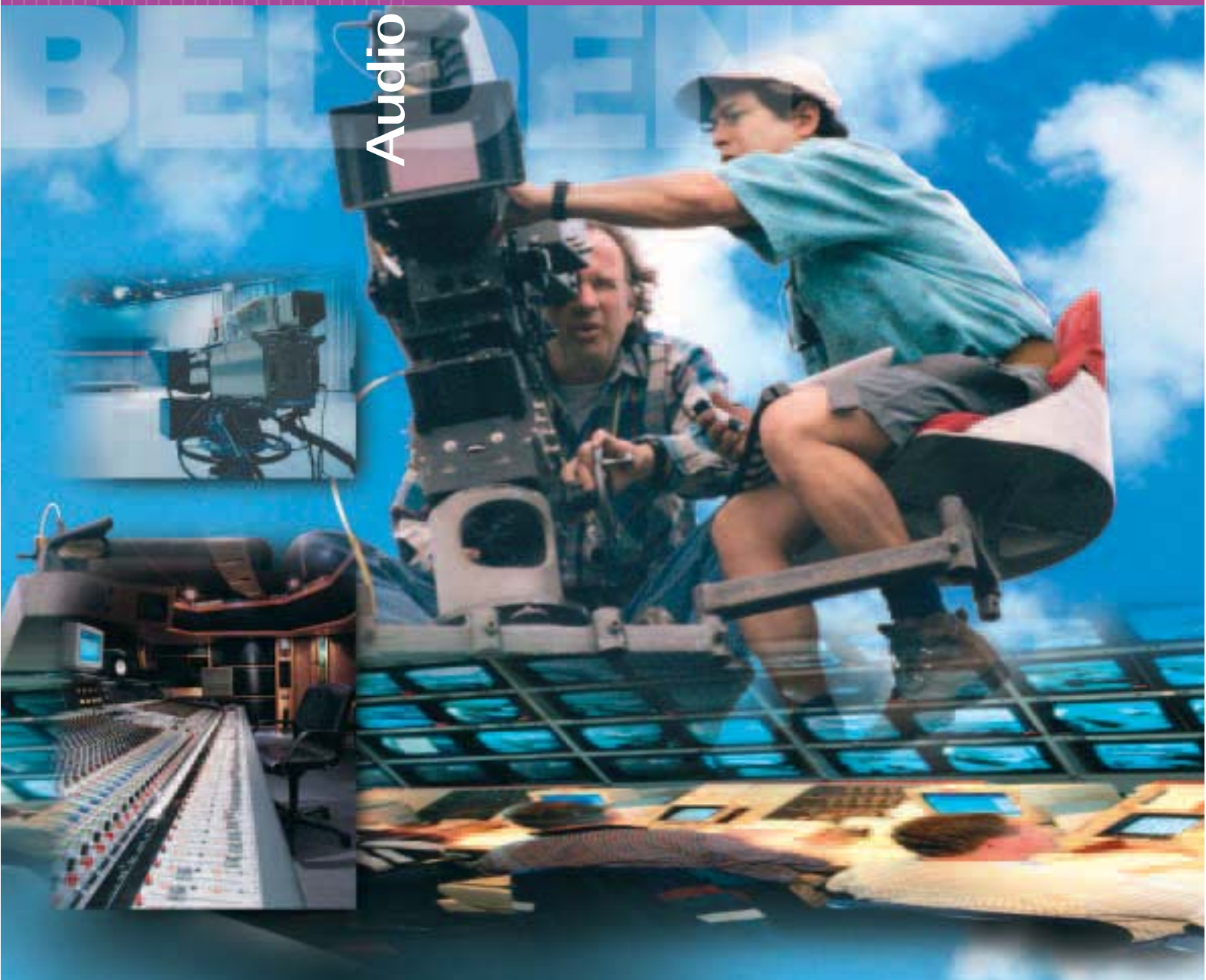
Belden

BRILLIANCE®

Audio / Video Cables

European Edition



Belden Audio/Video Cables

Dependable Solutions in Cabling

Better by design

Our strategic objective is to provide our customers with superior solutions for their present and future wire and cable needs. Accordingly, every solution we devise is based on performance, innovation and reliability – the three cornerstones of Belden's business strategy. The success of this commitment to deliver dependable solutions can be gauged by the many world-famous companies that use our products.

Some of our customers see the superior performance of our products in their industry-leading standards, which include VDE, KEMA, ÖVE, UL, CSA and HAR product approvals. Others point to the international specifications and standards, ranging from EN 50117, RS-485 and IEC 332-3C to TIA/EIA, ISO/IEC 11801, and many more besides. Our products are often called 'future-proof', meaning that the specifications exceed international requirements, with the aim of extending the product's useful life and reducing the replacement rate.

Over the years, Belden has become an international byword for premium quality and reliability, an accolade for excellence earned through decades of dedication to meeting the highest industry standards. Reducing system cost and maintenance are direct, long-term benefits of the ultra long life expectancy of Belden products. It's why our cables are used in some of the largest metropolitan communication networks in the world, like Amsterdam, Vienna and other European cities. And why many industrial installations with 24-hour continuous operation rely on the proven high quality of Belden cables.

Belden's commitment to innovation has historically fuelled new growth for industry players. It has also earned Belden global innovation leadership that is constantly driven by the Belden Engineering Centres. For instance with Duobond®, Flamarrest®, French Braid™ and MediaTwist®. Another yardstick for measuring the success of our novel products are the many patents we hold. But the ultimate criterion is the fitness for use of the products we supply to our customers.

A long history of innovation

For the past 100 years, Belden has been an acknowledged front-runner in the wire and cable industry, developing novel technologies and processes for the manufacture of innovative wire and cable products. Products that keep our customers at the forefront of new developments in their chosen field.

Starting in 1902, when the company was founded in Chicago, Belden has consistently pioneered breakthrough technologies and set new industry standards. This trend was set with early successes like Beldenamel insulation (1905) and the introduction of the soft rubber plug in 1927. Ever since, Belden has been an industry innovator, conceiving and developing special applications in cabling, shielding and jacketing. All focused on customer needs. All clearly establishing Belden's leadership in wire and cable technology.

Global player

The company's successful growth strategy in the 1990s led in 1999 to the purchase of Cable Systems International, the largest specialty telecom cable facility in the world. Other capabilities were created by acquisitions in Hungary, United Kingdom, the USA and the Netherlands, where Belden has its European headquarters and a large R&D Centre and manufacturing facility. Apart from Europe and the US, Belden's worldwide presence includes marketing and sales organizations in Asia Pacific, Latin America and the Middle East.

Today, Belden is a global player in the wire and cable industry, designing, manufacturing and marketing specialty cable, such as copper, and optical fibre cable for electrical, electronic and communications equipment. Reliable products that help Belden's customers keep pace with the shifting dynamics of these fast-moving markets.

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European manufacturing operations

As Belden's global business plans call for a commitment to local markets world-wide and a thorough understanding of local dynamics, Belden has established a very significant presence in core European markets. This ensures that appropriate solutions can always be found to meet the cable and wire needs of our European customers.

Belden has the largest range of cable products in all the markets we serve. Dedicated products matched to local needs. These include over 10.000 products for computer networking and computer equipment; for telecommunications and industrial instrumentation and control; for broadcasting and entertainment; and for cable television and electrical equipment, mainly based on copper conductors or optical fibres.

'Think global, act local'

With European sales accounting for almost a quarter of Belden's world-wide turnover of US$ 1.1 billion, Belden has clearly demonstrated the success of its 'Think global, act local' approach. And with its 1000-strong workforce across the length and breadth of Europe – and sales offices from Moscow to Lyon and from Stockholm to Dubai – Belden has a unique *local* capability to understand customers' problems. And provide the answer.

Belden's European headquarters and manufacturing base is in the Netherlands, where the company also has its European Engineering Centre. From here, Belden has easy access to Europe's top grade raw materials and is able to attract and retain highly trained personnel for its multinational workforce. From here, too, Belden's specialists offer tailor-made support to our rapidly growing European customer base. Specialists committed to providing optimal technical solutions, with additional expertise that helps our customers control their manufacturing processes better and uniquely simplify their cable installation work.

Detailed brochures

Full-colour brochures are available on the extensive range of Belden products:

- Digital telephony cables
- Shielded and non-shielded LAN cables
- Multi-conductor cables
- Optical fibre cables
- Audio/video cables
- Coaxial broadband cables
- Electrical cables

To request detailed brochures and data-sheets on our product lines and the extensive Belden Master Catalog, please contact your local Belden representative or send an e-mail to sales.info@belden-europe.com

USA

United Kingdom

The Netherlands

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Belden Audio/Video Cables

Belden Quality

Uncompromising quality

Belden is committed to sustaining an uncompromising performance in everything it does. From concept and design through manufacture and delivery of the high-quality products our customers need. Products stamped with the Belden hallmark of reliability and durability.

Belden uses statistical process control methods, not only to maintain the required specifications but also to continually improve its products. All Belden products are comprehensively tested before being shipped to the customer, and guaranteed to provide years of faultless performance.

Sustained customer benefits like these call for an uncompromising approach to quality. A commitment to quality which is documented by our approvals and certifications. These include ISO 9001 certification of all Belden development plants and manufacturing facilities – international accreditation, in fact, of all the company's quality processes.

ISO 9001

Fitness for use

Belden's fitness for use philosophy goes beyond the familiar 'design for operability' and 'customer-centric' concepts and provides a strategic approach to customer support. Besides taking into consideration the hands-on needs of the installers and users of our products, Belden's dynamic approach addresses concerns that have traditionally been viewed as falling outside the scope of customer service and support.

High value

Belden's fitness for use approach embraces elements of early supplier involvement, co-makership and concurrent engineering. Yet it is more than that. At Belden, fitness for use puts all the customer's interests first. It spans the development track, from concept to product development and production. And every step of the way, it focuses on the financial aspects of production, to incorporate cost-reducing measures for the hands-on users of our products.

Fitness for use provides our customers with the ideal product for their individual processes and applications. Custom-made products or standard Belden products with customized adjustments. Optimal products at reasonable cost. Products that have high value for the customer.

Prevention of fire hazard

Belden's concept of fire safety goes far beyond what is required by international norms. As a result, our products provide superior performance under the most hostile conditions. One innovation to emerge from Belden's concern with product safety is Flamarrest®, a low-smoke, flame retardant jacketing with outstanding fire shielding capabilities.

A recent Pan-European study shows that all Belden products comply with the stringent flammability standards in force in all Member States of the European Union – including those of major metropolitan public transport systems and airports, where fire protection standards are among the highest in the world.

ISO 14001

EMS

ISO 14001 EMS – Environmental Management System

Addressing environmental issues correctly is recognized as a high priority, particularly in the industrialized world and not least at Belden. Accordingly, the company makes every effort to minimize the environmental impact of its operations and products.

Recognizing ecological concerns shared by customers and consumers worldwide, from 1999-2001 a working group at Belden's European headquarters in Venlo completed comprehensive preparations for ISO 14001 EMS certification. This environmental management and audit system was implemented and certified in 2001. The progress achieved in the practical implementation of Belden's environmental objectives will be published each year. This will include the measures taken by the company to minimize the environmental impact of Belden's operations, also in respect of (energy) savings in production and novel materials and processes.

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Solutions for the audio/video market

Reliable performance
in broadcasting environments

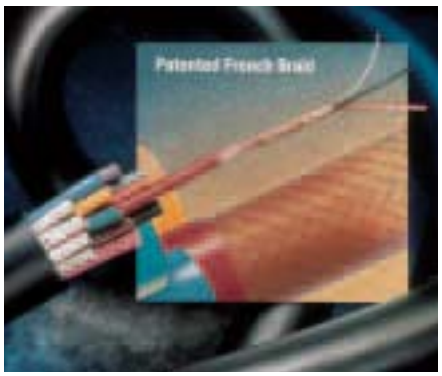
Save time and reduce installation costs with Beldfoil®

Beldfoil®

The Beldfoil® shield was the first to offer 100 % cable coverage, against radiated emission at audio and radio.

Easy and convenient to install.
The Beldfoil® shield in several Belden products is bonded to the jacket, so both can be removed simultaneously. This saves time and reduces installation cost.

Ultra-flexibility and very best shield coverage with French Braid®



French Braid®

Belden's French Braid® provide more flexibility and flex life than the conventional braid, it also reduces the noise levels incurred in cables.

Easy and convenient to install.
In comparison to the standard braid shield, Belden's French Braid® offers increased shield coverage (> 98 %), improved flex life, and ease of termination with minimal impact on structural integrity.

Belflex® jacket offers optimal security

Belflex®

Belflex® jacket gives best flexibility and maximum security with following advantages:

- retention of flexibility at extremly low as well as high temperatures of – 55 °C to 105 °C
- exceptional oil-resistance
- excellent retractile properties
- superb abrasion resistance
- Belflex® has a distinctive matte appearance
- long life span

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Belden Audio/Video Cables

Dependable Solutions in Audio/Video

Digital Audio

The specification for digital audio was developed jointly by the Audio Engineering Society & European Broadcast Union (AES/EBU). The two key electrical parameters in this specification that pertain to cable are the data rate which depends on the sampling rate (see table below) and impedance of 110 ohms ± 20% for twisted pair constructions and 75 ohms for coax designs.

Application	Sampling Rate	Bandwidth
DSR	32 kHz	4.096 MHz
CD/DVD	44.1 kHz	5.6448 MHz
DAT	48 kHz	6.144 MHz
DVD	96 kHz	12.228 MHz
DVD	192 kHz	24.576 MHz

*Note: Transmission distance calculations assume minimum allowable output signal amplitued (2V per AES3-1992) and minimum allowable input signal amplitude (200 mV per AES3-1992). Longer transmission distance is achievable but is contingent upon system component quality.

