm Solid BC	Duofoil® 100 % 95 % TC Braid	HDPE	PVC Black, White	0.233	5.92
										4 x Audio	4 Pair 22 AWG 0.8 mm (7x30) BC	Overall Beldfoil® 100 % + Drain Wire (22 AWG TC)	Polypropylene	PVC Brown, Red, Orange, Yellow	0.135	3.43 each Pair
2 Coax + 4 Pair							Pulling Tension: 947 N									

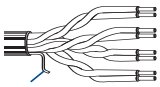
TC = Tinned Copper • TCCS = Tinned Copper-Covered Steel • BC = Bare Copper • DCR = DC resistance
SCR = Capacitance between one conductor and other conductors connected to shield. • CDR = Capacitance between conductors

Duofoil® see technical information page 23.13.

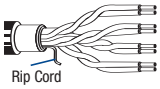
RJ-45 Cables for A/V Applications

BRILLIANCE®

Description	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Freq. MHz	Max. Atten. dB/100m	Min. PSUM NEXT dB	Min. PSUM ACR dB/100m	Min. PSUM ELFEXT dB/100m	Input Imp. (Ω)	Min. RL dB
CatSnake™ (Mobile Cat 5e) • 24 AWG • Bonded-Pair • Stranded (7x32) 0.6 mm Bare Copper Conductors • Rip Cord																			
Heavy-Duty Jacketed • Polyolefin Insulation • Flexible Matte Black PVC Jacket • Category 5e																			
	1304A		1000	305	27.8	12.6	0.61 mm	0.037	0.95	Bonded-Pair	0.245	6.22	1	2.4	62.3	63.3	60.8	100±12	20.0
			500	152	14.3	6.5	24 AWG			Unshielded			4	4.9	53.3	52.3	48.7	100±12	23.0
							(7x32) BC			U/UTP			8	6.9	48.8	46.1	42.7	100±12	24.5
													10	7.8	47.3	43.9	40.8	100±12	25.0
													16	9.9	44.3	39.1	36.7	100±12	25.0
													25	12.5	41.3	34.1	32.8	100±15	24.3
													31.25	14.1	39.9	31.3	30.9	100±15	23.6
													62.5	20.4	35.4	21.6	24.8	100±15	21.5
													100	26.4	32.3	17.1	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
			RJ-45 Compatible • -40°C Cold Bend U.S. Patents 5,606,151; 5,734,126 and 5,763,823 Color Code: see chart below										Jacket sequentially marked at 0.6 m intervals. Third party verified to TIA/EIA-568-B.2, Category 5e						
Upjacketed • Polyolefin Insulation • PVC Inner Jacket • Matte Black Flexible PVC Outer Jacket • Category 5e																			
	1305A		1000	305	39.9	18.1	0.61 mm	0.037	0.95	Bonded-Pair	0.295	7.49	1	2.4	62.3	63.3	60.8	100±12	20.0
			500	152	19.8	9.0	24 AWG			Unshielded			4	4.9	53.3	52.3	48.7	100±12	23.0
							(7x32) BC			U/UTP	Upjacketed O.D.:		8	6.9	48.8	46.1	42.7	100±12	24.5
											0.242	6.14	10	7.8	47.3	43.9	40.8	100±12	25.0
													16	9.9	44.3	39.1	36.7	100±12	25.0
													25	12.5	41.3	34.1	32.8	100±15	24.3
													31.25	14.1	39.9	31.3	30.9	100±15	23.6
													62.5	20.4	35.4	21.6	24.8	100±15	21.5
													100	26.4	32.3	17.1	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	
			RJ-45 Compatible • -40°C Cold Bend U.S. Patents 5,606,151 and 5,734,126 Color Code: see chart below										Jacket sequentially marked at 0.6 m intervals Third party verified to TIA/EIA-568-B.2, Category 5e						



4-Pairs



4-Pairs
EtherCon® compatible

BC = Bare Copper • DCR = DC resistance • ACR = Attenuation Crosstalk Ratio • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss

EtherCon® is a Neutrik trademark.

Color Code

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

Video Triax Cables

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 ft.	Nominal Attenuation dB/ 100 m

Triax 8 • Stranded (19x0.36) 1.0 mm • Silver-Plated Copper • 90 % Silver-Plated Copper Braid • 80 % Bare Copper Braid

Foam Polyethylene Insulation • Red PVC Jacket

70°C	**7783AF**	1000	305	75.0	34.0	0.99 mm 20 AWG (19x0.36) SPC 22.0 Ω/km* 12.0 Ω/km**	0.178	4.52	90 % SPC Braid + 80 % BC Braid 10.0 Ω/km*** 6.5 mm	0.331	8.40	75	82 %	16.5	54.0	1 10 20 40 50 60 100 300	0.2 0.7 1.0 1.4 1.6 1.7 2.3 4.2	0.6 2.2 3.2 4.6 5.1 5.6 7.5 13.8

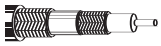
Return loss at 5-850 MHz: ≥ 21 dB

Spools are one piece, but length may vary 0 % to +10 % from length shown.

Triax 11 • Solid 1.4 mm Silver-Plated Copper • 90 % Silver-Plated Copper Braid • 85 % Bare Copper Braid

Foam Polyethylene Insulation • Red PVC Jacket

70°C	**7784AS**	1000 1968	305 600	100.1 197.1	49.3 96.9	1.4mm 16 AWG Solid SPC 18.4 Ω/km* 11.0 Ω/km**	0.256	6.50	90 % SPC Braid + 85 % BC Braid 7.4 Ω/km*** 7.2 mm	0.455	11.30	75	81 %	16.8	55.0	1 10 20 40 50 60 100 300 750	0.2 0.5 0.7 1.0 1.1 1.3 1.6 3.1 4.6	0.5 1.6 2.3 3.3 3.7 4.1 5.2 10.3 15.2



Return loss at 5-750 MHz: ≥ 23 dB

Screening attenuation at 30-1000 MHz: ≥ 75 dB
Pulling Tension: 300 N
Spools are one piece, but length may vary ±5 % from length shown.

