





European Edition



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 EN50117, RS-485 and IEC332-3C 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.

Table of Contents	Page
Dependable Solutions in Cabling	1 – 2
Belden Quality	3
Dependable Solutions in Audio/Video	4 – 5
Optical Fibre Cables	6
AUDIO	
Microphone Cables	7 – 8
Audio-Connect Cables – analog	9
Audio-Connect Cables – digital	10
Multicore Cables – analog	11 – 13
Multicore Cables – digital (AES/EBU)	14 – 15
Speaker Cables	16
Special Cables	17
VIDEO	
Triax Cables	18
Video Cables – analog	19
Video Cables – digital	20 – 21
Video Multicore Cables – analog	22
Video Multicore Cables – digital	23
Technical Information	24
Connector Cross/Transmission Distance	25
Part Number Index / Product Information	26



Dependable Solutions in Cabling

European manufacturing operations

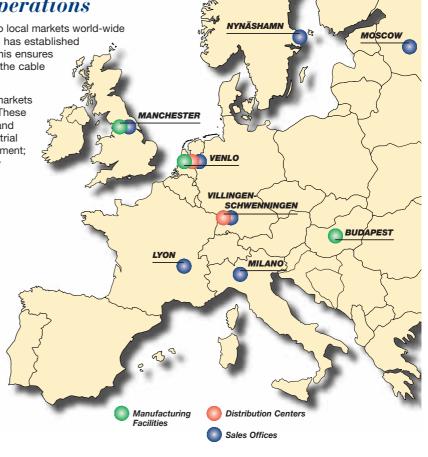
As Belden's global business plans call for a commitment to local markets world-wide and a thorough understanding of local dynamics, Belden has established a very significant presence in core European markets. This ensures that appropriate solutions can always be found to meet the cable and wire needs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



I/nited



United Kingdom



The Netherlands

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.

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 – 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 world-wide, 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.



Dependable Solutions in Audio/Video

Solutions for the audio/video market

Reliable performance

in broadcasting environments

Save time and reduce installation costs with Beldfoil®



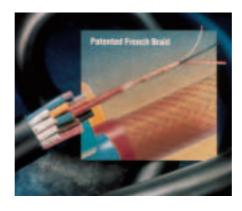
Beldfoil®

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

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 \pm 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 N	1Hz	4 N	lHz	5 N	ИHz	6 N	1Hz	12	MHz	25	MHz
	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.
						110 (hms					
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
1800 F	476	1563	281	922	233	763	203	664	129	424	85	279
						75 o	hms					
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
1505 F	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

<u>Using Belden coaxial cable will result in a minimum 6 dB of Headroom</u> 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.

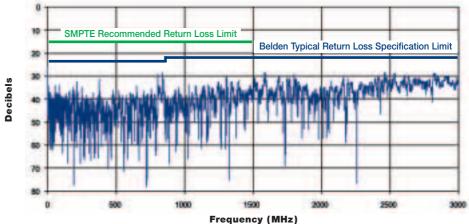
The most common is the 270 Mb/s SDI (Serial Digital Interface). All of the specifications differ in bandwidth requirements and transmission technology, i.e., composite, component and digital:

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.



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



Back to Content



Optical Fibre Cables

Description UL AWM Style

Part No UL NEC C (UL) CEC Type

Stan Len		
ft.	m	

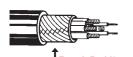
Core/Clad/Buffer AWG (stranding) kg Nom. D.C.R

& Nominal Core O.D Inch Inch mm

Shields & Overall Jacket Material D.C.R.

Nominal Optical Attenuation

SMPTE 311 6/2 Composite Cable





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.

Nominal

mm

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

	. UL NEC	No. of	Ø Nom./Max.	Weight	Max. Pulling	Energy of
	CEC Type	Fibres	(mm)	(kg/km)	Tension (N)	Flame (kJ/m)
50/125	62.5/125	115100	()	(ng/min)	Tonoisir (11)	riamo (no/m)

MOBILE OPTICAL FIBRE





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.