Digital Audio Transmission Distance*

	2 MHz		4 MHz		5 MHz		6 MHz		12 MHz		25 MHz	
	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.
	110 ohms											
26 AWG Pairs	365	1198	289	948	265	870	248	813	193	633	144	474
24 AWG Pairs	469	1538	391	1282	359	1176	337	1105	267	877	198	649
22 AWG Pairs	655	2151	530	1739	508	1667	469	1538	381	1250	309	1015
1800F	476	1563	281	922	233	763	203	664	129	424	85	279
	75 ohms											
1855A	1073	3521	740	2427	663	2174	607	1992	469	1538	339	1111
1505A	1483	4866	1060	3478	968	3175	887	2911	677	2222	469	1538
1505F	1793	5882	1150	3774	1016	3333	910	2985	622	2041	423	1389
1694A	1793	5882	1275	4184	1129	3704	1039	3407	762	2500	610	2000

Digital Video

Future will go HDTV

High Definition Television (HDTV) require upgrades throughout the TV industry, creating additional opportunities. International competitions, e.g. olympic games, formula one, football, have become very popular and have a need of highest technology that broadcaster can get.

Belden's Return Loss (RL) specification exceeds SMPTE requirement for HDTV:

Specification	RL	Frequency
SMPTE Recommended RL Limit	> 15 dB	5 – 1.5 GHz
Belden Guaranteed RL Specification Limit	> 23 dB	5 – 850 MHz
Belden Guaranteed RL Specification Limit	> 21 dB	850 MHz – 3 GHz

Using Belden coaxial cable will result in a minimum 6 dB of Headroom to accommodate to RL reduction introduced by: connectors, patch-bays, etc.

Television Standards

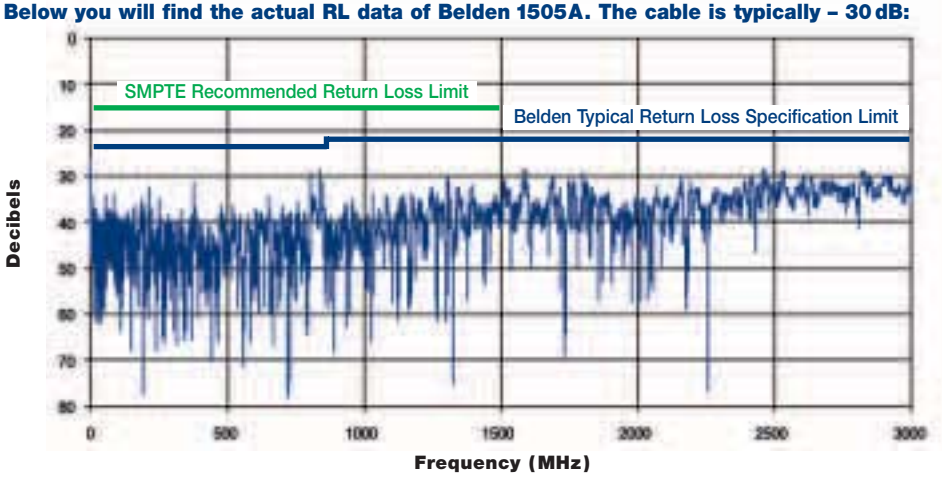
The Society of Motion Picture and Television Engineers (SMPTE) have developed several standards for serial digital video transmissions (SDI), and a 540 Mb/s format is currently under development. There is also a European standards body known as the ITU (formerly CCIR) that developed the composite video 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

For High Definition Television (HDTV) cables a band-width of 750 MHz is required with good RL performance at the third harmonic frequency of 2.25 GHz (3 x 750).
Belden coaxes intended for HDTV applications are currently tested up to 3 GHz and have a typical RL of 30 dB.

HEAD ROOM Belden

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



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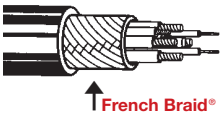
Optical Fibre Cables

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	Core/Clad/Buffer AWG (stranding) Dia. in mm Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	Shields & Overall Jacket Material Nom. D.C.R.	Nominal Optical Attenuation

SMPTE 311 6/2 Composite Cable



Digital
Mobile

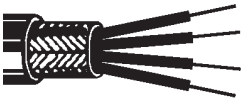
Product Description

Belden **7804C** is designed specifically for camera signal and control functions which belong to SMPTE 311 for longer transmission distances. This new 6/2 (6 copper/2 fibre) Composite Cable mates with industry standard SMPTE 304 connectors and assures clear, reliable transmission of audio, video and camera control functions. The black jacket is constructed of **Belflex®** material with rubber-like qualities that is highly flexible and durable, and suitable for outdoor and field applications.

SMPTE 311M	**7804C** **NEC** CMR **CEC** CMR	500 1000 1640 3280	152.4 304.8 500.0 1000.0	46 87 140 288	2 Breakout Fibres Single Mode 125/900 Micron	PVC	0.079	2.00	0.362	9.2	Braid shield 36 AWG tinned copper 95 % braid 2.9 Ω/M´ 9.5 Ω/km Black **Belflex®** Jacket	0.14 dB/1000 ft. @ 1310 nm
					2 Conductors* 16 (65 x 34) 1.5 tinned copper 4.3 Ω/M´ 14.1 Ω/km	PVC	0.093	2.36				0.45 dB/km @ 1310 nm
	***Also available: 7804R with 4 Conductors**				2 Conductors 24 (7 x 32) 0.61 tinned copper 23.3 Ω/M´ 76.4 Ω/km	PVC	0.050	1.27				

Part No. UL NEC C (UL) CEC Type 50/125	Part No. UL NEC C (UL) CEC Type 62.5/125	No. of Fibres	Ø Nom./Max. (mm)	Weight (kg/km)	Max. Pulling Tension (N)	Energy of Flame (kJ/m)
GMMT204	GMMT104	4	5.8	31	800	580
GMMT206	GMMT106	6	6.3	38	950	725
GMMT208	GMMT108	8	7.0	47	1100	890

MOBILE OPTICAL FIBRE



Digital
Mobile

Product Description

These new Belden mobile Optical Fibre Cables (OFC) are a perfect alternative for applications where stiff, heavy, older triax cable is currently employed, or in long haul situations. It is designed for rugged field applications with an PUR (Polyurethane) outer jacket. Withstand temperature extremes and vehicle traffic. Repeating bending is > 500.000 times according IEC 60794-1-2-E6. For indoor use it has flame retardancy according IEC 60332-2. The standard put-up is 2 km.

Optical Characteristics

Fibre-type (Multi-Mode)	Size (µm)	Wavelength (nm)	Attenuation Average/max. (dB/km)	Bandwidth (MHz x km)	Gigabit Ethernet Performance (m)	Refractive Index
50/125	50 ± 2.5 125 ± 2	850 1300	2.6/2.8 0.6/0.9	≥ 600 ≥ 1200	550 550	1.481 1.476
62.5/125	62.5 ± 2.5 125 ± 2	850 1300	3.0/3.2 0.7/0.9	≥ 200 ≥ 600	220 550	1.495 1.490

- **Temperature range** according to IEC 60794-1-2-F1
  - Transport/storage −30 to +70 °C
  - Installation −5 to +50 °C
  - Operation −30 to +70 °C
- **Pulling tension** according to IEC 60794-1-2-E1
  - See table with dimensions
- **Bending radii for fibres and tubes**
  - Installation/operation > 25 mm
- **Strippability**
  - Secondary coating only ≤ 10 cm
  - Secondary + primary coating ≤ 10 mm
- **Watertightness** according to IEC 60794-1-2-F5
- **Crush resistance** according to IEC 60794-1-2-E3
  - Tight buffer ≤ 4000 N/m
  - Cable ≤ 4000 N/m
- **Bending radii cable**
  - Static according to IEC 60794-1-2-E11 – 15 x Ø
  - Dynamic according to IEC 60794-1-2-E6 – 20 x Ø

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Belden Audio/Video Cables

Microphone Cables

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of Cond.	Standard Lengths		Std. Unit kg	AWG (stranding)	Insulation Thickness		Jacket Thickness		Nominal O.D.		Nominal Capacitance			
													CDR/CDR		CDR/SCR	
			ft.	m			Inch	mm	Inch	mm	Inch	mm	pF/ft.	pF/m	pF/ft.	pF/m

DOUBLE BRAID

Analog
Mobile

Product Description

Belden's famous **9397** has a double spiral shield for better secure of triboelectric noises.

75°C **24 Gage** (0.22 mm²)	**9397**	2	500 1000	152.4 304.8	11.1 22.4	(105 x 44)	0.012	0.30	0.031	0.79	0.176	4.47	40	131	110	361
						Bare copper, PVC insulated, conductors cabled with fillers. Bare copper double spiral shield. Matte Grey or Matte Black PVC jacket. Suggested working voltage: 300 V RMS. Color code: White, Green.											

FLEX

Analog
Mobile

Product Description

Belden's **46349** is good quality MIC cable and made for professional musicans.

24 Gage (0.22 mm²)	**46349**	2	328 3280	100 1000	4.2 42.0	24 (28 x 0.1)	0.025	0.63	0.059	1.50	0.236	6.00	–	–	18	60
						Bare copper, PE insulated, twisted pairs with fillers, with a spiral winded screening bare copper (> 90 % coverage). High flex matte PVC jackets in Red, Yellow, Green, Blue, Grey, White and Black. Color code: Red, Blue.											

SUPERFLEX

Analog
Mobile

Product Description

Belden's **46340** is very flexible and suitable for stage and studio.

75°C **24 Gage** (0.25 mm²)	**46340**	2	328 1640	100 500	4.9	24 (128 x 50)	0.025	0.63	0.059	1.50	0.236	6.00	–	–	18	60
						Bare copper, PE insulated, twisted pairs with fillers, with a spiral winded screening bare copper (> 90 % coverage). High flex matte PVC jacket in Black. Color code: Red, Blue.											

LONG LIFE

Analog
Mobile

Product Description

Belden **8412** is the classic microphone cable with excellent conductivity and is better at longer lengths than other MIC cables. The use of rubber in the construction provides good abrasion and impact resistance and extra limpness, so the cable lies flat on the stage or studio floor.

60°C **20 Gage** (0.52 mm²)	**8412**	2	250 U-500 500 U-1000 1000	76.2 U-152.4 152.4 U-304.8 304.8	5.5 10.8 11.2 21.5 21.6	20 (26 x 34)	0.023	0.58	0.035	0.89	0.262	6.65	30	98	55	180
						Tinned copper, cotton wrap, rubber insulated, conductors cabled. Rayon braid, tinned copper braid shield. 85 % shield coverage. Cotton wrap, EPDM jacket. Suggested working voltage: 600 V RMS. Color code: White, Black. EPDM jacket colors: Black, Red, Yellow and Blue. **Note:** Red, Yellow and Blue are available in 1000' only.											

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Microphone Cables

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of Cond.	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding)	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm	Nominal Capacitance CDR/CDR pF/ft.	Nominal Capacitance CDR/CDR pF/m	Nominal Capacitance CDR/SCR pF/ft.	Nominal Capacitance CDR/SCR pF/m

PROFESSIONAL

Analog
Mobile

Product Description

Belden's **9398** is one of classic microphone cables with excellent performance. With the double spiral shield the MIC cable is protected against noise.

24 Gage (0.22 mm²)	**9398** available: FRNC/LSNH	3	1000	304.8	11.5	24 (105 x 44)	0.012	0.30	0.030	0.76	0.185	4.70	40	131	110	361
							Bare copper, PVC insulated, conductors cabled with fillers. Bare copper double spiral shield. Matte Grey or matte Black PVC jacket. Suggested working voltage: 300 V RMS. Color code: White, Green, Brown.									

STAR QUAD/small

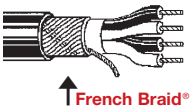
Analog
Mobile

Product Description

Belden's Star Quad **1804A** is made for applications where small size is required.

28 Gage (0.09 mm²)	**1804A**	4 2 Blue 2 White	500	152.4	2.3	28 (19 x 40) silver plated high strength copper alloy 65 Ω/M´ 213 Ω/km	0.006	0.152	0.014	0.356	0.115	2.92	40*	131*	60	197
							Silver plated copper alloy conductors, polypropylene insulated, tinned copper braid shield (78 % coverage), matte PVC jackets in Red, Yellow, Blue, Beige and Black. **Note:** one Blue conductor and one White conductor are striped for use in MIDI and other four conductor applications.									

STAR QUAD/flex



Analog
Mobile

Product Description

Belden's "Super Flexible" Star Quad cable, part no. **1172A,** utilizes Belden's patented **French Braid®** shield technology and is particularly suitable for use in outside broadcast and noisy environment applications.

100 V 75 °C **26 Gage** (0.14 mm²)	**1172A**	4 2 Blue 2 White	500 1000	152.4 304.8	4.6 9.5	26 (30 x 40) bare copper 36.0 Ω/M´ 118 Ω/km	0.011	0.28	0.030	0.76	0.190	4.83	39*	128*	57	187
							Bare copper, polyethylene insulated, conductors cabled, tinned copper **French Braid®** shield (95 % coverage) with bare copper drain wire, matte PVC jackets in Red, Green, Yellow, Blue, Grey and Black. **Note:** one Blue conductor and one White conductor are striped for use in MIDI and other four conductor applications.									

STAR QUAD/low noise

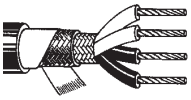
Analog
Mobile

Product Description

Belden's Star Quad **1192A** is made for low noise applications.

100 V 75 °C **24 Gage** (0.22 mm²)	**1192A**	4 2 Blue 2 White	100 500 1000	30.5 152.4 304.8	1.8 8.3 16.0	24 (42 x 40) bare copper 26.6 Ω/M´ 87.2 Ω/km	0.016	0.41	0.045	1.14	0.245	6.22	39*	128*	57	187
							Bare copper, polyethylene insulated, conductors cabled, tinned-copper braid shield (95 % coverage), matte PVC jackets in Red, Green, Yellow, Blue, Grey and Black. **Note:** one Blue conductor and one White conductor are striped for use in MIDI and other four conductor applications.									