Foam Polyethylene Insulation • Red FRNC/LSNH Jacket

70°C	**7784ANH**	1000 1968 3280	305 600 1000	100.1 197.1 328.5	52.3 102.9 171.5	1.4mm 16 AWG Solid SPC 18.4 Ω/km* 11.0 Ω/km**	0.256	6.50	90 % SPC Braid + 85 % BC Braid 7.4 Ω/km*** 7.2 mm	0.455	11.30	75	81 %	16.8	55.0			see above		

Return loss at 5-750 MHz: ≥ 23 dB

Screening attenuation at 30-1000 MHz: ≥ 75 dB
Pulling Tension: 300 N
Spools are one piece, but length may vary 0 % to +10 % from length shown, 1000 m +/-5 %.

Triax 11 • Stranded (19x0.28) 1.4 mm Silver-Plated Copper • 90 % Silver-Plated Copper Braid • 85 % Bare Copper Braid

Foam Polyethylene Insulation • Red PVC Jacket

70°C	**7784AF**	1000 1968	305 600	100.1 197.1	47.9 94.1	1.4mm 17 AWG (19x0.28) SPC 21.4 Ω/km* 14.0 Ω/km**	0.256	6.50	90 % SPC Braid + 85 % BC Braid 7.4 Ω/km*** 7.2 mm	0.433	11.00	75	82 %	16.5	54.0	1 5 10 100 180 360 750	0.2 0.3 0.5 1.7 2.4 3.5 5.2	0.5 1.1 1.6 5.6 7.9 11.5 17.1

Flexible

Return loss at 5-750 MHz: ≥ 23 dB

Screening attenuation at 30-1000 MHz: ≥ 75 dB
Pulling Tension: 270 N
Spools are one piece, but length may vary 0 % to +10 % from length shown.

Triax 11 • Solid 1.4 mm Bare Copper • 85 % Bare Copper Braid • 80 % Bare Copper Braid

Foam Polyethylene Insulation • Red PVC Jacket

70°C	**7784E**	1640	500	173.5	78.7	1.4mm 16 AWG Solid BC 18.2 Ω/km* 11.2 Ω/km**	0.256	6.50	85 % BC Braid + 80 % BC Braid 7.4 Ω/km*** 7.2 mm	0.433	11.00	75	81 %	16.8	55.0	1 3 5 10 100 300 750	0.2 0.2 0.4 0.5 1.8 3.2 4.8	0.5 0.8 1.3 1.7 5.8 10.6 15.6

Available: 7784ENH - with FRNC/LSNH Jacket
7784EPU - with PUR Jacket

Pulling Tension: 300 N
Spools are one piece, but length may vary ±5 % from length shown.

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • BC = Bare Copper • SPC = Silver-Plated Copper

Video Triax Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 ft.	Nominal Attenuation dB/ 100 m
Triax 14 • Stranded (7x0.75) 2.2 mm Silver-Plated Copper • 80% Silver-Plated Copper Braid • 80% Bare Copper Braid																			
Foam Polyethylene Insulation • Red PVC Jacket																			
70°C	**7785A**		1000	305	157.9	76.2	2.21 mm	0.382	9.70	80% SPC	0.571	14.50	75	82%	16.5	54.0	1	0.1	0.4
			1640	500	259.0	124.9	12 AWG			Braid							10	0.4	1.3
			1968	600	310.8	149.9	(7x0.75) SPC			+ 80% BC							20	0.5	1.7
							12.1 Ω/km*			Braid							40	0.8	2.5
							5.7 Ω/km**			6.4 Ω/km***							50	0.9	2.8
										10.4 mm							60	0.9	3.1
																	100	1.3	4.2
			Return loss at 5-850 MHz: ≥ 21 dB							Screening attenuation at 30-1000 MHz: ≥ 75 dB							300	2.3	7.6
										Pulling Tension: 550 N							1000	4.4	14.3
										Spools are one piece, but length may vary 305 m 0% to +5%, 500 m ±10%, 600 m ±10% from length shown.									
Foam Polyethylene Insulation • Red PVC Jacket																			
70°C	**7785ANH**		1000	305	157.9	80.3	2.21 mm	0.382	9.70	80% SPC	0.571	14.50	75	82%	16.5	54.0	see above		
			1640	500	259.0	131.6	12 AWG			Braid									
			1968	600	310.8	157.9	(7x0.75) SPC			+ 80% BC									
							12.1 Ω/km*			Braid									
							5.7 Ω/km**			6.4 Ω/km***									
										10.4 mm									
			Return loss at 5-850 MHz: ≥ 21 dB							Screening attenuation at 30-1000 MHz: ≥ 75 dB									
										Pulling Tension: 550 N									
										Spools are one piece, but length may vary 305 m 0% to +5%, 500 m ±5%, 600 m 0% to +10% from length shown.									

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • BC = Bare Copper • SPC = Silver-Plated Copper

Standard Analog Video Cables

75 Ohm Coax

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 ft.	Nominal Attenuation dB/ 100 m

23 AWG • Solid 0.6 mm **Copper-Covered Steel Conductor** • 95 % Bare Copper Braid

Polyethylene Insulation • Black PVC Jacket

30V RMS 75°C UL AWM Style 1354, VW1 — **8241** — NEC: CM

0.6/3.7
RG-59/U Typ

Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR
100	31	4.4	2.0	0.58 mm
U-500	U-152	19.5	8.8	23 AWG
500	152	18.5	8.4	Solid CCS
U-1000	U-305	38.0	17.2	169.2 Ω/km*
1000	305	40.0	18.1	160.7 Ω/km**
2000	610	80.0	36.3	
5000	1524	200.0	90.7	

Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m
0.146	3.71	95% BC Braid 8.5 Ω/km***	0.240	6.10	75	66%	20.5	67.3

Nominal Attenuation MHz	dB/ 100 ft.	dB/ 100 m
1	0.6	2.0
10	1.1	3.6
50	2.4	7.9
100	3.4	11.2
200	4.9	16.1
400	7.0	23.0
700	9.7	31.8
900	11.1	36.4
1000	12.0	39.4

U-305 m put-up also available in Red, Yellow, Green, Light Blue, White, Orange and Black.