GMMT204	GMMT104	4	5.8	31	800	580
GMMT206	GMMT106	6	6.3	38	950	725
GMMT208	GMMT108	8	7.0	47	1100	890

Optical Characteristics

Fibre-type (Multi-Mode)	Size (µm)	Wavelength (nm)	Attenuation Average/max. (dB/km)	Bandwidth (MHzxkm)	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			≥ 200 ≥ 600	220 550	1.495 1.490

■ Temperature range according to IEC 60794-1-2-F1 ■ Strippability

Transport/storage -30 to +70 °C -5 to +50 °C Installation Operation -30 to +70 °C

Secondary coating only < 10 cm Secondary + primary coating ≤ 10 mm

■ Pulling tension according to IEC 60794-1-2-E1 See table with dimensions

■ Watertightness according to IEC 60794-1-2-F5

■ Crush resistance according to IEC 60794-1-2-E3 Tight buffer ≤ 4000 N/m Cable $\leq 4000 \text{ N/m}$

■ Bending radii for fibres and tubes Installation/operation > 25 mm

■ Bending radii cable

Static according to IEC 60794-1-2-E11 – 15 x \varnothing Dynamic according to IEC 60794-1-2-E6 - 20 x Ø

Microphone Cables

Description	Description Part No. No. Lengths Std. AWG			Insulation Thickness		Jacket		Nominal		Nominal Capacitance						
UL AWM	UL NEC of C (UL) CEC Type Cond. Tt. m Sid. AWG (stranding)	of	f Len	gths	Unit		Inickness		Thickness		O.D.		CDR/CDR		CDR/SCR	
Style		, 3,	Inch	mm	Inch	mm	Inch	mm	pF/ft.	pF/m	pF/ft.	pF/m				

DOUBLE BRAID





Product Description

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

75°C	9397	2	500	152.4	11.1	(105 x 44)	0.012	0.30	0.031	0.79	0.176	4.47	40	131	110	361
24 Gage (0.22 mm²)			1000	304.8	22.4	Bare copper, PVoor Matte Black P Color code: White	VC jacke	t. Sugges					er double	spiral sh	ield. Mat	te Grey

FLEX





Product Description

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

24 Gage	46349	2	328	100	4.2	24 (28 x 0.1)	0.025	0.63	0.059	1.50	0.236	6.00	 -	18	60
(0.22 mm²)			3280	1000	42.0	Bare copper, PE (> 90 % coverage Color code: Red.	e). High fl								k.

SUPERFLEX





Product Description

Belden's 46340 is $\underline{\text{very flexible}}$ and suitable for stage and studio.

75°C	46340	2	328	100	4.9	24 (128 x 50)	0.025	0.63	0.059	1.50	0.236	6.00	-	-	18	60
24 Gage (0.25 mm²)			1640	500		Bare copper, PE (> 90 % coverage Color code: Red,	e). High fl					al winded	screenin	g bare co	pper	

LONG LIFE





Product Description

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

60°C	8412	2	250	76.2	5.5	20 (26 x 34)	0.023	0.58	0.035	0.89	0.262	6.65	30	98	55	180
20 Gage (0.52 mm²)			500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	10.8 11.2 21.5 21.6	Tinned copper, of shield. 85% shield. 85% shield. Rode: White Note: Red, Yellow	ld covera te, Black.	ge. Cotto EPDM ja	on wrap, cket colo	EPDM ja ors: Black	cket. Sug k, Red, Ye	gested w	orking v			



Microphone Cables



PROFESSIONAL





Product Description

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

24 Gage	9398	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
(0.22 mm²)	available: FRNC/LSNH						shield. N	/latte Gre		te Black	uctors cat PVC jack					

STAR QUAD/small



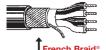


Product Description

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

28 Gag		1804A	4	500	152.4	2.3	28 (19 x 40)	0.006	0.152	0.014	0.356	0.115	2.92	40*	131*	60	197
(0.09 mr	m²)		2 Blue 2 White				silver plated high strength copper alloy 65 Ω/M′ 213 Ω/km	shield (7	78% cov ne Blue c	erage), m	atte PVC and one	jackets	in Red, Y	ellow, ΒΙι	d, tinned ie, Beige ed for use	and Blac	k.