STAR QUAD/RUBBER



Analog
Mobile

Product Description

With the 20 Gage stranded conductors Belden's **8424** is our largest starquad construction. The rubber in the construction provides good abrasion, impact resistance and extra limpness.

60 °C **20 Gage** (0.52 mm²)	**8424**	4	100 250 U-500 500 1000	30.5 76.2 U-152.4 152.4 304.8	7.3 15.7 30.5 30.0 64.3	20 (26 x 34) tinned copper	0.023	0.58	0.036	0.91	0.294	7.47	27*	95*	59	193
							Tinned copper, cotton wrap, rubber insulated, conductors cabled. Rayon braid, tinned copper braid shield, 85 % coverage. Cotton wrap, Black EPDM rubber jacket. Suggested working voltage: 600 V RMS. Color code: Black, White, Red, Green.									

* Capacitance between CDR as connected in quad configuration.

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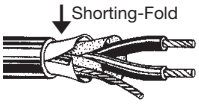
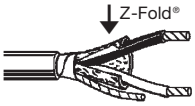
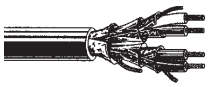
Belden Audio/Video Cables

Audio-Connect Cables – analog

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of Cond./ Pairs	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm	Nominal Capacitance CDR/CDR pF/ft.	Nominal Capacitance CDR/CDR pF/m	Nominal Capacitance CDR/SCR pF/ft.	Nominal Capacitance CDR/SCR pF/m
FAST INSTALLATION/size															
 Analog Installation	**Product Description** Belden **1883A** is similar to the popular Belden 9451 but with 24 AWG/0.22 mm². It has the added advantage of having the foil screen bonded to the jacket and the drain wire inside the foil for fast installation. Greatly speeding-up the installation time when making multiple connections.														
Beldfoil® 100% Shield Coverage **24 Gage** (7 x 32) (0.22 mm²)	**1883A** NEC CM CEC CM	2 1 pair	U-1000	U-304.8	5.9	0.008	0.20	0.020	0.51	0.123	3.12	31	102	58	190
						Tinned copper, polypropylene insulated, twisted pair. **Beldfoil®** aluminum-polyester shield. 24 AWG stranded tinned copper drain wire. PVC jacket available in Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White and Black. The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is on the inside of foil shield. Suggested working voltage: 300 V RMS. Color code: Black, Red.								
NOISE REDUCTION															
Shorting-Fold  Analog Installation	**Product Description** Belden's **9452** balanced pair instrumention cable featuring short lay cabling to minimize pick-up of electromagnetic interference and special conductive textile tape to minimize triboelectric noise.														
Beldfoil® (unbonded jacket) 100% Shield Coverage **24 Gage** (19 x 36) (0.22 mm²)	**9452**	2 1 pair	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	6.3 6.0 12.8 11.3	0.008	0.20	0.020	0.51	0.135	3.43	30	98	58	190
						Tinned copper, high density, polyethylene insulated, twisted pair. Noise reducing tape. 24 AWG stranded tinned copper drain wire. **Beldfoil®** (unbonded jacket) aluminum-polyester shield. 100% shield coverage. Black PVC jacket. Balanced pair instrumentation cable featuring short lay cabling to minimize pick-up of electromagnetic interference and special conductive textile tape to minimize triboelectric noise. Nominal impedance: 56 ohms. Suggested working voltage: 200V RMS. Color code: Black, Red.								
STANDARD															
Z-Fold®  Analog Installation	**Product Description** Belden **8451** is the classic miniature audio cable with an O.D. of 3.51 mm. This popular cable is often specified by OEM's.														
Beldfoil® (unbonded jacket) 100% Shield Coverage **22 Gage** (7 x 30) (0.34 mm²)	**8451** NEC CM CEC CM	2 1 pair	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	3.4 3.2 6.3 6.1	0.008	0.20	0.020	0.51	0.138	3.51	34	111	67	220
						Tinned copper, polypropylene insulated, twisted pair. **Beldfoil®** (unbonded jacket) aluminum-polyester shield. 22 AWG stranded tinned copper drain wire. Paper wrap, Grey or Black PVC jakket. Belden's Miniature Type Broadcast Audio and Instrumentation Cables occupy 1/2 to 2/3 less space than standard cables. Suggested working voltage: 300 V RMS. Unique paper separator facilitates jacket stripping. Color code: Black, Red.								
FAST INSTALLATION															
 Analog Installation	**Product Description** Belden **9451** is similar to the popular Belden 8451. It has the added advantage of having the foil screen bonded to the jacket and the drain wire inside the foil for fast installation. This makes the cable easier to strip. A standard stripping tool removes both the insulation and foil, greatly speeding-up the installation time when making multiple connections.														
Beldfoil® 100% Shield Coverage **22 Gage** (7 x 30) (0.34 mm²)	**9451** NEC CM CEC CM	2 1 pair	U-1000 5000	U-304.8 1.524.0	6.2 31.8	0.008	0.20	0.020	0.51	0.135	3.43	34	111	67	220
						Tinned copper, polypropylene insulated, twisted pair. **Beldfoil®** aluminum-polyester shield, 22 AWG stranded tinned copper drain wire. PVC jacket in Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White and Black. The jacket and shield are bonded so both can be removed with automatic stripping equipment. Drain wire is on the inside of foil shield. Suggested working voltage: 300 V RMS. Color code: Black, Red. **Also available: 9451D, siamese version**								
DUO PATCH															
 Analog Installation	**Product Description** Belden's **8728** double pair cable is suitable for two-channel stereo.														
Beldfoil® (unbonded jacket) 100% Shield Coverage 2717 **22 Gage** (7 x 30) (0.34 mm²)	**8728** NEC CM CEC CM	4 2 pair	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	16.7 15.5 30.7 28.6	0.010	0.25	0.028	0.71	0.215	5.46	35	115	62	203
						Tinned copper, polypropylene insulated, conductors cabled in pairs, each pair **Beldfoil®** (unbonded jacket) aluminum-polyester shielded with 24 AWG stranded tinned copper drain wire, polyester film over each shield, overall **Beldfoil®** (unbonded jacket) aluminum-polyester shield and 24 AWG stranded tinned copper drain wire, chrome PVC jacket. Pairs cabled in common axis to reduce diameter. Color code: Black, Red, Green, White.								

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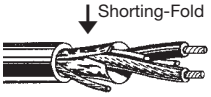
Audio-Connect Cables – digital

PATCH/small



Digital
Installation

Product Description

Belden's **9180** is designed for AES/EBU specification. The cable has a foil shield and therefore recommended for permanent installs.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding) [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
Beldfoil® 100% Shield Coverage 80°C **26 Gage** (0.14 mm²)	**9180** **NEC** CM **CEC** CM	1000	304.8	11.0	26 (7 x 34) 0.48 tinned copper 37.3 Ω/M´ 122.3 Ω/km	Datalene® color coded Black, White	0.049	1.24	0.144	3.66	**Beldfoil®** with 26 AWG drain wire 23.1 Ω/M´ 75.8 Ω/km	110	76 %	13.5	44	2 4 5 6 12 25	1.92 2.14 2.40 2.47 3.18 4.20	6.29 7.01 7.87 8.10 10.43 13.77
													Chrome PVC jacket.				

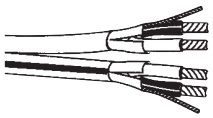
PATCH/medium

Digital
Installation

Product Description

Belden's digital **1800B** and **1802B** are utilize a special foam high-density polyethylene (Datalene®) that provides exceptional crush resistance when compared to standard foam insulations.

Beldfoil® 100% Shield Coverage 60°C **24 Gage** (0.22 mm²)	**1800B** **NEC** CMG **CEC** CMG (Replaces 1800A)	500 U-1000 1000	152.4 U-304.8 304.8	9.8 18.2 18.3	24 (7 x 32) 0.61 tinned copper 23.7 Ω/M´ 77.7 Ω/km	Datalene® color coded Red, Black	0.070	1.78	0.180	4.57	**Beldfoil®** with 24 AWG drain wire 18.9 Ω/M´ 62.0 Ω/km	110	76 %	13.0	43	2 4 5 6 12 25	1.31 1.57 1.76 1.83 2.30 3.08	4.29 5.18 5.77 6.00 7.54 10.10
													Slate Grey or Purple PVC jacket.					



Digital
Installation

Beldfoil® 100% Shield Coverage 60°C **24 Gage** (0.22 mm²)	**1802B** **NEC** CMG **CEC** CMG (Replaces 1802A)	500 U-1000 1000	152.4 U-304.8 304.8	19.7 29.0 30.9	24 (7 x 32) 0.61 tinned copper 23.7 Ω/M´ 77.7 Ω/km	Datalene® color coded Red, Black	0.070	1.78	0.180 x 0.374	4.57 x 9.50	**Beldfoil®** with 24 AWG drain wire 18.9 Ω/M´ 62.0 Ω/km	110	76 %	13.0	43	2 4 5 6 12 25	1.31 1.57 1.76 1.83 2.30 3.08	4.29 5.18 5.77 6.00 7.54 10.10
													Violet PVC jacket in zip cord style construction. Ink striped on one side for identification.					

PERFORMANCE

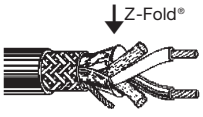
Digital
Mobile

Product Description

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

High Flex Version **24 Gage** (0.22 mm²)	**1800F**	500 U-1000 1000	152.4 U-304.8 304.8	16.7 27.4 32.9	24 (42 x 40) 0.61 bare copper 23.7 Ω/M´ 77.7 Ω/km	Datalene® color coded Blue, White	0.049	1.25	0.211	5.36	95 % tinned copper **French Braid®** with bare copper drain wire 5.0 Ω/M´ 16.4 Ω/km	110	76 %	13.0	43	2 4 5 6 12 25	1.28 2.17 2.62 3.01 4.72 7.17	4.19 7.12 8.59 9.87 15.48 23.51
													PVC jackets in Red, Yellow, Green, Blue, Grey, Purple and Black.					

PATCH/large



Digital
Mobile

Product Description

Belden's **1696A** is designed for AES/EBU specification. The cable has a foil plus braid and therefore recommended for flexed applications.

Beldfoil® (unbonded jacket) High Flex Version **22 Gage** (0.34 mm²) Stranded Conductors	**1696A**	250 500 U-1000 1000	76.2 152.4 U-304.8 304.8	8.9 16.6 31.5 31.3	22 (7 x 30) 0.61 tinned copper 14.8 Ω/M´ 48.5 Ω/km	Datalene® color coded Blue, White	0.082	2.08	0.234	5.94	**Beldfoil®** (unbonded jacket) with 24 AWG drain wire + 90 % tinned copper braid 4.6 Ω/M´ 15.2 Ω/km	110	76 %	13.0	43	2 4 5 6 12 25	0.88 1.09 1.32 1.37 1.77 2.41	2.88 3.57 4.32 4.49 5.80 7.90
													Black high flex matte PVC jacket.					

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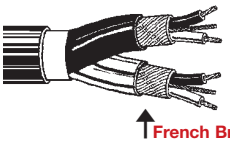
Belden Audio/Video Cables

Multicore Cables – analog

FLEXNAKE®

Analog
Mobile



Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of Pairs	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	Outer Jacket Thickness Inch	Outer Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm
Bare copper, polyolefin insulated twisted pairs color coded Red & Black, each pair individually shielded with bare copper double serve **French Braid®** (93 % coverage) with tinned copper drain wire. Individual pairs with numbered and color coded PVC jackets. Overall Black matte PVC jackets.									
Pair Dimensions & Electricals									
Nominal O.D. Conductor ..... 0.0225 inch 0.57 mm Nominal O.D. Insulation ..... 0.040 inch 1.02 mm Inner Pair Jacket O.D. ..... 0.120 inch 3.05 mm Nominal D.C.R. Conductor ..... 25.5 Ω/M´ 83.7 Ω/km Nominal D.C.R. Shield ..... 7.2 Ω/M´ 23.6 Ω/km Nominal Impedance (ohms) ..... 60 Nominal velocity of Propagation ..... 66 % CDR/CDR Nominal Capacitance between conductors ..... 26 pF/ft. 85 pF/m CDR/SCR Nominal Capacitance between one conductor and other conductors connected to shield ..... 47 pF/ft. 154 pF/m									
Individually Shielded and Jacketed Pairs **24 Gage** (0.22 mm²) Stranded Conductors (41 x 40) **Polyolefin Insulated** **Numbered and Color Coded Pair Jackets**	**1902A**	2	250 500 1000	76.2 152.4 304.8	5.3 8.3 16.2	0.050	1.27	0.330	8.38
	1904A	4	250 500 1000	76.2 152.4 304.8	9.7 18.3 33.2	0.043	1.09	0.372	8.45
	1906A	6	250 500 1000	76.2 152.4 304.8	11.5 23.0 45.2	0.049	1.24	0.447	11.4
	1908A	8	250 500 1000	76.2 152.4 304.8	14.6 30.2 57.1	0.050	1.27	0.482	12.2
	1912A	12	250 500 1000	76.2 152.4 304.8	21.9 43.7 87.8	0.062	1.57	0.602	15.3
	1916A	16	250 500 1000	76.2 152.4 304.8	30.0 56.8 113.7	0.077	1.96	0.683	17.3
	1924A	24	250 500 1000	76.2 152.4 304.8	44.1 88.4 181.1	0.090	2.29	0.825	21.0
	1932A	32	250 500 1000	76.2 152.4 304.8	58.7 113.9 232.3	0.100	2.54	0.968	24.6

PATCH/analog

Analog
Mobile

Product Description

Belden **46801** is a very flexible patch cable. It is used for connecting musical instruments and suitable for BANTAM applications.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of CDR	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding)	D.C.R. Ω/km	Jacket Thickness Inch	Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m
24 Gage (0.22 mm²)	**46801**	2	328	100	42.0	24 (28 x 0.1)	80	0.098	2.50	0.185	4.70	49	160
					Bare copper, polyethylene insulated, conductors cabled with fillers (Cotton/Aramide) > 90 % spiral screen copper braid, matte PVC jacket in Black. Color code: Red, Blue.								