Nominal Delay: 5.053 ns/m
Pulling Tension: 276 N

22 AWG • Stranded (7x30) 0.8 mm Bare Copper Conductor • 95 % Bare Copper Braid

Polyethylene Insulation • Black PVC Jacket

30V RMS 80°C UL AWM Style 1354 — **9259** — NEC: CM CEC: CM

0.7/3.7

Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR
100	31	4.1	1.9	0.76 mm
U-500	U-152	18.1	8.2	22 AWG
500	152	16.6	7.5	(7x30) BC
U-1000	U-305	35.0	15.9	57.7 Ω/km*
1000	305	37.0	16.8	49.2 Ω/km**

Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m
0.146	3.71	95% BC Braid 8.5 Ω/km***	0.241	6.12	75	78%	17.3	56.7

Nominal Attenuation MHz	dB/ 100 ft.	dB/ 100 m
1	0.3	1.0
10	0.9	3.0
50	2.1	6.9
100	3.0	9.8
200	4.5	14.8
400	6.6	21.7
700	8.9	29.2
900	10.1	33.1
1000	10.9	35.8

For CCTV applications.

Nominal Delay: 5.053 ns/m
Pulling Tension: 275 N

20 AWG • Solid 0.8 mm Bare Copper • 98 % Tinned Copper Double Braid

Polyethylene Insulation • Polyethylene Jacket (Red, Yellow, Green, Light Blue, White, Orange and Black)

80°C — **8281**

0.8/5.0
RG-59/U Type

Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR
500	152	37.5	17.0	0.81 mm
1000	305	74.0	33.6	20 AWG
				Solid BC
				36.1 Ω/km*
				32.5 Ω/km**

Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m
0.198	5.03	Double Braid 98% TC 3.6 Ω/km***	0.305	7.75	75	66%	21.0	68.9

Nominal Attenuation MHz	dB/ 100 ft.	dB/ 100 m
1	0.3	1.0
3.6	0.5	1.6
10	0.8	2.6
71.5	2.1	6.9
135	3.0	9.8
270	4.3	14.1
360	5.1	16.7
540	6.3	20.7
720	7.4	24.3
750	7.6	24.9
1000	9.2	30.2

152 m put-up not available in White.

Nominal Delay: 5.053 ns/m
Pulling Tension: 515 N

18 AWG • Solid 1.0 mm Bare Copper • **Duofoil®** • 60 % Tinned Copper Braid

Gas-Injected Foam HDPE Insulation • Black PVC Jacket

30V RMS 80°C UL AWM Style 1354 — **9248** — NEC: CM CEC: CM

1.0/4.6
RG-6

Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR
U-500	U-152	16.5	7.5	1.02 mm
500	152	15.0	6.8	18 AWG
U-1000	U-305	32.0	14.5	Solid BC
1000	305	33.0	15.0	39.4 Ω/km*
1640	500	55.8	25.3	21.0 Ω/km**
3280	1000	108.2	49.1	

Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m
0.180	4.57	Duofoil® + 60% TC Braid 18.4 Ω/km***	0.270	6.86	75	82%	16.2	53.1

Nominal Attenuation MHz	dB/ 100 ft.	dB/ 100 m
1	0.3	1.0
10	0.7	2.3
50	1.5	4.9
100	2.0	6.6
200	2.8	9.2
400	4.0	13.1
700	5.3	17.4
900	6.1	20.0
1000	6.5	21.3
1500	8.3	27.2

Nominal Delay: 4.068 ns/m
Pulling Tension: 195 N

14 AWG • Solid 1.6 mm Bare Copper • **Duofoil®** • 60 % Tinned Copper Braid

Gas-Injected Foam HDPE Insulation • Black PVC Jacket

80°C — **9292**

1.6/7.2
RG-11

Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR
1000	305	75.0	34.0	1.63 mm
				14 AWG
				Solid BC
				18.3 Ω/km*
				8.5 Ω/km**

Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m
0.280	7.11	Duofoil® + 60% TC Braid 9.8 Ω/km***	0.405	10.29	75	84%	16.1	52.8

Nominal Attenuation MHz	dB/ 100 ft.	dB/ 100 m
1	0.2	0.6
10	0.5	1.6
50	0.9	3.0
100	1.3	4.3
200	1.6	5.3
400	2.3	7.5
700	3.3	10.8
900	4.0	13.1
1000	4.3	14.1

Nominal Delay: 3.937 ns/m
Pulling Tension: 435 N

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • TC = Tinned Copper • BC = Bare Copper • CCS = Copper-Covered Steel
Duofoil® see technical information page 23.13.

Standard Analog Video Cables

RGB Component Video Multicore Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material 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/ 100 m

30 AWG • Stranded (7x38) 0.3 mm Tinned Copper • **Duofoil®** • 90 % Tinned Copper Braid (Coaxes) • Overall **Beldfoil®** Shield • TC Drain Wire

Foam HDPE Insulation • Overall Black PVC Jacket

30V RMS 60°C	NEC: CL2						0.31 mm 30 AWG (7x38) TC 413.2 Ω/km* 382.1 Ω/km**	0.056	1.42	Duofoil® + 90 % TC Braid 31.1 Ω/km***			75	78 %	17.3	56.8	1 5 10 30 50 100 1000	0.8 1.5 2.2 4.0 5.4 8.2 32.8	2.6 4.9 7.2 13.1 17.7 26.9 107.6

Miniature
0.3/1.4

Pulling Tension:

1520A	3 Coax	500 1000	152 305	23.0 50.0	10.4 22.7						0.283	7.19							187 N
1521A	4 Coax	500 1000	152 305	31.0 60.0	14.1 27.2						0.310	7.87							249 N
1522A	5 Coax	500 1000	152 305	34.5 67.0	15.6 30.4						0.338	8.59							311 N

Nominal Delay: 4.265 ns/m
100 % Sweep tested. 10 MHz to 40 MHz.
Color Code: see chart below

26 AWG • Stranded (7x34) 0.5 mm Bare Copper • **Duofoil®** • 93 % Tinned Copper Braid (Coaxes)

Foam HDPE Insulation • Overall Matte Black PVC Jacket

30V RMS 60°C							0.48 mm 26 AWG (7x34) TC 164.3 Ω/km* 136.1 Ω/km**	0.090	2.29	Duofoil® + 93 % TC Braid 28.2 Ω/km***			75	78 %	17.3	56.8	1 5 10 30 50 100 1000	0.6 1.3 1.8 3.1 3.9 5.4 15.9	2.0 4.3 5.9 10.2 12.8 17.7 52.2

High-Flex
0.5/2.3

Pulling Tension:

1406B	3 Coax	1000	305	79.0	35.8						0.388	9.86							458 N
1407B	4 Coax	1000	305	100.0	45.4						0.455	11.56							614 N
1417B	5 Coax	1000	305	110.0	49.9						0.477	12.12							765 N

Nominal Delay: 4.265 ns/m
100 % Sweep tested. 10 MHz to 40 MHz.
Color Code: see chart below

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • TC = Tinned Copper

Duofoil® see technical information page 23.13.