STAR QUAD/flex





Product Description

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

ĺ	100V 75°C	1172A	4	500	152.4	4.6	26 (30 x 40)	0.011	0.28	0.030	0.76	0.190	4.83	39*	128*	57	187
	26 Gage (0.14 mm²)		2 Blue 2 White	1000	304.8	9.5	bare copper 36.0 Ω/M' 118 Ω/km	Yellow,	95 % cov Blue, Gre	erage) wi	th bare cack. Note	opper dr	ctors cab ain wire, ue conduc uctor app	matte PV ctor and	C jackets	in Red,	Green,

STAR QUAD/low noise





Product Description

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

ĺ	100 V 75°C	1192A	4	100	30.5	1.8	24 (42 x 40)	0.016	0.41	0.045	1.14	0.245	6.22	39*	128*	57	187
	24 Gage (0.22 mm²)		2 Blue 2 White	500 1000	152.4 304.8	8.3 16.0	bare copper 26.6 Ω/M' 87.2 Ω/km	(95 % c Note: o	overage) ne Blue c	yethylene , matte P conductor ctor appl	VC jacke and one	ts in Red	, Green, '	Yellow, B	lue, Grey	and Blac	k.

STAR QUAD/RUBBER





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	8424	4	100	30.5	7.3	20 (26 x 34)	0.023	0.58	0.036	0.91	0.294	7.47	27*	95*	59	193
0 Gage .52 mm²)			250 U-500 500 1000	76.2 U-152.4 152.4 304.8	15.7 30.5 30.0 64.3	tinned copper	Rayon b	oraid, tinn acket. Su	ed coppi ggested	er braid s	shield, 85 voltage: (ed, condu % covera 600 V RM	age. Cott		Black EF	PDM

^{*} Capacitance between CDR as connected in guad configuration.

Audio-Connect Cables - analog

Description	Part No.	No.		dard	Std.		ation		ket	Nom		ا	Nominal C	apacitance	:
UL AWM	UL NEC C (UL)	of Cond./	Len	gths	Unit	Inick	rness	Inick	rness	0.	D.	CDR	/CDR	CDR	SCR
Style	CEC Type	Pairs	ft.	m	kg	Inch	mm	Inch	mm	Inch	mm	pF/ft.	pF/m	pF/ft.	pF/m

FAST INSTALLATION/size





Product Description

Belden **1883A** is similar to the popular Belden 9451 but with <u>24 AWG/0.22 mm</u>². It has the added advantage of having the <u>foil screen bonded to the jacket</u> and the <u>drain wire inside the foil</u> for fast installation. Greatly <u>speeding-up the installation time</u> when making multiple connections.

Beldfoil®	1883 A	2	U-1000	U-304.8	5.9	0.008	0.20	0.020	0.51	0.123	3.12	31	102	58	190
100 % Shield Coverage 24 Gage (7 x 32) (0.22 mm²)	NEC CM CEC CM	1 pair				24 AWG Yellow, G can be re	stranded t reen, Blue emoved or	ypropylene tinned cop e, Violet, G n automati g voltage:	per drain rey, White c stripping	wire. PVC and Black g equipme	jacket ava . The jack nt. Drain v	ailable in E et and shi wire is on	Brown, Red eld are bo	d, Orange, nded so b	oth

NOISE REDUCTION



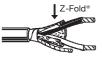


Product Description

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®	9452	2	U-500	U-152.4	6.3	0.008	0.20	0.020	0.51	0.135	3.43	30	98	58	190
(unbonded jacket) 100% Shield Coverage 24 Gage (19 x 36)		1 pair	500 U-1000 1000	152.4 U-304.8 304.8	6.0 12.8 11.3	stranded 100% sh cabling to	tinned co ield cover o minimize	pper drair age. Black pick-up o	wire. Bel PVC jack of electron	ene insulat Idfoil® (unt ket. Baland nagnetic in pedance: 5	oonded jac ed pair in terference	cket) alum strumenta and speci	inum-poly ation cable ial conduc	ester shie featuring tive textile	ld. short lay tape to
(0.22 mm²)						Color coo	de: Black,	Red.							

STANDARD





Product Description

Belden **8451** is the classic miniature audio cable with an O.D. of 3.51 mm. This popular cable is <u>often specified by OEM's</u>.

Beldfoil®	8451	2	U-500	U-152.4	3.4	0.008	0.20	0.020	0.51	0.138	3.51	34	111	67	220
(unbonded jacket) 100 % Shield Coverage 22 Gage (7 x 30) (0.34 mm²)	NEC CM CEC CM	1 pair	500 U-1000 1000	152.4 U-304.8 304.8	3.2 6.3 6.1	polyeste ket. Beld space that	shield. 22 en's Minia an standar	ypropylene 2 AWG strature Type d cables. S ng. Color o	anded tini Broadcas Suggested	ned coppe It Audio ar I working v	er drain wi ıd Instrum	re. Paper of the contraction C	wrap, Grey Cables occ	or Black upy 1/2 to	PVC jak- 2/3 less

FAST INSTALLATION





Product Description

Belden **9451** is similar to the popular Belden 8451. It has the added advantage of having the <u>foil screen bonded to the jacket</u> and the <u>drain wire inside the foil</u> for fast installation. This makes the cable easier to strip. A standard stripping tool removes both the insulation and foil, greatly <u>speeding-up the installation time</u> when making multiple connections.