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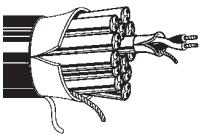
Multicore Cables – analog

FLEX/foil

Analog
Installation



Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of Pairs	Standard Lengths		Std. Unit kg	Outer Jacket Thickness		Nominal O.D.		Nominal D.C.R. Overall Shield	
			ft.	m		Inch	mm	Inch	mm	Ω/M´	Ω/km

Product Description

Belden **15-series** is a flexible audio snake cable. The foil screen 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 greatly speeding-up the installation time. Jacketed pairs are individually numbered and color coded (following the familiar resistor color code) for easy identification.

Tinned copper, polyolefin insulated pairs color coded Red & Black, each pair individually shielded with bonded **Beldfoil**® aluminum-polyester shield. Individual pairs with numbered and color coded PVC jackets. Overall **Beldfoil**® aluminum-polyester shield. Overall Black matte PVC jacket with nylon ricord. Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment.

Pair Dimensions & Electricals

Nominal O.D. Conductor	0.024 inch	0.61 mm
Nominal O.D. Insulation	0.040 inch	1.02 mm
Inner Pair Jacket O.D.	0.111 inch	2.82 mm
Nominal D.C.R. Conductor	23.3 Ω/M´	76.4 Ω/km
Nominal D.C.R. Shield	18.9 Ω/M´	62.0 Ω/km
Nominal Impedance (ohms)	50	
Nominal velocity of Propagation CDR/CDR	66 %	
Nominal Capacitance between conductors CDR/SCR	31 pF/ft.	102 pF/m
Nominal Capacitance between one conductor and other conductors connected to shield	58 pF/ft.	190 pF/m

Individually Shielded and Jacketed Pairs **24 Gage** (0.22 mm²) Stranded Conductors (7 x 32) **Polyolefin Insulated** **Numbered and Color Coded Pair Jackets** NEC CM	**1509C**	2	500 1000	152.4 304.8	10.7 20.0	0.034	0.86	0.301	7.65	14.4	47.2
	1510C	4	500 1000	152.4 304.8	16.8 32.3	0.037	0.94	0.352	8.94	5.3	17.4
	1511C	6	500 1000	152.4 304.8	22.3 44.1	0.037	0.94	0.418	10.61	5.3	17.4
	1512C	8	500 1000	152.4 304.8	29.1 59.1	0.033	0.84	0.452	11.48	5.2	17.1
	1513C	12	500 1000	152.4 304.8	40.0	0.045	1.14	0.561	14.25	5.0	16.4
	1514C	16	500 1000	152.4 304.8	53.0 103.6	0.056	1.42	0.628	15.95	4.9	16.1
	1515C	20	500 1000	152.4 304.8	63.2 128.2	0.055	1.40	0.710	19.56	4.8	15.7
	1516C	24	500 1000	152.4 304.8	79.1 162.7	0.065	1.65	0.807	20.50	4.8	15.7
	1517C	26	500 1000	152.4 304.8	83.4 171.4	0.065	1.65	0.823	20.90	4.6	15.1
	1518C	32	500 1000	152.4 304.8	100.2 204.1	0.070	1.78	0.897	22.78	4.6	15.1
	1519C	52	500 1000	152.4 304.8	163.4 320.5	0.085	2.16	1.117	28.37	4.4	14.4

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of Pairs	Standard Lengths		Std. Unit kg	Insulation Thickness		Jacket Thickness		Nominal O.D.		Nominal Capacitance			
												CDR/CDR		CDR/SCR	
			ft.	m		Inch	mm	Inch	mm	Inch	mm	pF/ft.	pF/m	pF/ft.	pF/m

INSTALLATION

Analog
Installation

Product Description

Belden **1508A** is made with drain wire inside the foil for fast installation. This makes the cable easier to strip. A stranded stripping tool removes both the insulation and foil, greatly speeding-up the installation time when making multiple connections. See for siamese version Belden **1504A** in our American Audio/Video Catalog.

Beldfoil® 100 % Shield Coverage **24 Gage** (7 x 32) (0.22 mm²)	**1508A** NEC CM CEC CM	1	500 1000	152.4 304.8	2.5 5.0	0.008	0.20	0.024	0.61	0.131	3.33	31	102	58	190
						Tinned copper, polyolefin insulated, twisted pair, **Beldfoil**® aluminum-polyester shield, 24 AWG stranded tinned copper drain wire, Black matte PVC jacket. The jacket and shield are bonded so both can be removed with automatic stripping equipment. Color code: Black, Red.									

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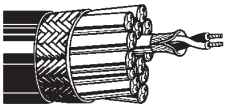
Belden Audio/Video Cables

Multicore Cables – analog

FLEX/braid

Analog
Mobile



Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of Pairs	Standard Lengths		Std. Unit kg	Outer Jacket Thickness		Nominal O.D.	
			ft.	m		Inch	mm	Inch	mm

Product Description

Belden **46-analog-series** is a flexible audio snake cable with an overall braid shield. This makes the cable suitable for mobile applications. Jacketed pairs are individually numbered for easy identification.

Tinned copper, single-insulation: PE, each pair of a Red and a White insulated single and shielded first with a polyester foil and then with a spiral screening of 0.10 mm tinned copper (> 90 % coverage). Each screened pair jacket with a numbered PVC jacket. Pairs twisted together in a layer with a central filler and shielded with a non-woven foil. Overall tinned braid (> 80 % coverage). Jacket matte soft PVC, color code: Black.

Pair Dimensions & Electricals

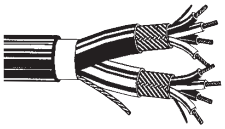
Nominal O.D. Insulation	0.044 inch	1.13 ± 0.03 mm
Inner Pair Jacket O.D.	118 inch	3.0 ± 1 mm
DC loop resistance at 20 ± 5 C	260 Ω/km (max.)	
Capacitance at 1 kHz	70 ± nF/km	
Nominal Impedance (ohms)	90 ± 20 Ω	
Nominal velocity of Propagation	66 %	
Next	< 0.1 MHz	> 75 dB
Nominal Attenuation	0.1 MHz	> 1.4 dB
	1.0 MHz	> 3.6 dB
	4.0 MHz	> 7.5 dB

26 Gage (0.14 mm²) (18 x 0.1)

46312	4	1640	500	91.5	0.173	4.40	0.492	12.5
46313	8	1640	500	136.5	0.150	3.80	0.591	15.0
46315	12	1640	500	169.0	0.126	3.20	0.638	16.2
46305	16	1640	500	201.0	0.130	3.30	0.709	18.0
46306	24	820	250	154.0	0.157	4.00	0.882	22.4
46332	28	820	250	174.0	0.157	4.00	0.921	23.4
46333	32	820	250	190.8	0.157	4.00	0.988	25.1
46334	36	820	250	213.3	0.154	3.90	1.055	26.8
46948	40	820	250	245.0	0.154	3.90	1.083	27.5

STAR QUAD (1172A)

Analog
Mobile



Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of Quads	Standard Lengths		Std. Unit kg	Jacket Thickness		Nominal O.D.	
			ft.	m		Inch	mm	Inch	mm

Product Description

Quad snakes are used for connection of multiple microphones to patch panels, mixer boards, or sound rooms. Quad technology offers the best noise rejection for mic and line level applications. Belden's flexible quad snakes feature a Belden patented **French Braid®** for superior noise rejection.

Each quad construction includes four 26 AWG stranded (30 x 40) bare copper polyethylene insulated conductors, color-coded Blue, White, Blue with a White stripe, and White with a Blue stripe. A patented copper **French Braid®** is applied over the four conductors with a 26 AWG (7 x 38) tinned copper drain wire. Each quad is individually jacketed using a PVC internal jacket, available in the following color code: Brown (1), Red (2), Orange (3), Yellow (4), Green (5), Blue (6), Violet (7), Grey (8), White (9), Black (10), Beige (11), Pink (12), and Grey (numbered from 13 to 24 quads). It includes an additional overall 20 AWG tinned copper drain wire.
Quad snakes are available in an overall Black jacket.

Quad Dimensions & Electricals

Nominal O.D. Conductor	0.02 inch	0.508 mm
Nominal O.D. Insulation	0.045 inch	1.143 mm
Inner Pair Jacket O.D.	0.057 inch	3.988 mm
Nominal D.C.R. Conductor	36 Ω/1.000f	11.8 Ω/100 m
Nominal D.C.R. Shield	6.8 Ω/1.000f	2.23 Ω/100 m
Nominal Impedance (ohms)	40 Ω	
Nominal Velocity of Prop.	66 %	
Nominal Capacitance between conductors @ 1 KHz	39.2 pF/ft.	128.6 pF/m
Nominal Capacitance between conductors in Quad configuration	57.4 pF/ft.	188.4 pF/m

26 Gage (0.14 mm²)

Stranded Conductors (30 x 40)

Polyethylene Insulated

7884A	2	500 1000	152.4 304.8	42.5 85.0	0.069	1.753	0.458	11.63
7885A	4	500 1000	152.4 304.8	63.0 126.0	0.057	1.448	0.498	12.65
7886A	8	500 1000	152.4 304.8	159.0 318.0	0.09	2.286	0.782	19.86
7887A	12	500 1000	152.4 304.8	172.0 344.0	0.085	2.159	0.828	21.03
7888A	16	500 1000	152.4 304.8	234.0 468.0	0.097	2.464	0.938	23.83
7889A	24	500 1000	152.4 304.8	376.0 752.0	0.142	3.607	1.232	31.29

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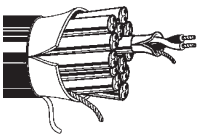
Multicore Cables – digital (AES/EBU)

PERFORMANCE

Digital

Installation



Product Description

Belden's exclusive **Beldfoil**® shield is key to the **flexible 78-series.** High-flexibility, long flex life and exellent EMI/RFI protection. This unique construction provides a 10 – 20 % longer life over standard spiral shields, greater flexibility than conventional braid shields, and a 50 % reduction in triboelectric and microphonic noise over either. Error-free transmissions over extended distance. Jacketed pairs are individually numbered and color coded for easy identification.

Tinned copper, foamed HDPE insulated pairs color coded Blue & White. Each pair individually shielded with bonded **Beldfoil**® aluminum-polyester shield. Individual pairs with numbered and color coded PVC jackets. Overall **Beldfoil**® aluminum-polyester shield. Overall slate Violet PVC jacket with nylon ripcord. Pair jackets and shields are bonded so that both strip simultaneously with automatic stripping equipment.

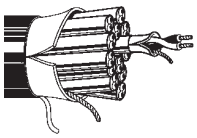
Pair Dimensions & Electricals

Nominal O.D.
Conductor.....0.024 inch 61 mm
Nominal O.D.
Insulation.....0.070 inch 1.79 mm
Inner Pair Jacket O.D....0.167 inch 4.24 mm
Nominal D.C.R.
Conductor.....23.3 Ω/M´ 76.4 Ω/km
Nominal D.C.R.
Shield.....18.9 Ω/M´ 62.0 Ω/km
Nominal Impedance
(ohms).....110 ± 10 Ω
Nominal velocity of
Propagation.....76 %
CDR/CDR.....12.2 pF/ft. 42 pF/m
CDR/SCR.....25 pF/ft. 82 pF/m
Nominal Attenuation....2 MHz: 1.67 dB/100 ft. 5.48 dB/100 m
4 MHz: 2.11 dB/100 ft. 6.92 dB/100 m
5 MHz: 2.30 dB/100 ft. 7.54 dB/100 m
6 MHz: 2.46 dB/100 ft. 8.06 dB/100 m
12 MHz: 3.16 dB/100 ft. 10.36 dB/100 m
25 MHz: 4.22 dB/100 ft. 13.84 dB/100 m

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of Pairs	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	Outer Jacket Thickness Inch	Outer Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm
26 Gage (0.14 mm²) Stranded Conductors (7 x 32) NEC CMG CEC CMG	**7891A**	2	500 1000	152.4 304.8	12.7 25.4	0.030	0.76	0.343	8.71
	7890A	4	250 1000	76.2 304.8	8.2 27.7	0.030	0.76	0.399	10.13
	7880A	8	250 500 1000	76.2 152.4 304.8	13.6 25.8 63.9	0.035	0.89	0.541	13.74
	7892A	12	500 1000	152.4 304.8	38.5 78.9	0.040	1.02	0.679	17.25
	7893A	16	500 1000	152.4 304.8	49.9 108.8	0.050	1.27	0.770	19.56

Digital

Installation



Product Description

Belden's exclusive **Beldfoil**® shield is key to the **flexible 18-series.** High-flexibility, long flex life and exellent EMI/RFI protection. This unique construction provides a 10 – 20 % longer life over standard spiral shields, greater flexibility than conventional braid shields, and a 50 % reduction in triboelectric and microphonic noise over either. Error-free transmissions over extended distance. Jacketed pairs are individually numbered and color coded for easy identification.

Tinned copper, foamed HDPE insulated pairs color coded Blue & White. Each pair individually shielded with bonded **Beldfoil**® aluminum-polyester shield. Individual pairs with numbered and color coded PVC jackets. Overall **Beldfoil**® aluminum-polyester shield. Overall slate Violet PVC jacket with nylon ripcord. Pair jackets and shields are bonded so that both strip simultaneously with automatic stripping equipment.