Color Code

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

Low Loss HDTV/SDI Digital Coax

75 Ohm Coax

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 ft.	Nominal Attenuation dB/ 100 m
28.5 AWG • Solid 0.3 mm Bare Copper Conductor • **Duobond® foil** • 95% Tinned Copper Braid																			
Gas-Injected Foam HDPE Insulation • PVC Jacket (Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White and Black)																			
DigiTruck HDTV/SDI Digital Video 70°C	**179DT**	NEC: CM CEC: CMG FT4	500 1000	152 305	5.0 8.0	2.3 3.6	0.31 mm 28.5 AWG Solid BC 379.2 Ω/km* 350.0 Ω/km**	0.056	1.42	Duobond® + 95% TC Braid 29.2 Ω/km***	0.100	2.54	75	77%	17.5	57.4	1 5 10 67.5 71.5 100 135 270 360 540 720 750 1000 1500 2000 2250 3000 4500	1.2 1.9 2.4 5.9 6.0 6.9 7.9 10.8 12.5 15.4 17.9 18.3 21.3 26.3 30.8 32.8 38.3 47.5	3.9 6.1 7.8 19.3 19.6 22.6 25.8 35.4 41.0 50.5 58.7 60.0 69.9 86.3 101.1 107.6 125.7 155.8
0.3/1.4 RG-179			Return loss at 5-1600 MHz: ≥ 23 dB 1600-3000 MHz: ≥ 21 dB							Nominal Delay: 4.331 ns/m 100% Sweep tested. 5 Mhz to 3 GHz. Pulling Tension: 66 N									
25 AWG • Stranded (19x37) 0.5 mm Bare Copper • **Duofoil®** • 95% Tinned Copper Braid																			
Gas-Injected Foam HDPE Insulation • PVC Jacket (Brown, Red, Orange, Yellow, Blue, Violet, Grey, White and Black)																			
HDTV/SDI Digital Video 75°C	**1865A**	NEC: CMR CEC: CMG FT4	1000	305	14.0	6.4	0.53 mm 25 AWG (19x37) BC 107.6 Ω/km* 89.9 Ω/km**	0.094	2.39	Duofoil® + 95% TC Braid 17.7 Ω/km***	0.150	3.81	75	82%	16.5	54.1	1 5 71.5 360 540 750 1000 1500 2250 3000	0.5 1.1 3.7 8.2 10.1 12.0 13.9 17.0 20.8 24.0	1.5 3.6 12.1 26.9 33.1 39.4 45.6 55.8 68.2 78.7
0.5/2.4 RG-59/U Type			Nominal Delay: 4.068 ns/m 100% Sweep tested. 5 Mhz to 3 GHz.							Pulling Tension: 133 N									
23 AWG • Solid 0.6 mm Bare Copper Conductor • **Duofoil®** • 95% Tinned Copper Braid																			
Gas-Injected Foam HDPE Insulation • PVC Jacket																			
HDTV/SDI Digital Video 75°C	**1855A**	NEC: CMR CEC: CMG FT4	500 1000	152 305	9.0 16.0	4.1 7.3	0.58 mm 23 AWG Solid BC 90.8 Ω/km* 65.9 Ω/km**	0.102	2.59	Duofoil® + 95% TC Braid 24.9 Ω/km***	0.159	4.04	75	82%	16.3	53.5	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2000 2250 3000 4500	0.4 0.8 1.2 3.1 3.8 5.4 6.2 7.7 9.5 9.6 10.5 13.0 15.1 16.0 18.5 22.8	1.3 2.6 3.9 10.0 12.5 17.7 20.3 25.3 31.1 31.5 34.4 42.6 49.5 52.5 60.7 74.8
0.6/2.6 RG-59/U Type			Return loss at 5-1600 MHz: ≥ 23 dB 1601-4500 MHz: ≥ 21 dB 152 m put-up available in Black only.							Nominal Delay: 4.003 ns/m 100% Sweep tested. 5 Mhz to 3 GHz. Pulling Tension: 160 N Also available in multiples, bundled. See page 19.31 and 19.33.									
22 AWG • Solid 0.6 mm Tinned Copper • **Duofoil®** • 90% Tinned Copper Braid																			
Gas-Injected Foam HDPE Insulation • Green with FRNC Jacket																			
HDTV/SDI Digital Video 75°C	**1855ENH**		328 1640	100 500	6.2 30.9	2.8 14.0	0.64 mm 22 AWG Solid TC 69.0 Ω/km* 52.0 Ω/km**	0.110	2.80	Duofoil® + 90% TC Braid 17.0 Ω/km***	0.175	4.45	75	84%	16.2	53.0	71.5 135 270 360 540 750 1500 3000	2.6 3.5 4.9 5.7 7.0 8.2 11.8 17.1	8.6 11.5 16.1 18.6 22.8 26.9 38.7 56.1
0.6/2.8 RG-59/U Type																			

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • TC = Tinned Copper • BC = Bare Copper

Duofoil® and Duobond® see technical information page 23.13.