Beldfoil®	9451	2		U-304.8	6.2	0.008	0.20	0.020	0.51	0.135	3.43	34	111	67	220
100 % Shield Coverage 22 Gage (7 x 30) (0.34 mm²)	NEC CM CEC CM	1 pair	5000	1.524.0	31.8	22 AWG Blue, Viol with auto Suggeste	stranded to et, Grey, W matic strip ed working	inned cop /hite and [per drain Black. The pment. Di 300 V RMS	wire. PVC jacket an rain wire is S. Color co	jacket in l d shield a s on the in	Brown, Re re bonded side of foi	num-polye d, Orange d so both o	Yellow, G	reen,

DUO PATCH





Product Description

Belden's 8728 double pair cable is suitable for two-channel stereo.

Beldfoil®	8728	4	U-500	U-152.4	16.7	0.010	0.25	0.028	0.71	0.215	5.46	35	115	62	203
(unbonded jacket) 100 % Shield Coverage 91 2717 22 Gage (7 x 30) (0.34 mm²)	NEC CM CEC CM	2 pair	500 U-1000 1000	152.4 U-304.8 304.8	15.5 30.7 28.6	jacket) a film over stranded	luminum-p each shiel	oolyester s d, overall pper drair	shielded w Beldfoil® (n wire, chr	conductor rith 24 AW (unbonded ome PVC en, White.	G strande jacket) al	d tinned c uminum-p	opper dra olyester sl	in wire, po nield and 2	lyester 4 AWG

Audio-Connect Cables – digital

Description UL AWM	Part No. UL NEC C (UL)		dard gths	Std. Unit	AWG (stranding) [Dia. in mm]	Insul & No Core	minal	Non O.	ninal .D.	No. of Shields & Material	Nom. Imp.	Nom. Vel. of	Non Capac	ninal itance	А	Nominal ttenuatio	
Style	CEC Type	ft.	m	kg	Nom. D.C.R.	Inch	mm	Inch	mm	Nom. D.C.R.	(ohms)	Prop.	pF/ft.	pF/m	MHz	dB/ 100 ft.	dB/ 100 m

PATCH/small





Product Description

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

Beldfoil®	9180	1000	304.8	11.0	26	Data		0.144	3.66	Beldfoil®	110	76 %	13.5	44	2	1.92	6.29
100% Shield Coverage	NEC CM				(7 x 34) 0.48 tinned	color	coded White			with 26 AWG	Chrom	e PVC ja	icket.		4	2.14 2.40	7.01 7.87
80°C	CEC CM				copper	0.049	1.24	-		drain wire					6	2.40	8.10
					37.3 Ω/M′	0.049	1.24			23.1 Ω/M′					12	3.18	10.43
26 Gage (0.14 mm ²)					122.3 Ω/km					75.8 Ω/km					25	4.20	13.77

PATCH/medium

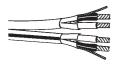




Product Description

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

Beldfoil [®]	1800B	500	152.4	9.8	24	Data		0.180	4.57	Beldfoil®	110	76 %	13.0	43	2	1.31	4.29
100% Shield		U-1000	U-304.8	18.2	(7 x 32)	color	coded			with	Slate C	rev or P	urple P\	IC.	4	1.57	5.18
Coverage	NEC CMG	1000	304.8	18.3	0.61 tinned	Red,	Black			24 AWG	iacket.	iicy oi i	ui pic i v	0	5	1.76	5.77
60°C	CEC CMG				copper	0.070	1.78	1		drain wire	Jacket.				6	1.83	6.00
					23.7 Ω/M'	0.070	1.70			18.9 Ω/M'					12	2.30	7.54
24 Gage (0.22 mm²)	(Replaces 1800A)				77.7 Ω/km					62.0 Ω/km					25	3.08	10.10