Pair Dimensions & Electricals

Nominal O.D.
Conductor.....0.024 inch 61 mm
Nominal O.D.
Insulation.....0.070 inch 1.79 mm
Inner Pair Jacket O.D....0.167 inch 4.24 mm
Nominal D.C.R.
Conductor.....23.3 Ω/M´ 76.4 Ω/km
Nominal D.C.R.
Shield.....18.9 Ω/M´ 62.0 Ω/km
Nominal Impedance
(ohms).....110 ± 10 Ω
Nominal velocity of
Propagation.....76 %
CDR/CDR.....13 pF/ft. 43 pF/m
CDR/SCR.....25 pF/ft. 82 pF/m
Nominal Attenuation....2 MHz: 1.30 dB/100 ft. 4.26 dB/100 m
4 MHz: 1.56 dB/100 ft. 5.11 dB/100 m
5 MHz: 1.70 dB/100 ft. 5.57 dB/100 m
6 MHz: 1.81 dB/100 ft. 5.93 dB/100 m
12 MHz: 2.28 dB/100 ft. 7.48 dB/100 m
25 MHz: 3.08 dB/100 ft. 10.10 dB/100 m

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of Pairs	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	Outer Jacket Thickness Inch	Outer Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm
24 Gage (0.22 mm²) Stranded Conductors (7 x 32) NEC CMG CEC CMG	**1803F**	4	500 1000	152.4 304.8	26.3 48.5	0.030	0.76	0.485	12.32
	1805F	8	500 1000	152.4 304.8	47.2 93.0	0.035	0.89	0.661	16.79
	1806F	12	500 1000	152.4 304.8	70.8 146.1	0.040	1.02	0.829	21.06
	1850F	16	500 1000	152.4 304.8	95.3 186.0	0.050	1.27	0.944	23.98
	1852F	24	500 1000	152.4 304.8	146.1 293.0	0.060	1.52	1.205	30.61
	1854F	32	500 1000	152.4 304.8	196.9 383.7	0.070	1.78	1.346	34.19

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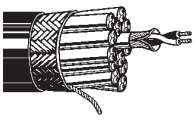
Belden Audio/Video Cables

Multicore Cables – digital (AES/EBU)

FLEX

Digital
Installation

FRNC/ LSNH



Description	Part No.	No. of Pairs	Standard Lengths		Std. Unit kg	Outer Jacket Thickness		Nominal O.D.		Burning Energy	Crush Resistance
			ft.	m		Inch	mm	Inch	mm	KJ/m (nom)	N/Km

Product Description

Belden's **46-digital-series** is specially engineered to meet the requirements of the AES/EBU specification. The cable is very flexible and has a small outer diameter for use in applications where space is limited. Flame retardancy according to IEC 332-3C. Jacketed pairs are individually numbered and color coded for easy identification.

Tinned copper, single-insulation: PE, each pair of a Blue and a White insulated single and shielded first with a polyester foil and then with a spiral screening of 0.10 mm tinned copper (> 90 % coverage). Each screened pair jacket with a numbered flexible FRNC jacket. Pairs twisted together in a layer with a central filler and shielded with a non-woven foil. Overall tinned braid (> 90 % coverage). Jacket matte soft flexible FRNC, color code: Grey (RAL 7032).	**26 Gage** (0.14 mm²) (18 x 0.1)	**46959**	1	1640	500	11.0	0.059	1.50	0.154	3.9	283	85
		46923	2	1640	500	50.0	0.079	2.00	0.331	8.4	913	150
		46924	3	1640	500	65.0	0.079	2.00	0.350	8.9	1078	200
		46925	4	1640	500	75.0	0.079	2.00	0.374	9.5	1271	250
		46926	6	1640	500	95.0	0.079	2.00	0.449	11.4	1672	300
		46935	8	1640	500	120.0	0.079	2.00	0.492	12.5	2023	400
		46936	10	1640	500	135.0	0.079	2.00	0.524	13.3	2325	500
		46937	12	1640	500	160.0	0.079	2.00	0.559	14.2	2644	600
		46938	16	1640	500	200.0	0.079	2.00	0.642	16.3	3292	750

Pair Dimensions & Electricals

Nominal O.D. Insulation	0.044 inch	1.13 mm
Inner Pair Jacket O.D.	0.114 inch	2.90 mm
DC loop resistance at 20 ± 5 C	260 Ω/km (max.)	
Capacitance at 1 kHz	nom. 56 pF/m	
Nominal Impedance (0.1–6 MHz)	110 Ω ± 10 %	
Nominal Impedance (> 10 MHz)	110 Ω ± 20 %	
Nominal velocity of Propagation	60 %	
Nominal Attenuation	2 MHz: 0.95 dB/100 ft.	3.1 dB/100 m
	4 MHz: 1.89 dB/100 ft.	6.2 dB/100 m
	5 MHz: 2.23 dB/100 ft.	7.3 dB/100 m
	6 MHz: 2.50 dB/100 ft.	8.2 dB/100 m
	12 MHz: 3.99 dB/100 ft.	13.1 dB/100 m
	25 MHz: 6.40 dB/100 ft.	21.0 dB/100 m

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of CDR	Standard Lengths		Std. Unit kg	AWG (stranding)	Insulation Thickness		Jacket Thickness		Nominal O.D.		Nom. Imp. (ohms)	Nominal Capacitance	
			ft.	m			Inch	mm	Inch	mm	Inch	mm		pF/ft.	pF/m

PATCH for FLEX

Digital
Installation

FRNC/ LSNH

Product Description

Belden **40550** is the one pair patch cable for the flexible 46-digital-series. The cable is very flexible and has a small outer diameter for use in applications where space is limited. Flame retardancy according to IEC 332-1.

26 Gage (0.14 mm²)	**40550**	1	1640	500	20.0	26 (18 x 0.1)	0.008	0.20	0.020	0.50	0.114	2.90	110 ± 20 %	17	56
		Tinned copper, single-insulation: PE, each pair of a Blue and a White insulated single and shielded first with a polyester foil and then with a spiral screening of 0.10 mm tinned copper (> 90 % coverage) and drain wire. Jacket matte soft flexible FRNC, color code: Grey (RAL 7032).													

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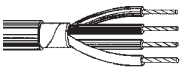
Speaker Cables

PERFORMANCE



Analog
Mobile

Product Description

Belden **1810A / 1811A** are high flex multiconductor cables for Bi-amp and Tri-amp connections. Particularly suitable for use in Neutrik SPEAKON connectors.

Description UL AWM Style	Part No. UL NEC C(UL) CEC Type	No. of Cond.	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm
High Flex Design **14 Gage** (2.1 mm²)	**1810A**	4	1000	304.8	52.6	0.025	0.64	0.040	1.02	0.390	9.91
						Bare copper, PVC insulated, conductors cabled with fillers, paper wrap, overall Black matte finish PVC jacket. Color code: Red, Green, White and Black. Compatible with Neutrik Speakon Connectors.					
	1811A	8	1000	304.8	92.2	0.025	0.64	0.040	1.02	0.515	13.08
						Bare copper, PVC insulated, conductors cabled with fillers, paper wrap, overall Black matte finish PVC jacket. Color code: Brown, Red, Orange, Yellow, Green, White, Blue and Black. Compatible with Neutrik Speakon Connectors.					

STANDARD

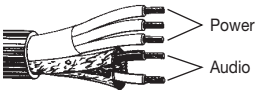
Analog
Mobile

Product Description

Belden's standard speaker cables are suitable for speaker applications.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of CDR	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	(Stranding)	D.C.R. Ω/km	Jacket Thickness Inch	Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm
8 x 2.5 mm²	**43907**	8	3280	1000	280	(50 x 0.25)	< 8	0.114	2.90	0.492	12.50
4 x 2.5 mm²	**46379**	4	3280	1000	165	(50 x 0.25)	< 8	0.114	2.90	0.394	10.00
2 x 4.0 mm²	**46380**	2	3280	1000	120	(56 x 0.30)	< 4.5	0.138	3.50	0.354	9.00
2 x 2.5 mm²	**46381**	2	3280	1000	72	(50 x 0.25)	< 8	0.114	2.90	0.317	8.05
2 x 1.5 mm²	**46382**	2	3280	1000	78	(32 x 0.23)	< 13	0.098	2.50	0.276	7.00
Bare copper, PVC insulated. Matte PVC jacket in Black or Grey. Color code: Black, Red.											

ACTIVE



Analog
Mobile

Product Description

High flexible cable, suitable for DC power supplies and loudspeaker connections. The cable has stranded conductors and an overall foil screen.

3 x 1.00 mm²	**43908**	3 + 2	328 1640	100 500	30 150	1.00 mm² (32 x 0.20)	< 13	0.098	2.50	0.464	11.80
2 x 0.14 mm²						0.14 mm² (18 x 0.10)					
Copper, polyethylene insulated, double braid. PVC jacket in Black.											

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	(Stranding)	Insulation Thickness Inch	Insulation Thickness mm	Nominal O.D. Inch	Nominal O.D. mm
60°C **16 Gage** (2 x 1.3 mm²) Stranded Conductors	**9716**	1000	304.8	26.3	(26 x 30)	0.027	0.69	0.115 x 0.230	2.92 x 5.84
					Copper, PVC insulated, *Parallel*. 1 conductor tinned, 1 conductor bare. Suggested working voltage: 300V. Stock color: Clear. **Also available in different sizes (8782, 9712, 8649, 9708, 9717, 9718)**				

PARALLEL ZIP

Analog
Mobile

Product Description

Belden's standard speaker cables are suitable for speaker applications.

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Belden Audio/Video Cables

Special Cables

INSTRUMENT

Analog
Mobile

Product Description
Belden's cable, part no. **46378**, is very flexible and is used for connecting musical instruments.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of CDR/ Pairs	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding)	D.C.R. Ω/km	Jacket Thickness Inch	Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m
24 Gage (0.25 mm²)	**46378**	1	328 1640	100 500	40	24 (7 x 0.02)	90	0.081	2.05	0.244	6.20	33	110
					Bare copper, foamed polythene, conducting PVC, > 90 % spiral screen copper braid (48 x 0.122). One Red conductor, matte PVC jacket in Red, Green, Yellow, Blue and Black.								

GUITAR

Analog
Mobile

Product Description
Belden's cable, part no. **46377**, is very flexible and is particularly suitable for use with guitars.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of CDR/ Pairs	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding)	D.C.R. Ω/km	Jacket Thickness Inch	Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m
24 Gage (0.22 mm²)	**46377**	1	820 1640	250 500	42	24 (28 x 0.1)	80	0.104	2.65	0.286	7.20	21	70
					Bare copper, foamed polythene, conducting PVC, > 95 % spiral screen copper braid (58 x 0.122). One Red conductor, matte PVC jacket in Black.								

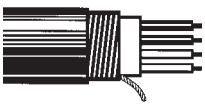
INSTRUMENT/RUBBER

Analog
Mobile

Product Description
Belden **8410** is rubber insulated, rayon braid, tinned copper braid shield, cotton yarn wrap and rubber jacket.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of CDR/ Pairs	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding)	D.C.R. Ω/km	Jacket Thickness Inch	Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m
60°C **25 Gage** (0.16 mm²)	**8410**	1	500	152.4	8.8	25 (7 x 33)	–	0.024	0.61	0.245	6.22	33	108
					3 strands copper, 4 strands tinned copper-covered steel. Rayon braid, rubber insulated. Rayon braid, 80 % tinned copper braid shield. Cotton yarn wrap, Black EPDM rubber jacket. Suggested working voltage: 300 V.								

DMX 512

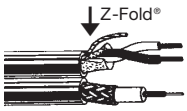


Analog
Mobile

Product Description
Double overall screened two pair cable specifically for DMX 512 lighting control applications. The two additional conductors are used for feedback on digital controls, according to RS-485 data cable specification.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of CDR/ Pairs	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding)	D.C.R. Ω/km	Jacket Thickness Inch	Jacket Thickness mm	Nominal O.D. Inch	Nominal O.D. mm	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m
80°C 100 % Shield Coverage AWM 2717 **22 Gage** (0.34 mm²)	**43906**	2	1640 3280	500 1000	20 61	22 (7 x 0.25)	–	0.028	0.71	0.26	6.8	34	112
					Copper, PE insulated, conductors cabled in pairs (color code: White and Green, Red and Black, each pair stranded together), drain wire, overall braid shield (> 80 % coverage), Black PVC jacket.								

AUDIO/VIDEO



Analog
Mobile

Product Description
Belden **9265** is made for the interconnection of cameras requiring one coax for video and one pair for audio. Another common application for this design is the connection of CCTV surveillance cameras.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding) [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
Beldfoil® AWM 20006 30V 60°C **Electronic News Gathering (ENG), Field Production (EFP) and CCTV Applications**	**9265** **NEC** CL2	500 1000	152.4 304.8	13.8 26.0	2 Cond. 22 (7 x 30) 0.76 mm tinned copper 15.0 Ω/M´ 49.2 Ω/km	PVC 0.054	1.37	0.242 x 0.470	6.15 x 11.94	1 Pair **Beldfoil®** shielded 100 % shield coverage 11.0 Ω/M´ 36.1 Ω/km	35	58 %	51.0	167.3	–	–	–
					Color code: Black, Red. **Also available: 1 Coax + 2 Pair Audio 0.34 mm² (7721A in many colors)**												
					1 Coax 22 (7 x 30) 0.76 mm bare copper 15.0 Ω/M´ 49.2 Ω/km	Foam Polyethylene 0.146	3.71			Bare copper braid 95 % shield coverage 2.6 Ω/M´ 8.5 Ω/km	75	78 %	17.3	56.8	1 5 10 50 100	0.3 0.7 1.0 2.1 3.0	0.98 2.3 3.3 6.9 9.8
						Coax O.D. 0.242	6.15										
					Black PVC jacket. Siamese Type Cable RG-59/U Type with **Beldfoil®** aluminium-polyester shielded twisted pair.												