Low Loss HDTV/SDI Digital Coax

75 Ohm Coax

BRILLIANCE®

Description	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/100 ft.	Nominal Attenuation dB/100 m
23 AWG • Solid 0.6 mm Bare Copper • 90% Tinned Copper Double Braid + 85% Tinned Copper Braid																			
Polyethylene Insulation • Cream PVC Jacket																			
SDI Digital Video 75°C	**BE43187**		328	100	7.5	7.0	0.58 mm	0.146	3.70	Double Braid	0.248	6.30	75	66%	20.7	68.0	1	0.3	1.1
			1640	500	37.5	35.0	23 AWG			90% TC							10	1.1	3.5
							Solid BC			85% TC							135	3.8	12.5
																	270	5.5	17.9
																	360	6.3	20.8
																	540	8.0	26.2
0.6/3.7 RG-59/U Type																	750	9.8	32.0
																	1000	11.3	37.0
22 AWG • Stranded (7x29) 0.8 mm Bare Compacted Copper# • 98% Tinned Copper Double Braid																			
Gas-Injected Foam HDPE Insulation • PVC Jacket (Matte Black, Red, Green, Blue, Yellow, White and Violet)																			
HDTV/SDI Digital Video 75°C	**1505F**	NEC: CM CEC: CM	1000	305	45.0	20.4	0.76 mm	0.145	3.68	Double Braid	0.242	6.15	75	80%	17.0	55.7	1	0.2	0.7
							22 AWG			98% TC							3.6	0.5	1.6
							(7x29) BCC			Braid							5	0.6	2.0
							47.8 Ω/km*			7.8 Ω/km***							7	0.7	2.4
							40.0 Ω/km**										10	0.9	2.4
																	71.5	2.5	8.2
																	100	3.0	9.8
0.8/3.7 RG-59/U Type																	135	3.5	11.5
																	270	5.1	16.7
																	360	6.0	19.7
																	540	7.4	24.3
																	720	8.7	28.5
																	750	8.9	29.2
																	1000	10.5	34.4
																	1500	13.3	43.6
		Return loss at 5-3000 MHz: ≥ 15 dB								Nominal Delay: 4.265 ns/m							2000	15.7	51.5
										100% Sweep tested. 5 Mhz to 3 GHz.							2250	16.9	55.4
										Pulling Tension: 400 N							3000	20.3	66.6
20 AWG • Solid 0.8 mm Bare Copper • **Duofoil®** • 95% Tinned Copper Braid																			
Gas-Injected Foam HDPE Insulation • PVC Jacket (Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White and Black)																			
HDTV/SDI Digital Video 75°C	**1505A**	NEC: CMR CEC: CMG FT4	500	152	17.5	7.9	0.81 mm	0.145	3.68	Duofoil®	0.233	5.92	75	83%	16.3	53.5	1	0.3	1.0
			1000	305	36.0	16.3	20 AWG			95% TC							3.6	0.5	1.8
			5000	1524	165.4	75.0	Solid BC			Braid							5	0.6	2.1
							45.3 Ω/km*			12.5 Ω/km***							7	0.7	2.4
							32.8 Ω/km**										10	0.9	2.9
																	71.5	2.1	6.9
																	100	2.3	7.6
0.8/3.7 RG-59/U Type																	135	2.7	8.9
																	270	3.8	12.5
																	360	4.4	14.4
																	540	5.5	18.0
																	720	6.4	21.0
																	750	6.5	21.3
																	1000	7.6	24.9
																	1500	9.3	30.5
		Return loss at 5-1600 MHz: ≥ 23 dB								Nominal Delay: 4.003 ns/m							2000	9.3	30.5
		1601-4500 MHz: ≥ 21 dB								100% Sweep tested. 5 Mhz to 3 GHz.							2250	11.6	38.0
										Pulling Tension: 209 N							3000	13.4	44.0
		152 m put-up available in Black, Red or Blue only.								Also available in bundled versions. See page 19.32 and 19.34.							4500	16.4	53.8
Gas-Injected Foam HDPE • Black FRNC/LSNH Jacket																			
HDTV/SDI Digital Video 75°C	**1505ANH**	IEC 332-3C IEC 332-1 IEC 61034-1 IEC 60331-11 IEC 60754-1 IEC 60754-2	1000	305	36.0	15.5	0.81 mm	0.145	3.68	Duofoil®	0.233	5.92	75	83%	16.3	53.5			see above
							20 AWG			95% TC									
							Solid BC			Braid									
							45.2 Ω/km*			12.4 Ω/km***									
							32.8 Ω/km**												
0.8/3.7 RG-59/U Type																			
		Return loss at 5-1600 MHz: ≥ 23 dB								Nominal Delay: 4.003 ns/m									
		1601-4500 MHz: ≥ 21 dB								100% Sweep tested. 5 Mhz to 3 GHz.									
										Pulling Tension: 209 N									

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • TC = Tinned Copper • BC = Bare Copper • BCC = Bare Compacted Copper
#Compacted conductor combines impedance uniformity of solid conductors and "nick-resistance" of stranded conductors.

Duofoil® see technical information page 23.13.