	Beldfoil®	1802B	500	152.4	19.7	24	Datal	ene®	0.180	4.57	Beldfoil®	110	76 %	13.0	43	2	1.31	4.29
	100% Shield		U-1000	U-304.8	29.0	(7 x 32)	color o	coded	X	Х	with	Violet E	VC jack	ot in zin	oord	4	1.57	5.18
	Coverage	NEC CMG	1000	304.8	30.9	0.61 tinned	Red,	Black	0.374	9.50	24 AWG	1	onstructi		Coru	5	1.76	5.77
	60°C	CEC CMG				copper	0.070	1.78	1		drain wire		ped on o		for	6	1.83	6.00
						23.7 Ω/M′	0.070	1.70			18.9 Ω/M′	identific		nie side	101	12	2.30	7.54
	24 Gage	(Replaces				77.7 Ω/km					62.0 Ω/km	lucitiiii	Jalion.			25	3.08	10.10
L	(0.22 mm ²)	1802A)																

PERFORMANCE





Product Description

Belden's new <u>"Super Flexible" digital cable</u>, part no. **1800 F**, utilizes Belden's patented **French Braid** shield technology and a <u>special jacket compound</u> 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		24 (42 x 40) 0.61 bare copper 23.7 Ω/Μ΄ 77.7 Ω/km	Datal color of Blue, 0.049	coded	0.211	5.36	95% tinned copper French Braid® with bare copper drain wire 5.0 Ω/M′ 16.4 Ω/km		Blue, G	13.0 Red, Ye rey, Purp		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
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PATCH/large





Product Description

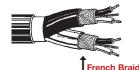
Belden's **1696A** is designed for AES/EBU specification. The cable has a foil plus braid and therefore <u>recommended for flexed applications</u>.

Beldfoil® (unbonded jacket) High Flex Version 22 Gage (0.34 mm²) Stranded	250 500 U-1000 1000	76.2 152.4 U-304.8 304.8	22 (7 x 30) 0.61 tinned copper 14.8 Ω/M' 48.5 Ω/km	color	lene® coded White 2.08	0.234	5.94	with 24 AWG drain wire + 90 % tinned copper braid	110 Black h jacket.	76 % nigh flex	13.0 matte P	43 VC	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
Stranded Conductors			48.5 Ω/km					copper braid 4.6 Ω/M′ 15.2 Ω/km					25	2.41	7.90

Multicore Cables - analog







Description UL AWM	Part No. UL NEC C (UL)	No. of	Stan Len	dard gths	Std. Unit	Outer of Thick		Nom O.	
Style	CEC Type	Pairs	ft.	m	kg	Inch	mm	Inch	mm

Product Description

Belden's new 19-series <u>"Super Flexible"</u> audio snake cable, utilizes Belden's patented French Braid®. This improves flex life, <u>lowers microphonic or triboelectric noise and DC loop resistance</u>. The French Braid® is easy to terminate since it is not fully woven. Jacketed pairs are <u>individually numbered</u> and <u>color coded</u> (following the familiar resistor color code) for easy identification.

Bare copper, polyolefin insulated twisted pairs color coded Red & Black, each pair individually shielded with bare copper double serve French Braid® (93 %	Individually Shielded and Jacketed Pairs	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
coverage) with tinned copper drain wire. Individual pairs with numbered and color coded PVC jackets. Overall Black matte PVC jackets.	24 Gage (0.22 mm²) Stranded	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
Pair Dimensions & Electricals Nominal O.D. Conductor	Conductors (41 x 40)	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
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	Polyolefin Insulated	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
Nominal Impedance (ohms)60 Nominal velocity of Propagation	Numbered and Color Coded Pair Jackets	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
Nominal Capacitance between conductors		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
Nominal Capacitance between one conductor and other conductors		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
connected to shield47 pF/ft. 154 pF/m		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

Description UL AWM	Part No. UL NEC C (UL)	No. of		idard gths	Std. Unit	AWG (stranding)	D.C.R. Ω/km		cket kness	Non O.			ninal citance
Style	CEC Type	CDR	ft.	m	kg	(========		Inch	mm	Inch	mm	pF/ft.	pF/m







Product Description

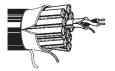
Belden **46801** is a <u>very flexible</u> patch cable. It is used for connecting musical instruments and suitable for <u>BANTAM</u> applications.