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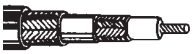
Triax Cables

TRIAX 8



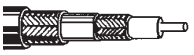
Digital
Mobile

Product Description

Belden **7783A** is a standard Triaxial cable with an impedance of 75 ohms and is used to interconnect video cameras to related equipment.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding) [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
80°C **RG-59/U Type** **High Flex Version**	**7783A**	1640 3280	500 1000	55.8 111.6	20 (19 x 32) 0.99 mm silver plated copper	Foam Polyethylene 0.178	 4.52	0.331	8.4	Silver plated copper braid (90%) bare copper braid (80%) Inner 12 Ω/km Outer 10 Ω/km	75	83%	16.5	54	71.5 88.5 135 180 270 750 1500 2250 3000	1.9 2.1 2.6 3.1 3.9 6.8 10.0 12.5 14.7	6.2 6.9 8.5 10.2 12.8 22.3 32.8 41.0 48.2
						Structure Return Loss 21 dB 5 – 850 MHz 15 dB 850 – 3000 MHz					Polyethylene insulation between braids. With Red **Belflex®** jacket suitable for extreme outdoor applications (-50 +80 °C).							

TRIAX 9



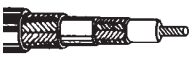
Digital
Mobile

Product Description

Belden **1856A** standard Triaxial cable for the ultimate increase in flexibility with exceptional electrical characteristics for excellent picture quality over extended transmission distances.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding) [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
80°C **RG-59/U Type**	**1856A**	500 1000	152.4 304.8	17.0 34.9	20 (solid) 0.81 mm bare copper 10.6 Ω/M´ 32.8 Ω/km	Foam Polyethylene 0.143	 3.68	0.360	9.14	2 bare copper braids 95% shield coverage Inner 2.5 Ω/M´ 8.2 Ω/km Outer 1.6 Ω/M´ 5.3 Ω/km	75	83%	16.2	53.1	71.5 88.5 135 180 270 750 1500 2250 3000	2.2 2.4 3.0 3.4 4.2 7.1 12.0 16.4 20.4	7.2 7.9 9.8 11.2 13.8 23.3 39.4 53.8 66.9
						Structure Return Loss 21 dB 5 – 850 MHz 15 dB 850 – 3000 MHz					Polyethylene insulation between braids. Red, Yellow, Green, Blue, Violet or Black **Belflex®** jacket suitable for extreme outdoor applications (-50 +80 °C). 100% Sweep tested.							

TRIAX 11



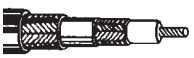
Digital
Mobile

Product Description

Belden **7784A** is a standard Triaxial cable with an impedance of 75 ohms and is used to interconnect video cameras to related equipment.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding) [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
80°C **RG-59/U Type** **High Flex Version**	**7784A**	1640 3280	500 1000	84.4 172.8	16 (19 x 29) 1.42 mm silver plated copper	Foam Polyethylene 0.256	 6.50	0.433	11.0	Silver plated copper braid (90%) bare copper braid (80%) Inner 10 Ω/km Outer 8 Ω/km	75	82%	16.5	54	71.5 88.5 135 180 270 750 1500 2250 3000	1.4 1.6 2.0 2.4 3.0 5.2 7.6 9.4 11.0	4.7 5.2 6.6 7.9 9.8 17.1 24.9 30.8 36.1
						Structure Return Loss 21 dB 5 – 850 MHz 15 dB 850 – 3000 MHz					Polyethylene insulation between braids. Red **Belflex®** jacket suitable for extreme outdoor applications (-50 +80 °C). **Also available:** **Bare Copper (Solid)** **7784E – PVC** **7784ENH – FRNC** **7784EPU – PUR**							

TRIAX 14



Digital
Mobile

Product Description

Belden **7785A** is a standard Triaxial cable with an impedance of 75 ohms and is used to interconnect video cameras to related equipment.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding) [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
80°C **RG-59/U Type** **High Flex Version**	**7785A**	1640	500	139.6	13 (19 x 25) 2.21 mm silver plated copper	Foam Polyethylene 0.382	 9.70	0.571	14.5	Silver plated copper braid (90%) bare copper braid (80%) Inner 3 Ω/km Outer 3 Ω/km	75	82%	16.5	54	71.5 88.5 135 180 270 750 1500 2250 3000	1.1 1.2 1.5 1.8 2.2 3.6 5.2 6.4 7.4	3.6 3.9 4.9 5.9 7.2 11.8 17.1 21.0 24.3
						Structure Return Loss 21 dB 5 – 850 MHz 15 dB 850 – 3000 MHz					Polyethylene insulation between braids. Red **Belflex®** jacket suitable for extreme outdoor applications (-50 +80 °C).							

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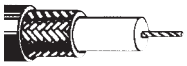
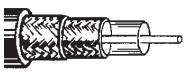
Belden Audio/Video Cables

Video Cables – analog

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding) [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
STANDARD																	
 Analog Mobile	**Product Description** Belden **8241** standard analog video cable with an impedance of 75 ohms is typically used in video applications such as video equipment rack wiring, CCTV, MATV and color or monochrome video monitor hook-ups.																
1354 30 V 80°C **RG-59/U Type** 0.6/3.7	**8241** **NEC** CMX **CEC** CMX	U-500 500 1000 2000 5000 [Black only]	152.4 U-152.4 304.8 609.6 1524.0	9.1 8.7 17.3 36.2 89.1	23 (solid) 0.58 mm bare copper covered steel 47 Ω/M´ 154.2 Ω/km	Polyethylene	0.146	3.71	0.242	6.15	Bare copper braid 95 % shield coverage 2.6 Ω/M´ 8.5 Ω/km	75	66 %	20.5	67.3	1 10 50 100 200 400 700 900 1000	0.6 1.1 2.4 3.4 4.9 7.0 9.7 11.1 12.0	2.0 3.6 7.9 11.2 16.1 23.0 31.8 36.4 39.4
													PVC jacket (Red, Yellow, Green, Light Blue, White, Orange and Black) **Also available:** **8241A, 8241B, 8241F**							
 Analog Mobile	**Product Description** Belden **9259** standard flexible video cable with an impedance of 75 ohms.																
1354 30 V 80°C 0.7/3.7	**9259** **NEC** CM **CEC** CM	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.0 18.4 18.1 35.7 34.6	22 (7 x 30) 0.76 bare copper 15.0 Ω/M´ 49.2 Ω/km	Foam Polyethylene	0.146	3.71	0.242	6.15	Bare copper braid 95 % shield coverage 2.6 Ω/M´ 8.5 Ω/km	75	78 %	17.3	56.8	1 10 50 100 200 400 700 900 1000	0.3 0.9 2.1 3.0 4.5 6.6 8.9 10.1 10.9	1.0 3.0 6.9 9.8 14.8 21.7 29.2 33.1 35.8
													Black PVC jacket. For CCTV applications.							
 Analog Mobile	**Product Description** Belden **9248** standard analog video cable with Duofoil® and tinned copper braid.																
1354 30 V 80°C **RG-6** 1.0/4.6	**9248** **NEC** CM **CEC** CM	U-500 500 U-1000 1000 1640 3280	U-152.4 152.4 U-304.8 304.8 500 1000	18.1 18.1 35.7 38.2 60.9 117.6	18 (solid) 0.040 bare copper 6.4 Ω/M´ 21.0 Ω/km	Gas Injected*	0.180	4.57	0.270	6.86	Duofoil® +61 % tinned copper braid 100 % shield coverage 5.6 Ω/M´ 18.4 Ω/km	75	82 %	16.2	53.1	1 10 50 100 200 400 700 900 1000	0.3 0.7 1.5 2.0 2.8 4.0 5.3 6.1 6.5	1.0 2.3 4.9 6.6 9.2 13.1 17.4 20.0 21.3
													Black PVC jacket. 100 % sweep tested. 5 – 450 MHz.							
 Analog Mobile	**Product Description** Belden **9292** standard RG-11 video cable with Duofoil® and tinned copper braid.																
80°C **RG-11** 1.6/7.2	**9292**	1000	304.8	76.1	14 (solid) 0.064 bare copper 2.6 Ω/M´ 8.5 Ω/km	Foam Polyethylene	0.285	7.24	0.405	10.29	Duofoil® +61 % tinned copper braid 100 % shield coverage 3.0 Ω/M´ 9.8 Ω/km	75	78 %	17.3	56.7	1 10 50 100 200 400 700 900 1000	0.17 0.50 1.0 1.4 2.1 2.9 3.9 4.4 4.7	0.6 1.6 3.3 4.6 6.9 9.5 12.8 14.4 15.4
													Black PVC jacket. 100 % sweep tested. 5 – 450 MHz.							

* Gas injected foam high density Polyethylene.

DOUBLE BRAID																	
 Analog Digital Mobile	**Product Description** Belden **8281** standard analog and digital video cable with an impedance of 75 ohms and double braided shield for use in noisy environment applications.																
80°C **Double Braided** **RG-59/U Type** 0.8/5.0	**8281**	500 1000	152.4 304.8	16.4 33.3	20 (solid) 0.78 mm bare copper 9.9 Ω/M´ 32.5 Ω/km	Polyethylene	0.198	5.03	0.305	7.75	Tinned copper double braid 98 % shield coverage 1.1 Ω/M´ 3.6 Ω/km	75	66 %	20.5	68.9	71.5 135 270 360 540 750 1500 3000	2.1 3.0 4.3 5.1 6.3 7.6 12.0 19.1	6.9 9.8 14.1 16.7 20.7 24.9 39.4 62.6
													Red, Yellow, Green, Light Blue, White, Orange or Black polyethylene jacket. 100 % Sweep tested. **Also available:** **8281B, 8281F**							

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Video Cables – digital

SMALL

Digital
Mobile

Product Description

Belden **1855A** Digital Video Coax. This small, compact cable is designed as an interconnect cable for HDTV transmission equipment in mobile trucks, and can also be used as digital video patch cord in mobile units or studios. Its light weight and compact size provide an advantage, especially in truck applications where space is at a premium and axle weight limitations must be considered. Its solid conductor makes it easy to connectorize.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
75°C **SDI/HDTV Digital Video** **Sub-Miniature RG-59/U Type** 0.6/2.6	**1855A** NEC CMR CEC CMR	500 [Black only]	152.4	8.2	23 (solid) 0.58 mm bare copper 20.1 Ω/M´ 65.9 Ω/km	Gas Injected Foam HDPE 0.102	2.59	0.159	4.03	Duofoil® +95% tinned copper braid 7.6 Ω/M´ 24.9 Ω/km	75	82%	16.5	54.1	71.5	2.9	10.0
		1000	304.8	13.3											135	3.8	12.5
															270	5.4	17.7
															360	6.2	20.3
															540	7.7	25.3
															750	9.6	31.5
															1500	13.0	42.6
															3000	18.5	60.7

Structure Return Loss
23 dB – 850 MHz
21 dB 850 – 3000 MHz

Overall PVC jacket: Brown, Red, Orange, Yellow, Green, Blue, **Violet**, Grey, White and Black. 100% Sweep tested.
On request: FRNC/LSNH

Burning Energy: 940 kJ/m

PRECISION

Digital
Mobile

Product Description

Belden **1505A** digital video cable is similar to 1694A but smaller O.D. diameter and is made for critical analog and digital video circuits and high quality applications. Should be used where superior signal integrity is required.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
75°C **SDI/HDTV Digital Video** **RG-59/U Type** 0.8/3.7	**1505A** NEC CMR CEC CMR	500 [Black only]	152.4	7.6	20 (solid) 0.81 mm bare copper 10.0 Ω/M´ 32.8 Ω/km	Gas Injected Foam HDPE 0.145	3.68	0.235	5.97	Duofoil® + 95% tinned copper braid 3.8 Ω/M´ 12.5 Ω/km	75	83%	16.3	53.5	71.5	2.1	6.9
		1000	304.8	14.6											135	2.7	8.9
															270	3.8	12.5
															360	4.4	14.4
															540	5.5	18.0
															750	6.4	21.0
															1500	9.4	30.5
															3000	13.8	44.0

Structure Return Loss
23 dB – 850 MHz
21 dB 850 – 3000 MHz

Brown, Red, Orange, Yellow, Green, Blue, **Violet**, Grey, White or Black PVC jacket. 100% Sweep tested.
Also available: FRNC/LSNH **YR46739**

Burning Energy: 2350 kJ/m

Digital
Mobile

Product Description

Belden **1505F** is an exceptionally flexible version of our popular 1505A RG-59 digital video coax cable.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
75°C **SDI/HDTV Video Patch** **RG-59/U Type** 0.8/3.7 **High Flex Version**	**1505F** NEC CM CEC CM	1000	304.8	20.0	22 (7x29) 0.79 mm bare compacted copper* 12.2 Ω/M´ 40.0 Ω/km	Gas Injected Foam HDPE 0.145	3.68	0.242	6.15	Tinned copper double braid 95% shield coverage 2.4 Ω/M´ 7.8 Ω/km	75	80%	17.0	55.7	71.5	2.5	8.2
															135	3.5	11.5
															270	5.1	16.7
															360	6.0	19.7
															540	7.4	24.3
															720	8.7	28.5
															1500	13.3	43.6
															3000	20.3	66.6

Structure Return Loss
15 dB 5 – 3000 MHz

Red, Yellow, Green, Blue, Violet, White or Matte Black PVC jacket. 100% Sweep tested.

PERFORMANCE

Digital
Mobile

Product Description

Belden **1694A** digital video cable provides 20–30% lower attenuation than traditional precision video cables. This improved performance allows for error-free transmissions over extended distances.