Low Loss HDTV/SDI Digital Coax

75 Ohm Coax

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 ft.	Nominal Attenuation dB/ 100 m
18 AWG • Solid 1.0 mm Bare Copper • **Duofoil®** • 95% Tinned Copper Braid																			
Gas-Injected Foam HDPE • PVC Jacket (Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White and Black)																			
HDTV/SDI Digital Video 70°C	**1694A**	NEC: CMR CEC: CMG FT4	500 1000 4500	152 305 1372	20.5 45.0 202.5	9.3 20.4 91.9	1.02 mm 18 AWG Solid BC 30.2 Ω/km* 21.0 Ω/km**	0.180	4.57	Duofoil® + 95% TC Braid 9.2 Ω/km***	0.275	6.99	75	82%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720 750 1000 1500 2250 3000 4500	0.2 0.5 0.7 1.6 2.1 3.0 3.4 4.3 4.9 5.0 5.9 7.3 9.1 10.7 13.3	0.8 1.5 2.4 5.2 6.9 9.7 11.3 13.9 16.1 16.4 19.3 24.0 30.0 35.0 43.6
 1.0/4.6 RG-6/U Type																			
		Return loss at 5-1600 MHz: ≥ 23 dB 1601-4500 MHz: ≥ 21 dB 152 m put-up available in Black only.								Nominal Delay: 4.068 ns/m 100% Sweep tested. 5 Mhz to 4.5 GHz. Pulling Tension: 306 N Also available in bundled versions, see page 19.32.									
Gas-Injected Foam HDPE • Black FRNC Jacket																			
HDTV/SDI Digital Video 70°C	**1694ANH**	IEC 332-3C IEC 332-1 IEC 61034-1 IEC 60331-11 IEC 60754-1 IEC 60754-2	328 1000 1640 4500	100 305 500 1372	15.4 46.2 77.0 207.7	6.4 19.6 32.2 88.2	1.02 mm 18 AWG Solid BC 30.2 Ω/km* 21.0 Ω/km**	0.180	4.57	Duofoil® + 95% TC Braid 9.2 Ω/km***	0.275	6.99	75	82%	16.2	53.1			see above
 1.0/4.6 RG-6/U Type																			
		Return loss at 5-1600 MHz: ≥ 23 dB 1601-4500 MHz: ≥ 21 dB 305 m put-up available in Black only.								Nominal Delay: 4.068 ns/m 100% Sweep tested. 5 Mhz to 4.5 GHz. Pulling Tension: 306 N									
19 AWG • Stranded (7x27) 1.0 mm Bare Copper • 99% Tinned Copper Double Braid																			
Gas-Injected Foam HDPE • PVC Jacket (Black, Red, Green, Blue, White, Orange, Yellow and Violet)																			
HDTV/SDI Digital Video 75°C 300V RMS	**1694F**	NEC: CMR CEC: CMG	1000	305	54.0	24.5	1.016 mm 19 AWG (7x27) BC 33.3 Ω/km* 27.8 Ω/km**	0.225	5.72	Double Braid + 99% TC Braid 5.5 Ω/km***	0.276	7.01	75	81%	16.2	53.1	1 3.6 10 71.5 270 360 540 720 750 1000 1500 2250 3000 4500	0.2 0.5 0.7 2.0 4.0 4.7 5.9 6.9 7.0 8.2 10.4 13.2 15.6 19.8	0.8 1.5 2.4 6.5 13.1 15.4 19.3 22.6 22.9 26.9 34.1 43.3 51.1 64.9
 1.0/4.6 RG-6/U Type																			
		Return loss at 5-850 MHz: ≥ 20 dB 850-4500 MHz: ≥ 15 dB								Nominal Delay: 4.101 ns/m 100% Sweep tested. 5 Mhz to 4.5 GHz. Pulling Tension: 364 N									

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • TC = Tinned Copper • BC = Bare Copper

Duofoil® see technical information page 23.13.

Low Loss HDTV/SDI Digital Coax

75 Ohm Coax

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 ft.	Nominal Attenuation dB/ 100 m
14 AWG • Solid 1.6 mm Bare Copper • **Duofoil®** • 95 % Tinned Copper Braid																			
Gas-Injected Foam HDPE Insulation • PVC Jacket (Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White and Black)																			
HDTV/SDI Digital Video 75°C	**7731A**	NEC:	500	152	46.5	21.1	1.63 mm	0.280	7.11	Duofoil®	0.400	10.16	75	85%	16.0	52.5	1	0.2	0.5
		CMR	1000	305	95.0	43.1	14 AWG			+ 95% TC							10	0.5	1.5
		CEC:	4000	1219	388.0	176.0	Solid BC			Braid							71.5	1.1	3.6
		CMG FT4					13.1 Ω/km*			4.9 Ω/km***							135	1.5	4.8
							8.2 Ω/km**										270	2.1	6.9
																	360	2.5	8.0
																	540	3.1	10.0
1.6/7.2 RG-11/U Type																	720	3.6	11.7
																	750	3.7	12.0
																	1000	4.3	14.1
		Return loss at	5-1600 MHz: ≥ 23 dB							Nominal Delay: 3.97 ns/m							1500	5.5	18.0
			1601-4500 MHz: ≥ 21 dB							100% Sweep tested. 5 Mhz to 3 GHz.							2250	6.9	22.6
																	3000	8.2	26.9
		152 m put-up available in Black only.								Pulling Tension: 644 N							4500	10.4	34.1
Gas-Injected Foam HDPE • Black FRNC Jacket																			
HDTV/SDI Digital Video 70°C	**7731ANH**	IEC 332-3C	1000	305	100.0	40.4	1.63 mm	0.280	7.11	Duofoil®	0.400	10.16	75	85%	16.0	52.5			see above
		IEC 332-1	1640	500	164.0	66.3	14 AWG			+ 95% TC									
		IEC 61034-1	3280	1000	328.0	132.5	Solid BC			Braid									
		IEC 60331-11	4000	1219	400.0	161.5	13.1 Ω/km*			4.9 Ω/km***									
		IEC 60754-1					8.2 Ω/km**												
		IEC 60754-2																	
1.6/7.2 RG-11/U Type																			
		Return loss at	5-1600 MHz: ≥ 23 dB							Nominal Delay: 3.97 ns/m									
			1601-4500 MHz: ≥ 21 dB							100% Sweep tested. 5 Mhz to 3 GHz.									
										Pulling Tension: 644 N									

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • TC = Tinned Copper • BC = Bare Copper

Duofoil® see technical information page 23.13.