24 Gage	46801	2	328	100	42.0	24 (28 x 0.1)	80	0.098	2.50	0.185	4.70	49	160
(0.22 mm²)						per, polyethylene insu opper braid, matte PV					on/Aramid	e) > 90 % :	spiral

Multicore Cables – analog

FLEX/foil

Analog Installation



Description UL AWM	Part No. UL NEC C (UL)	No. of		idard gths	Std. Unit		Jacket kness	Non O.	***	Nom D.C Overall	.R.
Style	CEC Type	Pairs	ft.	m	kg	Inch	mm	Inch	mm	Ω/Μ΄	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 <u>speeding-up the installation time</u>. Jacketed pairs are <u>individually numbered</u> and <u>color coded</u> (following the familiar resistor color code) for easy identification.

Tinned copper, polyolefin insulated pairs color Black, each pair individually shielded with both	nded Beldfoil®	Individually Shielded and	1509 C	2	500 1000	152.4 304.8	10.7 20.0	0.034	0.86	0.301	7.65	14.4	47.2
aluminum-polyester shield. Individual pairs wi and color coded PVC jackets. Overall Beldfoi polyester shield. Overall Black matte PVC jac	Jacketed Pairs 24 Gage	1510C	4	500 1000	152.4 304.8	16.8 32.3	0.037	0.94	0.352	8.94	5.3	17.4	
ricord. Pair jackets and shields are bonded s simultaneously with automatic stripping equ	so both strip	(0.22 mm²) Stranded	1511C	6	500 1000	152.4 304.8	22.3 44.1	0.037	0.94	0.418	10.61	5.3	17.4
Pair Dimensions & Electricals		Conductors (7 x 32)	1512C	8	500 1000	152.4 304.8	29.1 59.1	0.033	0.84	0.452	11.48	5.2	17.1
Nominal O.D. Conductor 0.024 inch Nominal O.D. Insulation 0.040 inch	0.61 mm 1.02 mm 2.82 mm	Polyolefin Insulated	1513C	12	500 1000	152.4 304.8	40.0	0.045	1.14	0.561	14.25	5.0	16.4
	76.4 Ω/km 62.0 Ω/km	Numbered and	1514C	16	500 1000	152.4 304.8	53.0 103.6	0.056	1.42	0.628	15.95	4.9	16.1
Nominal Impedance (ohms)50 Nominal velocity of		Color Coded Pair Jackets	1515C	20	500 1000	152.4 304.8	63.2 128.2	0.055	1.40	0.710	19.56	4.8	15.7
Propagation		NEC CM	1516C	24	500 1000	152.4 304.8	79.1 162.7	0.065	1.65	0.807	20.50	4.8	15.7
between conductors31 pF/ft.	102 pF/m		1517C	26	500 1000	152.4 304.8	83.4 171.4	0.065	1.65	0.823	20.90	4.6	15.1
Nominal Capacitance between one conductor			1518C	32	500 1000	152.4 304.8	100.2 204.1	0.070	1.78	0.897	22.78	4.6	15.1
and other conductors connected to shield	190 pF/m		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	Description	Part No.	No.	Stan		Std.		ation	Jacket Thickness						Non		1	Nominal Ca	Capacitance	
	UL NEC C (UL)	of	Len	Unit		Thickness Thick		iness	O.D.		CDR/CDR		CDR/SCR							
	Style	CEC Type	Pairs	ft.	m	kg	Inch	mm	Inch	mm	Inch	mm	pF/ft.	pF/m	pF/ft.	pF/m				

INSTALLATION





Product Description

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

Beldfoil®	1508A	1	500	152.4	2.5	0.008	0.20	0.024	0.61	0.131	3.33	31	102	58	190
100 % Shield Coverage	NEC CM CEC CM		1000	304.8	5.0	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.									
24 Gage (7 x 32) (0.22 mm²)							e bonded de: Black,		an be rem	iovea with	automati	c stripping	g equipme	ent.	
(0.22)															

Multicore Cables – analog

FLEX/braid



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

Product Description

26 Gage

(0.14 mm²)

 (18×0.1)

46312

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

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

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

0.173

0.069

0.057

0.09

42.5

85.0

63.0

126.0

159.0

1.753

1.448

2.286

0.458

0.498

0.782

11.63

12.65

19.86

0.492

12.5

STAR QUAD (1172A)



nalog	
lobile	

Description UL AWM	Part No. UL NEC C (UL)	No. of	Stan Len	dard gths	Std. Unit		cket kness	Nominal O.D.	
Style	CEC Type	Quads	ft.	m	kg	Inch	mm	Inch	mm

Product Description

26 Gage

(0.14 mm²)

Stranded

Conductors

(30 x 40)

Polyethylen

Insulated

7884 A

7885 A

7886A

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.