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
75°C **SDI/HDTV Digital Video** **RG-6/U Type** 1.0/4.6	**1694A** NEC CMP CEC CMR	500 [Black only]	152.4	10.2	18 (solid) 1.01 mm bare copper 6.4 Ω/M´ 21.0 Ω/km	Gas Injected Foam HDPE 0.180	4.57	0.275	6.99	Duofoil® + 95% tinned copper braid 2.8 Ω/M´ 9.2 Ω/km	75	83%	16.2	53.1	71.5	1.6	5.2
		1000	304.8	20.5											135	2.1	6.9
															270	3.0	9.7
															360	3.4	11.3
															540	4.3	13.9
															750	5.0	16.4
															1500	7.3	24.0
															3000	10.7	35.0

Structure Return Loss
23 dB – 850 MHz
21 dB 850 – 3000 MHz

Brown, Red, Orange, Yellow, Green, Blue, **Violet**, Grey, White or Black PVC jacket. 100% Sweep tested.
Also available: FRNC/LSNH **YR46680**

Burning Energy: 3400 kJ/m

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

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Belden Audio/Video Cables

Video Cables – digital

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding) [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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

HIGH QUALITY

Digital
Mobile

Product Description

Belden **7855A** video cable is made for excellent picture quality over extended transmission distances.

75°C **SDI/HDTV Digital Video** **RG-7/U Type** 1.3/5.7	**7855A** HEAD ROOM Belden	1000	304.8	58.26	16 (solid) 1.3 mm bare copper 1.2 Ω/M´ 3.9 Ω/km NEC CMR CEC CMR	Gas Injected Foam HDPE	0.225	5.71	0.320	8.13	Duofoil® + 95% tinned copper braid 1.7 Ω/M´ 5.6 Ω/km	75	84%	16.1	52.8	71.5 135 270 360 540 750 1500 3000	1.4 1.8 2.5 2.9 3.6 4.3 6.1 8.7	4.4 5.8 8.1 9.4 11.7 14.0 20.0 28.5
											Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White, or Black PVC jacket.							

LONG RUN

Digital
Installation

Product Description

Belden **7731A** Digital Video Coax. This RG-11/U type coaxial cable is intended for internal studio use, meeting the Society of Motion Picture & Television Engineers (SMPTE) 292M standard for Bit-Serial Digital Interface for High-Definition Television (HDTV) Systems.

75°C **SDI/HDTV Digital Video** **RG-11/U Type** 1.6/7.2	**7731A** NEC CMP CEC CMR HEAD ROOM Belden	1000 4000	304.8 1219.2	42.8 212.3	14 (solid) 1.62 mm bare copper 2.5 Ω/M´ 8.2 Ω/km	Gas Injected Foam HDPE	0.285	7.24	0.405	10.3	Duofoil® +95% tinned copper braid 1.5 Ω/M´ 4.9 Ω/km	75	85%	16.0	52.4	71.5 135 270 360 540 750 1500 3000	1.1 1.5 2.1 2.5 3.1 3.7 5.5 8.2	3.6 4.8 6.9 8.0 10.0 12.0 18.0 26.9
						Structure Return Loss 23 dB – 850 MHz 21 dB 850 – 3000 MHz					Brown, Red, Orange, Yellow, Green, Blue, **Violet**, Grey, White or Black PVC jacket. 100% Sweep tested. **Also available:** FRNC/LSNH **YR47003** Burning Energy: 7000 kJ/m							

PERFORMANCE/small

Digital
Mobile

Product Description

Belden **1865A** digital cable where small size is required.

75°C **Sub-Miniature RG-59/U Type** 0.5/2.4	**1865A** NEC CMP CEC CMR	1000	304.8	13.9	25 (19 x 37) 0.53 mm bare copper 27.4 Ω/M´ 81.0 Ω/km	Gas Injected Foam HDPE	0.094	2.39	0.150	3.81	Duofoil® + 95% tinned copper braid 5.4 Ω/M´ 17.7 Ω/km	75	82%	16.5	54.1	71.5 135 270 360 540 750 1500 3000	3.7 5.0 7.1 8.2 10.1 12.0 16.7 23.3	12.1 16.4 23.3 26.9 33.1 39.5 54.8 76.4
											Overall PVC jacket: Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White and Black. 100% Sweep tested.							

STANDARD/FRNC

FRNC/LSNH

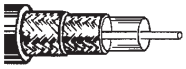
Digital
Mobile

Product Description

Belden **1855ENH** is specially engineered to meet the requirements of the AES/EBU specification. The cable is flexible and has a small outer diameter for use in applications where space is limited. Flame retardancy according to IEC 332-3C.

75°C **SDI Digital Video** **RG-59/U Type** 0.6/2.8	**1855ENH** NEC CMX CEC CMX	328 1640 3280	100 500 1000	3.0 15.0 30.0	22 (solid) 0.6 mm tinned copper 72 Ω/km	Gas Injected	0.110	2.8	0.199	4.50	Duofoil® + 90% tinned copper braid	75	84%	16.1	52.8	71.5 135 270 360 540 750 1500 3000	2.62 3.51 4.91 5.67 6.95 8.20 11.80 17.10	8.6 11.5 16.1 18.6 22.8 26.9 38.7 56.1
											Green with FRNC jacket. **For the UK market YR46865 SDV-LFH (Violet).**							

DOUBLE BRAID



Analog
Digital
Mobile

Product Description

Belden **43187** standard analog and digital video cable with an impedance of 75 ohms and double braided shield for use in noisy environment applications.

75°C **Double Braided RG-59/U Type** 0.6/3.7	**43187**	328 1640	100 500	7.5 37.5	23 (solid) 0.6 mm bare copper	Polyethylene	0.143	3.65	0.244	6.20	Soft annealed copper double braid 91% coverage	75	66%	20.5	68.9	1 10 135 270 360 540 750 1000	0.61 1.13 3.66 5.00 5.85 7.16 8.60 9.91	2.0 3.7 12.0 16.4 19.2 23.5 28.2 32.5
											Cream PVC jacket.							

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Video Multicore Cables – analog

RGB/miniature

Analog
Mobile

Product Description

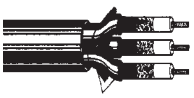
Belden **152xA-series** are used for sending Red, Green and Blue signals through separate coaxes. All Belden RGB cables are pre-timed to less than 5.0 ns delay difference between each coax. This allows installation with no TDR.

Belden's 152xA-series multicore video cables are "pre-timed" to this specification: **nom. delay < 4.0 ns/m**

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding) [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
1354 30V 60°C 0.3/2.6 NEC CL2	**1520A 3-Coaxial**	500 1000	152.4 304.8	10.8 21.5	30 (7 x 38) 0.30 mm tinned copper 103.2 Ω/M´ 337.9 Ω/km	Foam High Density Polyethylene 0.056 Coax O.D.'s 0.102	1.42 2.59	0.283	7.19	(Coaxes) Duofoil® +90% tinned copper braid (overall) Beldfoil® 100% shield coverage 9.5 Ω/M´ 31.2 Ω/km	75	78%	17.3	56.7	1 5 10 30 50 100	0.8 1.5 2.2 4.0 5.4 8.2	2.6 4.9 7.2 13.1 17.7 26.9
											Overall Black PVC jacket; inner PVC jackets color coded: Red, Green and Blue. 100% Sweep tested.							
	1521A 4-Coaxial	500 1000	152.4 304.8	12.4 25.3	30 (7 x 38) 0.30 mm tinned copper 103.2 Ω/M´ 337.9 Ω/km	Foam High Density Polyethylene 0.056 Coax O.D.'s 0.102	1.42 2.59	0.310	7.87	(Coaxes) Duofoil® +90% tinned copper braid (overall) Beldfoil® 100% shield coverage 9.5 Ω/M´ 31.2 Ω/km	75	78%	17.3	56.7	1 5 10 30 50 100	0.8 1.5 2.2 4.0 5.4 8.2	2.6 4.9 7.2 13.1 17.7 26.9
											Overall Black PVC jacket; inner PVC jackets color coded: Red, Green, Blue and White. 100% Sweep tested.							
	1522A 5-Coaxial	500 1000	152.4 304.8	14.3 29.5	30 (7 x 38) 0.30 mm tinned copper 103.2 Ω/M´ 337.9 Ω/km	Foam High Density Polyethylene 0.056 Coax O.D.'s 0.102	1.42 2.59	0.338	8.59	(Coaxes) Duofoil® +90% tinned copper braid (overall) Beldfoil® 100% shield coverage 9.5 Ω/M´ 31.2 Ω/km	75	78%	17.3	56.7	1 5 10 30 50 100	0.8 1.5 2.2 4.0 5.4 8.2	2.6 4.9 7.2 13.1 17.7 26.9
											Overall Black PVC jacket; inner PVC jackets color coded: Red, Green, Blue, White and Yellow. 100% Sweep tested.							

RGB

Analog
Mobile



Product Description

These bundled coaxial cables of the Belden **14xxB-series** are very flexible. Ideal for use in graphics, animation and computer display applications.

Belden's 14xxB-series multicore video cables are "pre-timed" to this specification: **nom. delay < 4.0 ns/m**

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding) [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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
60°C 0.5/3.7	**1406B 3-Coaxial**	1000	304.8	32.7	26 (7 x 34) 0.48 mm bare copper 37.3 Ω/M´ 122.4 Ω/km	Foam Polyethylene 0.090 0.146 in. (3.71 mm) is O.D. of ea. indiv. coax	2.29	0.388	9.86	Duofoil® +93% tinned copper braid 100% shield coverage 8.6 Ω/M´ 28.2 Ω/km	75	78%	17.3	56.8	1 5 10 30 50 100	0.6 1.3 1.8 3.1 3.9 5.4	2.0 4.2 5.9 10.2 12.8 17.7
											Overall matte Black PVC jacket. Inner PVC jacket color coded: Red, Green and Blue. 100% Sweep tested.							
	1407B 4-Coaxial	1000	304.8	40.6	26 (7 x 34) 0.48 mm bare copper 37.3 Ω/M´ 122.4 Ω/km	Foam Polyethylene 0.090 0.146 in. (3.71 mm) is O.D. of ea. indiv. coax	2.29	0.455	11.56	Duofoil® +93% tinned copper braid 100% shield coverage 8.6 Ω/M´ 28.2 Ω/km	75	78%	17.3	56.8	1 5 10 30 50 100	0.6 1.3 1.8 3.1 3.9 5.4	2.0 4.2 5.9 10.2 12.8 17.7
											Overall matte Black PVC jacket. Inner PVC jacket color coded: Red, Green, Blue and White. 100% Sweep tested.							
	1417B 5-Coaxial	1000	304.8	47.7	26 (7 x 34) 0.48 mm bare copper 37.3 Ω/M´ 122.4 Ω/km	Foam Polyethylene 0.090 0.146 in. (3.71 mm) is O.D. of ea. indiv. coax	2.29	0.477	12.12	Duofoil® +93% tinned copper braid 100% shield coverage 8.6 Ω/M´ 28.2 Ω/km	75	78%	17.3	56.8	1 5 10 30 50 100	0.6 1.3 1.8 3.1 3.9 5.4	2.0 4.2 5.9 10.2 12.8 17.7
											Overall matte Black PVC jacket. Inner PVC jacket color coded: Red, Green, Blue, White and Yellow. 100% Sweep tested.							

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Belden Audio/Video Cables

Video Multicore Cables – digital

HEAD ROOM Belden

Description UL AWM Style	Part No. UL NEC C (UL) CEC Type	No. of Cond.	Standard Lengths ft.	Standard Lengths m	Std. Unit kg	AWG (stranding) [Dia. in mm] Nom. D.C.R.	Insulation & Nominal Core O.D. Inch	Insulation & Nominal Core O.D. mm	Nominal O.D. Inch	Nominal O.D. mm	No. of Shields & Material Nom. D.C.R.	Nom. Imp. (ohms)	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

VIDEOFLEX Mini High-Res

Digital
Mobile

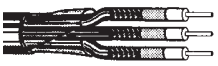
Product Description

Belden's **12xxR-series** are the industry's first cables to offer true 75 Ohm performance. With precise 75 Ohm Impedance, whole-system performance is optimized. Mini High-Res component video cables are designed for RGB and HDTV applications.

Belden's Mini High-Res multicore video cables are "pre-timed" to this specification: **nom. delay < 4.0 ns/m**

75°C **SDI/HDTV Digital Video** 0.4/2.3 NEC CMR (UL 1666)	**1277R**	3	500 1000	152.4 304.8	15.9 31.8	25 (solid) 0.45 mm bare copper 6.4 Ω/M´ 21.0 Ω/km	Foam PE 0.0919	2.33	0.320	8.13	Duofoil® +95% tinned copper braid	75	80%	17.0	55.7	5 50 100 200 400 750 900 1000 3000	1.17 3.7 4.9 6.7 9.5 13.4 15.0 15.8 31.2	3.8 12.1 16.1 22.0 31.2 44.0 49.2 51.8 102.4
	1278R	4	500 1000	152.4 304.8	16.8 33.6		Coax O.D. 0.114	2.90	0.351	8.92		1277R: Red, Green and Blue 1278R: Red, Green, Blue and White 1279R: Red, Green, Blue, White and Yellow 1280R: Red, Green, Blue, White, Yellow and Brown							
	1279R	5	500 1000	152.4 304.8	19.5 37.2				0.403	10.24								
	1280R	6	500 1000	152.4 304.8	23.1 46.3				0.423	10.74								

VIDEOFLEX 778xA-series



Digital
Mobile

Product Description

Videoflex with bundled **778xA-series** digital video cables is small in size, and meets the needs of today's most demanding graphics and television installations. A 6-coax design allows for buffered output of RGsB (Sync on green). A 12-coax version is also available for applications requiring multiple channels of video.