HDTV/SDI Digital Coax

RGB Component Video Multicore Cables
VideoFlex® Snake Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 ft.	Nominal Attenuation dB/ 100 m
25 AWG • Solid 0.5 mm Tinned Copper • **Duobond®** • 95% Tinned Interlocked Serve (Coaxes)																			
FPFA Insulation • Overall Matte Black PVC Jacket																			
HDTV/SDI Digital Video 60°C		NEC: CMR CEC: CMG					0.46 mm 25 AWG Solid TC 129.2 Ω/km* 111.5 Ω/km**	0.074	1.88	Duobond® 95% TC Serve 17.7 Ω/km***	0.114	2.90	75	80%	17.0	55.8	1	0.5	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
																	750	13.4	44.0
																	900	15.0	49.2
																	1000	15.8	51.8
																	3000	31.2	102.4
Miniature 0.5/1.9																			
Nominal Delay: 4.068 ns/m • Color Code: see chart 1																			Pulling Tension:
	1277R	3 Coax	† 500	152	25.5	11.6					0.320	8.13							400 N
			† 1000	305	48.0	21.8													
	1278R	4 Coax	250	76	21.8	9.9					0.351	8.92							489 N
			† 500	152	31.5	14.3													
			† 1000	305	60.0	27.2													
	1279R	5 Coax	† 500	152	40.5	18.4					0.403	10.24							578 N
			† 1000	305	80.0	36.3													
	1280R	6 Coax	† 500	152	44.0	20.0					0.423	10.74							601 N
			† 1000	305	87.0	39.5													
23 AWG • Solid 0.6 mm Tinned Copper • **Duofoil®** • 95% Tinned Copper Braid (Coaxes)																			
Gas-Injected Foam HDPE Insulation • Overall Matte Black PVC Jacket																			
HDTV/SDI Digital Video 75°C		NEC: CMR CEC: CMG FT4					0.58 mm 23 AWG Solid TC 90.8 Ω/km* 65.9 Ω/km**	0.100	2.55	Duofoil® + 95% TC Braid 24.9 Ω/km***	0.159	4.03	75	83%	16.5	54.1	1	0.4	1.3
																	3.6	0.8	2.6
																	10	1.2	3.9
																	270	5.4	17.7
																	360	6.2	20.3
																	750	9.5	31.2
																	1000	10.5	34.4
																	2500	16.9	55.4
																	3000	18.5	60.7
1855A Bundled 0.6/2.6																			
Nominal Delay: 4.068 ns/m • Sweep tested. 5 MHz to 3 GHz. • Color Code: see chart 2																			Pulling Tension:
	7787A	3 Coax	500	152	47.5	21.5					0.432	10.97							480 N
			1000	305	94.0	42.6													
	7788A	4 Coax	1000	305	110.0	49.9					0.481	12.22							640 N
	7789A	5 Coax	500	152	73.0	33.1					0.539	13.69							801 N
			1000	305	142.0	64.4													
	7790A	6 Coax	500	152	88.5	40.1					0.597	15.16							961 N
			1000	305	176.0	79.8													
	7791A	10 Coax	500	152	155.5	70.5					0.796	20.22							1601 N
			1000	305	304.0	137.9													
	7792A	12 Coax	500	152	178.5	81.0					0.825	20.96							1922 N
			1000	305	367.0	166.5													

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • TC = Tinned Copper • FPFA = Foam Perfluoroalkoxy • HDPE = High-density Polyethylene • DCR = DC resistance • † Spools are one piece, but length may vary ±10% from length shown. • Duobond® see technical information page 23.13.

Color Code (Chart 1)

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

Color Code (Chart 2)

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

HDTV/SDI Digital Coax

RGB Component Video Multicore Cables
VideoFlex® Snake Cables

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 ft.	Nominal Attenuation dB/ 100 m
20 AWG • Solid 0.8 mm Bare Copper • **Duofoil®** • 95 % Tinned Copper Braid (Coaxes)																			
Gas-Injected Foam HDPE Insulation • Overall Matte Black PVC Jacket																			
HDTV/SDI Digital Video 75°C  1505A Bundled 0.8/3.7		NEC: CMR CEC: CMG FT4					0.81 mm 20 AWG Solid BC 45.3 Ω/km* 32.8 Ω/km**	0.145	3.68	Duofoil® + 95 % TC Braid 12.5 Ω/km***	0.235	5.97	75	83 %	16.2	53.1	1 3 10 270 360 750 1000 2500 3000	0.3 0.5 0.9 3.8 4.4 6.5 7.6 12.4 13.8	1.0 1.8 2.9 12.5 14.4 21.3 24.9 40.7 45.3
																			Pulling Tension:
	7794A	3 Coax	500 1000	152 305	94.5 187.0	42.9 84.8					0.631	16.03							961 N
	7795A	4 Coax	500 1000	152 305	116.5 237.0	52.8 107.5					0.706	17.93							1281 N
	7796A	5 Coax	500 1000	152 305	153.0 299.0	69.4 135.6					0.790	20.07							1601 N
	7798A	10 Coax	500 1000	152 305	319.5 625.0	144.9 283.5					1.166	29.62							3203 N
	Nominal Delay: 4.265 ns/m • Sweep tested. 5 MHz to 3 GHz. Color Code: see chart below																		
18 AWG • Solid 1.0 mm Bare Copper • **Duofoil®** • 95 % Tinned Copper Braid (Coaxes)																			
Gas-Injected Foam HDPE Insulation • Overall Matte Black PVC Jacket																			
HDTV/SDI Digital Video 75°C  1694A Bundled 1.0/4.6		NEC: CMR CEC: CMG FT4					1.02 mm 18 AWG Solid BC 30.8 Ω/km* 21.0 Ω/km**	0.180	4.57	Duofoil® + 95 % TC Braid 9.8 Ω/km***	0.275	6.99	75	82 %	16.2	53.1	1 3.6 10 270 360 750 1000 2500 3000	0.2 0.5 0.7 3.0 3.4 5.0 5.9 9.7 10.7	0.8 1.5 2.4 9.7 11.3 16.4 19.3 31.8 35.0
																			Pulling Tension:
	7710A	3 Coax	500 1000	152 305	137.5 285.0	62.4 129.3					0.770	19.56							921 N
	7711A	4 Coax	500 1000	152 305	179.5 350.0	81.4 158.8					0.900	22.86							1227 N
	7712A	5 Coax	500 1000	152 305	216.5 454.0	98.2 205.9					0.970	24.64							1534 N
	7713A	10 Coax	500 1000	152 305	463.0 904.0	210.0 410.1					1.386	35.20							3069 N
	Nominal Delay: 4.068 ns/m • Sweep tested. 5 MHz to 3 GHz. Color Code: see chart below																		

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • TC = Tinned Copper • BC = Bare Copper
Duofoil® see technical information page 23.13.