152.4

304.8

152.4

304.8

152.4

500

1000

500

1000

500

2

4

Each guad construction includes four 26 AWG stranded (30 x 40) bare copper polyethylene insulated conductors, colorcoded Blue, White, Blue with a White stripe, and White with a Blue stripe. A patented copper French Braid $^{\circ}$ 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 (numb 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.

		_	
Ound	Dimensions		Electricale

Quad Differsions & Elec	ulicais	
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

			1000	304.8	318.0				
ne	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
	7889 A	24	500 1000	152.4 304.8	376.0 752.0	0.142	3.607	1.232	31.29

Multicore Cables – digital (AES/EBU)

PERFORMANCE

Installation



Description UL AWM	Part No. UL NEC C (UL)	O No. of		dard gths	Std. Unit		Jacket iness	Non O	ninal D.
Style	CEC Type		ft.	m	kg	Inch	mm	Inch	mm

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.

0.030

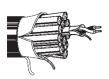
26.3

0.76

0.485

12.32

Tinned copper, foamed HDPE insulated pairs color coded Blue & White. Each pair individually shielded	26 Gage (0.14 mm²)	7891A	2	500 1000	152.4 304.8	12.7 25.4	0.030	0.76	0.343	8.71
with bonded Beldfoil® aluminum-polyester shield. Individual pairs with numbered and color coded PVC jackets. Overall Beldfoil® aluminum-polyester shield.	Stranded Conductors	7890A	4	250 1000	76.2 304.8	8.2 27.7	0.030	0.76	0.399	10.13
Overall slate Violet PVC jacket with nylon ripcord. Pair jackets and shields are bonded so that both strip simultaneously with automatic stripping equipment.	(7 x 32)	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
Pair Dimensions & Electricals Nominal O.D.	CEC CMG	7892A	12	500 1000	152.4 304.8	38.5 78.9	0.040	1.02	0.679	17.25
Conductor		7893A	16	500 1000	152.4 304.8	49.9 108.8	0.050	1.27	0.770	19.56
Insulation										



Tinned copper, foamed HDPE insulated pairs color

coded Blue & White. Each pair individually shielded



25 MHz: 4.22 dB/100ft. 13.84 dB/100m

Product Description

24 Gage

(0.22 mm²)

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.

152.4

500

Individual pairs with numbered and color coded PVC jackets. Overall Beldfoil ® aluminum-polyester shield.	Stranded Conductors	1805 F	8	500 1000	152.4 304.8	47.2 93.0	0.035	0.89	0.661	16.79
Overall slate Violet PVC jacket with nylon ripcord. Pair jackets and shields are bonded so that both strip	(7 x 32)	1806 F	12	500 1000	152.4 304.8	70.8 146.1	0.040	1.02	0.829	21.06
simultaneously with automatic stripping equipment. Pair Dimensions & Electricals	NEC CMG CEC CMG	1850F	16	500 1000	152.4 304.8	95.3 186.0	0.050	1.27	0.944	23.98
Nominal O.D. Conductor0.024 inch 61 mm		1852F	24	500 1000	152.4 304.8	146.1 293.0	0.060	1.52	1.205	30.61
Nominal O.D. Insulation0.070 inch 1.79 mm		1854F	32	500 1000	152.4 304.8	196.9 383.7	0.070	1.78	1.346	34.19
$\begin{array}{l} \text{Inner Pair Jacket O.D.} & 0.167 \text{ inch } 4.24 \text{ mm} \\ \text{Nominal D.C.R.} \\ \text{Conductor.} & 23.3 \ \Omega/\text{M}' \ 76.4 \ \Omega/\text{km} \\ \text{Nominal D.C.R.} \\ \text{Shield.} & 18.9 \ \Omega/\text{M}' \ 62.0 \ \Omega/\text{km} \\ \text{Nominal Impedance} \\ \text{(ohms).} & 110 \pm 10 \ \Omega \\ \text{Nominal velocity of} \\ \text{Propagation.} & 76\% \\ \text{CDR/CDR.} & 13 \ \text{pF/ft.} \ 43 \ \text{pF/m} \\ \text{CDR/SCR.} & 25 \ \text{pF/ft.} \ 82 \ \text{pF/m} \\ \text{Nominal Attenuation.} & 2 \ \text{MHz: } 1.30 \ \text{dB/100ft.} \ 4.26 \ \text{dB/100 m} \\ 4 \ \text{MHz: } 1.56 \ \text{dB/100ft.} \ 5.57 \ \text{dB/100 m} \\ 6 \ \text{MHz: } 1.81 \ \text{dB/100ft.} \ 5.93 \ \text{dB/100 m} \\ 12 \ \text{MHz: } 2.28 \ \text{dB/100ft.} \ 5.93 \ \text{dB/100 m} \\ 25 \ \text{MHz: } 3.08 \ \text{dB/100 ft.} \ 1.010 \ \text{dB/100 m} \\ 25 \ \text{MHz: } 3.08 \ \text{dB/100 ft.} \ 10.10 \ \text{dB/100 m} \\ \end{array}$										