Belden's 778xA-series multicore video cables are "pre-timed" to this specification: **nom. delay < 4.0 ns/m**

23 Gage **SDI/HDTV Digital Video** (1855A Bundled) 0.6/2.6 NEC CMR CEC CMR	**7787A**	3	500 1000	152.4 304.8	22.7 44.9	23 (solid) 0.58 mm bare copper 20.1 Ω/M´ 65.9 Ω/km	Gas injected Foam HDPE 0.102	2.55	0.432	10.97	Duofoil® +95% tinned copper braid 100% shield coverage 7.6 Ω/M´ 24.9 Ω/km	75	83%	16.5	54.1	71.5 135 270 360 540 750 1500 3000	3.0 3.8 5.4 6.2 7.7 9.0 13.0 18.5	9.8 12.5 17.7 20.3 25.3 29.5 42.6 60.7
	7788A	4	1000	304.8	54.0		Coax O.D. 0.159	4.03	0.481	12.22		High-flex PVC jacket. 7787A: Red, Green and Blue 7788A: Red, Green, Blue and White 7789A: Red, Green, Blue, White and Yellow 7790A: Red, Green, Blue, White, Yellow and Brown							
	7789A	5	500 1000	152.4 304.8	35.2 68.0				0.539	13.69								
	7790A	6	500 1000	152.4 304.8	42.6 84.4				0.579	15.16								
	7792A	12	500 1000	152.4 304.8	85.3 168.7				1.150	29.21								

VIDEOFLEX 779xA-series

Digital
Mobile

Product Description

Belden has bundled its highly popular **779xA-series** cables into new, multi-channel audio/video cable. Videoflex can be used for all of the various RGB systems including "RGB: 3-coax, RGBS: 4-coax, RGBHV: 5-coax". RGBHV with simultaneous composite Sync, making it suitable for any large display device. A 10-coax version is also available for applications requiring multiple channels of video. The transmission of digital audio over 75-ohm coax requires the use of baluns which convert the unbalanced coax signal to a 110-ohm balanced transmission.

Belden's 779xA-series multicore video cables are "pre-timed" to this specification: **nom. delay < 4.0 ns/m**

20 Gage **SDI/HDTV Digital Video** (1505A Bundled) 0.8/3.7 NEC CMR CEC CMR	**7794A**	3	500 1000	152.4 304.8	40.6 80.7	20 (solid) 0.81 mm bare copper 10.0 Ω/M´ 32.8 Ω/km	Gas injected Foam HDPE 0.145	3.68	0.631	16.03	Duofoil® +90% tinned copper braid 100% shield coverage 9.5 Ω/M´ 11.5 Ω/km	75	83%	16.3	53.1	71.5 135 270 360 540 750 1500 3000	2.1 2.7 3.8 4.4 5.5 6.4 9.4 13.8	6.9 8.9 12.5 14.4 18.0 21.0 30.8 45.3
	7795A	4	500 1000	152.4 304.8	50.1 102.1		Coax O.D. 0.235	5.57	0.706	17.93		High-flex PVC jacket. 7794A: Red, Green and Blue 7795A: Red, Green, Blue and White 7796A: Red, Green, Blue, White and Yellow 7798A: Red, Green, Blue, White, Yellow, Brown, Orange, Grey, Violet and Black							
	7796A	5	500 1000	152.4 304.8	64.6 126.6				0.790	20.07								
	7798A	10	500 1000	152.4 304.8	137.9 269.4				1.166	29.62								

VIDEOFLEX 771xA-series

Digital
Mobile

Product Description

Belden has bundled **771xA-series** and is used for sending Red, Green and Blue signals through separate coaxes. All Belden RGB cables are pre-timed to less than 5.0 ns/100 ft. delay difference between each coax. This allows installation with no TDR (available with 4, 5, 10 coaxes). Overall matte Black PVC jacket.

Belden's 771xA-series multicore video cables are "pre-timed" to this specification: **nom. delay < 4.0 ns/m**

75°C **SDI/HDTV Digital Video** (1694A Bundled) 1.0/4.6 NEC CMR CEC CMR	**7710A**	3	500 1000	152.4 304.8	72.2 125.4	18 (solid) 1.01 mm bare copper 6.4 Ω/M´ 21.0 Ω/km	Gas injected Foam HDPE 0.180	4.57	0.770	19.56	Duofoil® +95% tinned copper braid 2.8 Ω/M´ 9.2 Ω/km	75	82%	16.2	53.1	71.5 135 270 360 540 750 1500 3000	1.6 2.1 3.0 3.4 4.3 5.0 7.3 10.0	5.2 6.9 9.8 11.2 14.1 16.4 23.9 32.8
	7711A	4	500 1000	152.4 304.8	87.7 156.4		Coax O.D. 0.275	6.99	0.843	21.41		7710A: Red, Green and Blue 7711A: Red, Green, Blue and White 7712A: Red, Green, Blue, White and Yellow 7713A: Red, Green, Blue, White, Yellow, Brown, Orange, Grey, Violet and Black							
	7712A	5	500 1000	152.4 304.8	103.1 187.1				0.942	23.93								
	7713A	10	500 1000	152.4 304.8	192.8 366.6				1.386	35.20								

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Equivalency Chart for American Wire Gauge (AWG)

AWG Size	Composition of Conductor	Approx. O.D. mm	Section mm^2
40	Solid	0.079	0.005
39	Solid	0.089	0.006
38	Solid	0.102	0.008
37	Solid	0.114	0.010
36	Solid	0.127	0.013
	7/44	0.153	0.014
35	Solid	0.142	0.016
34	Solid	0.160	0.020
	7/42	0.191	0.022
33	Solid	0.180	0.025
32	Solid	0.209	0.032
	7/40	0.203	0.034
	19/44	0.229	0.039
31	Solid	0.226	0.040
30	Solid	0.255	0.051
	7/38	0.305	0.056
	19/42	0.305	0.060
29	Solid	0.287	0.064
28	Solid	0.320	0.080
	7/36	0.381	0.071
	19/42	0.406	0.093
27	Solid	0.361	0.102
	7/35	0.457	0.111
26	Solid	0.404	0.127
	7/34	0.483	0.140
	10/36	0.533	0.127
	19/38	0.508	0.153
25	Solid	0.455	0.163
24	Solid	0.511	0.203
	7/32	0.610	0.226
	10/34	0.584	0.200
	19/36	0.610	0.239
	41/40	0.584	0.201
23	Solid	0.574	0.259
22	Solid	0.643	0.322
	7/30	0.762	0.352
	19/34	0.787	0.380
	26/36	0.762	0.327

AWG Size	Composition of Conductor	Approx. O.D. mm	Section mm^2
21	Solid	0.724	0.412
20	Solid	0.813	0.514
	10/30	0.890	0.504
	19/32	0.940	0.612
	26/34	0.914	0.520
	41/36	0.914	0.533
19	Solid	0.912	0.653
18	Solid	1.020	0.816
	7/26	1.220	0.891
	16/30	1.200	0.808
	19/30	1.240	0.957
	41/34	1.200	0.819
	65/34	1.200	0.845
17	Solid	1.150	1.039
16	Solid	1.290	1.300
	7/24	1.520	1.420
	19/29	1.470	1.216
	26/30	1.500	1.310
	65/34	1.500	1.300
	105/36	1.500	1.365
15	Solid	1.450	1.651
14	Solid	1.630	2.070
	7/20	1.850	2.260
	19/27	1.850	1.930
	41/30	1.850	2.060
	105/36	1.850	2.100
13	Solid	1.830	2.630
12	Solid	2.050	3.290
	7/20	2.440	3.610
	19/25	2.360	3.070
	65/30	2.410	3.270
	165/34	2.410	3.300
11	Solid	2.300	4.155
10	Solid	2.600	5.230
	37/26	2.920	4.710
	65/28	2.950	5.230
	105/30	2.950	5.355

Conversion Table

To Convert Standard To Metric			
in	mm	x 25.4	#
ft	m	: 0.3048	#
mi	km	x 1.6093	✶
lbs	kg	x 0.4536	✶
lbs/1000 ft	kg/km	x 1.488	✶
°F	°C	(F-32)/1.8	#
To Convert Metric To Standard			
mm	in	: 25.4	#
m	ft	x 0.3048	#
km	mi	x 0.6214	✶
kg	lbs	x 2.204	✶
kg/km	lbs/1000 ft	x 0.67197	✶
°C	°F	1.8 x °C + 32	#

= Exact value
✶ = Approximate value
x = multiply by
: = divide by

Nominal Temperature Range for Various Insulating and Jacketing Compounds

Compound	Normal Low	Normal High	Special Low	Special High
Chlorosulfonated Polyethylene (Hypalon®)	– 20°C	90°C	– 40°C	105°C
EPDM (Ethylene-Propylene-Diene Monomer)	– 55°C	105°C	—	150°C
Neoprene	– 20°C	60°C	– 55°C	90°C
Polyethylene (Solid and Foamed)	– 60°C	80°C	—	—
Polypropylene (Solid and Foamed)	– 40°C	105°C	—	—
Rubber	– 30°C	60°C	– 55°C	75°C
FEP Teflon®	– 70°C	200°C	—	—
PVC	– 20°C	80°C	– 55°C	105°C
Silicone	– 80°C	150°C	—	200°C
Halar®	– 70°C	150°C	—	—
Tefzel®	– 65°C	150°C	—	—
TFE Teflon	– 70°C	260°C	—	—
CPE	– 35°C	90°C	– 45°C	105°C
Solef® / Kynar®	– 20°C	150°/125°C	– 40°C	150°/150°C
Flamarrest®	– 20°C	75°C	—	—

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Belden Audio/Video Cables

Connector Cross/Transmission Distance

Connector Cross

Belden	Type	ADC	Bomar	Damar + Hagen	Fischer	Lemo	Neutrik	Radiall	Telegärtner	Trompeter	Vitelec
152xA	0.3/2.6RGB	–	–	on request	–	FGG.3B.244.CLCD82	NBTC75 BLI4	R142.004.000	J01002A0027	– D7	VB10-2036
12xxR	–	BNC-16	–	1-xxxx-2100	–	–	on request	–	on request	105-2053-9	–
14xxB	0.5/3.7RGB	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-7	SBC1855A	1-6097-2100	–	FFS0A.250.NTAC47	NBNC75 PDE6	R142.081.320	J01002A0030	– D1	–
1855ENH	0.6/2.8	–	–	1-4271-2100	–	FFS0A.250.NTAE63	NBNC75 PFE7	R142.082.027	J01002A0033	– D24	–
8241	0.6/3.7	BNC-1	SBC8241	1-1190-2100	–	on request	NBNC75 PNS7	R142.016.000	J01002A0003	– D3	–
1505A	0.8/3.7	BNC-1	SBC1505A	1-4253-2100	–	FFS0A.250.NTAE63	NBNC75 PLS9	R142.084.161	J01002A0031	– D2	–
8281	0.8/4.9	BNC-3	SBC8281	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 PTS11	R142.086.161	J01002A0010	– D4	VB10-2024
7731A	1.6/7.2	BNC-25	SBC7731A	1-5044-2100	–	FFA.4E.675.CTAC10	on request	R142.186.000	J01002A1940	– D5	–
7783A	Triax 8	on request	–	Serie 47	1051 A004-5	FFA.4E.675.CTAC85	–	–	–	305-1365-1	–
1856A	Triax 9	on request	–	Serie 47	1051 A004-5	FFA.4E.675.CTAC95	–	–	–	305-0088-2	–
7784A	Triax 11	on request	–	Serie 47	1051 A004-5	FFA.4E.675.CTAC11	–	R142.017.000	–	305-1289-1	–
7785A	Triax 14	on request	–	Serie 47	1051 A004-4	on request	–	–	–	–	–

Maximum Transmission Distance in Feet (meters) at Serial Digital Data Rates

Data Rate:	143 Mb/s	177 Mb/s	270 Mb/s	360 Mb/s	540 Mb/s	1.5 Gb/s
Spec:	SMPTE 259M	ITU-R BT. 601	SMPTE 259M	SMPTE 259M	SMPTE 344M*	SMPTE 292M
Application:	Composite NTSC	Composite PAL	Component Video	Component Widescreen	Component Widescreen	HDTV
Belden No.	ft. (m)	ft. (m)	ft. (m)	ft. (m)	ft. (m)	ft. (m)
1865A	810 (247)	760 (232)	600 (183)	520 (158)	420 (128)	170 (52)
1855A – 778xA	1000 (305)	910 (277)	750 (229)	650 (198)	530 (162)	210 (64)
1505F	1200 (366)	1071 (327)	857 (261)	732 (223)	588 (179)	225 (69)
8281F	1250 (381)	1100 (335)	860 (262)	730 (222)	590 (180)	240 (73)
8281B	1430 (436)	1270 (387)	1000 (305)	850 (259)	680 (207)	250 (76)
8281	1430 (436)	1270 (387)	1000 (305)	860 (262)	700 (213)	260 (79)
1505A – 779xA	1430 (436)	1320 (402)	1110 (338)	960 (293)	790 (241)	300 (91)
1694A – 771xA	1760 (536)	1620 (494)	1360 (415)	1180 (360)	970 (296)	370 (113)
7855A	2220 (677)	2000 (610)	1670 (509)	1460 (445)	1210 (369)	470 (143)
7731A	2730 (832)	2460 (750)	2000 (610)	1740 (530)	1430 (436)	540 (165)

* Proposed at time of printing.

NOTE: The serial digital interconnect standards are designed to operate where the signal loss at 1/2 the clock frequency does not exceed the approximate loss values listed below. The maximum length values shown are based on typical attenuation values for the cables listed and the following criteria:

Maximum length = 30 dB loss at 1/2 the clock frequency: SMPTE 259M, PAL, Widescreen.
Maximum length = 20 dB loss at 1/2 the clock frequency: SMPTE 292M.

The bit error rate (BER) can vary dramatically as the calculated distances are approached. BER is dependent on receiver design and the losses of the actual coax used.
Distribution and routing equipment manufacturers should be contacted to verify their maximum recommended transmission.

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Part Number Index

Product Information

Optical Fibre Catalog

Headroom Catalog

Digital Studio Cable Guide

Master Catalog

Online Product Service: www.belden-europe.com

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