Color Code

Cond.	Color
1	Red
2	Green

Cond.	Color
3	Blue
4	White

Cond.	Color
5	Yellow
6	Brown

Cond.	Color
7	Orange
8	Grey

Cond.	Color
9	Purple
10	Black

HDTV/SDI Digital Coax

RGB Component Video Multicore Cables
Banana Peel® Unjacketed Bundles

BRILLIANCE®

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 ft.	Nominal Attenuation dB/ 100 m

25 AWG • Solid 0.5 mm Tinned Copper • **Duobond®** • 95% Tinned Copper Interlocked Serve Braid (Coaxes) • **Banana Peel® Unjacketed,** Bonded to Central Spline

Foam HDPE Insulation • PVC Jackets in Colors

HDTV/SDI Digital Video 75°C
NEC: CMR CEC: CMG

0.46 mm 25 AWG Solid TC 129.2 Ω/km* 111.5 Ω/km**

0.074 | 1.88 | Duobond® 95% TC Serve 17.7 Ω/km***

0.114 | 2.90 | 75 | 80% | 17.0 | 55.8

MHz	dB/ 100 ft.	dB/ 100 m
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
750	13.4	44.0
900	15.0	49.2
1000	15.8	51.8

Miniature 0.5/1.9

															Pulling Tension:
1281S3	3 Coax	† 500	152	17.0	7.7					0.246	6.25				400 N
		† 1000	305	31.0	14.1										
1281S4	4 Coax	† 500	152	23.5	10.7					0.275	6.99				489 N
		† 1000	305	44.0	20.0										
1281S5	5 Coax	† 250	76	16.0	7.3					0.308	7.82				578 N
		† 500	152	28.5	12.9										
		† 1000	305	55.0	24.9										
1281S6	6 Coax	† 500	152	33.5	15.2					0.342	8.69				601 N
		† 1000	305	68.0	30.8										

100% Sweep tested. 5 MHz to 850 MHz. Patent pending.

Nominal Delay: 4.068 ns/m
Color Code: see chart 1

23 AWG • Solid 0.6 mm Bare Copper • **Duofoil®** • 95% TC Braid (Coaxes) • **Banana Peel® Unjacketed,** Bonded to Central Spline

Gas-Injected Foam HDPE Insulation • PVC Jacket

HDTV/SDI Digital Video 75°C
NEC: CMR CEC: CMG

0.58 mm 23 AWG Solid BC 90.8 Ω/km* 65.9 Ω/km**

0.102 | 2.59 | Duofoil® + 95% TC Braid 24.9 Ω/km***

0.159 | 4.04 | 75 | 82% | 16.3 | 53.5

MHz	dB/ 100 ft.	dB/ 100 m
1	0.4	1.3
3.6	0.8	2.6
10	1.2	3.9
360	6.2	20.3
750	9.6	31.5
1000	10.5	34.4
2000	15.1	49.5
2250	16.0	52.5
3000	18.5	60.7
4500	22.8	74.8

1855A Bundled 0.6/2.6

															Pulling Tension:
1855S3	3 Coax	500	152	29.5	13.4					0.343	8.71				480 N
		1000	305	57.1	25.9										
1855S5	5 Coax	500	152	51.5	23.4					0.429	10.90				800 N
		1000	305	102.1	46.3										
1855S6	6 Coax	500	152	64.1	29.1					0.477	12.12				960 N
		1000	305	121.1	54.9										

Return loss at 5-625 MHz: ≥ 20 dB
625-675 MHz: ≥ 15 dB
675-850 MHz: ≥ 20 dB
850-4500 MHz: ≥ 15 dB

Nominal Delay: 4.068 ns/m
100% Sweep tested. 5 MHz to 5 GHz.
152 m put-up available in Black only.
Color Code: see chart 2

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • TC = Tinned Copper • BC = Bare Copper
† Spools are one piece, but length may vary ±10% from length shown. • Duofoil® and Duobond® see technical information page 23.13.

Color Code (Chart 1)

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

Color Code (Chart 2)

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

HDTV/SDI Digital Coax

RGB Component Video Multicore Cables
Banana Peel® Unjacketed Bundles

BRILLIANCE®

Description	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/100 ft.	Nominal Attenuation dB/100 m
20 AWG • Solid 0.8 mm Bare Copper • **Duofoil®** • 95% TC Braid (Coaxes) • **Banana Peel® Unjacketed,** Bonded to Central Spline																			
Foam HDPE Insulation • Individual PVC Jackets in Colors																			
HDTV/SDI Digital Video 75°C		NEC: CMR CEC: CMG					0.81 mm 20 AWG Solid BC 45.2 Ω/km* 32.8 Ω/km**	0.145	3.68	Duofoil® + 95% TC Braid 12.4 Ω/km***	0.235	5.97	75	83%	16.2	53.1	1	0.3	0.9
																	3.6	0.6	1.9
																	10	0.9	2.9
																	71.5	2.1	6.8
																	135	2.7	8.8
																	270	3.8	12.4
																	360	4.4	14.4
																	540	5.5	18.0
																	720	6.4	20.9
																	750	6.5	21.3
																	1000	7.6	24.9
																	1500	9.4	30.8
																	2500	12.4	40.6
																	3000	13.8	45.2
																	4500	16.5	54.2
1505A Bundled 0.8/3.7 RG-59/U Type																			
																			Pulling Tension:
	1505S3 3 Coax		500	152	55.5	25.2					0.502	12.75							960 N
			1000	305	104.0	47.2													
	1505S5 5 Coax		500	152	95.0	43.1					0.629	15.98							1601 N
			1000	305	185.0	83.9													
	1505S6 6 Coax		500	152	117.6	53.3					0.790	20.07							1921 N
			1000	305	250.3	113.5													

Return loss at
5-475 MHz: ≥ 20 dB
475-525 MHz: ≥ 15 dB
525-850 MHz: ≥ 20 dB
850-4500 MHz: ≥ 15 dB

Nominal Delay: 4.003 ns/m
100% Sweep tested. 5 MHz to 4.5 GHz. Patent pending.
Color Code: see chart below

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • DCR = DC resistance • TC = Tinned Copper • BC = Bare Copper

Duofoil® see technical information page 23.13.

Color Code

Cond.	Color
1	Red
2	Green
3	Blue

Cond.	Color
4	White
5	Yellow
6	Brown