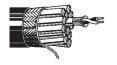
1803 F

Multicore Cables – digital (AES/EBU)

FLEX







Description	Part No.	No. of		ndard gths	Std. Unit		Jacket kness	Non O.		Burning Energy	Crush Resistance
		Pairs	ft.	m	kg	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 <u>very flexible</u> and has a small outer diameter for use in applications where space is limited. <u>Flame retardancy according to IEC 332-3C</u>. Jacketed pairs are individually numbered and <u>color coded</u> for easy identification.

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

Pair Dimensions & Electricals

Nominal O.D. Insulation	U.U44 If	ich I.	. 13 mm
Inner Pair Jacket O.D.	0.114 ir	nch 2.	.90 mm
DC loop resistance at 20 ± 5 C	260 Ω/	km (max.)	
Capacitance at 1 kHz	nom. 56	6 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/100ft.	3.1 dB/100 m
	4 MHz:	1.89 dB/100ft.	6.2 dB/100 m
	5 MHz:	2.23 dB/100ft.	7.3 dB/100 m
	6 MHz:	2.50 dB/100ft.	8.2 dB/100 m
	12 MHz:	3.99 dB/100ft.	13.1 dB/100 m
	25 MHz:	6.40 dB/100ft.	21.0 dB/100m

Description UL AWM	Part No. UL NEC C (UL)	No. of		dard gths	Std. Unit	AWG (stranding)		ation iness		cket kness		ninal .D.	Nom. Imp.	Nom Capac	
Style	CEC Type	CDR	ft.	m	kg	(* " * 3)	Inch	mm	Inch	mm	Inch	mm	(ohms)	pF/ft.	pF/m

PATCH for FLEX







Product Description

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

26 Gage	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
(0.14 mm²)		with a sp	oiral scree	ning of 0.	10 mm tii	each pair of a Blu nned copper (> 90 or code: Grey (RAL	% covera				elded firs	t with a p	olyester fo	oil and the	n



Speaker Cables

Description UL AWM Style	Part No. UL NEC	No. of		dard gths	Std. Unit		ation kness		cket kness	Nom O.	ninal D.
017 e.j.e	C(UL) CEC Type	Cond.	ft.	m	kg	Inch	mm	Inch	mm	Inch	mm

PERFORMANCE





Product Description

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

High Flex	1810A	4	1000	304.8	52.6	0.025	0.64	0.040	1.02	0.390	9.91		
Design 14 Gage (2.1 mm²)						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.							
(2.1 mm²)	1811A	8	1000	304.8	92.2	0.025							
						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.							

Description UL AWM Style	Part No. UL NEC C (UL)	No. of	Stan Len	dard gths	Std. Unit	(Stranding)	D.C.R. Ω/km	Jac Thick	cket kness	Non O.	ninal D.
	CEC Type	CDR	ft.	m	kg			Inch	mm	Inch	mm

STANDARD





Product Description

Belden's <u>standard speaker cables</u> are suitable for speaker applications.

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 mm ²	46379	4	3280	1000	165	(50 x 0.25)	< 8	0.114	2.90	0.394	10.00					
2 x 4.0 mm ²	46380	2	3280	1000	120	(56 x 0.30)	< 4.5	0.138	3.50	0.354	9.00					
2 x 2.5 mm ²	46381	2	3280	1000	72	(50 x 0.25)	< 8	0.114	2.90	0.317	8.05					
2 x 1.5 mm ²	46382	2	3280	1000	78	(32 x 0.23)	< 13	0.098	2.50	0.276	7.00					
Bare conner PVC	insulated Matte PVC is	acket in Blac	ck or Grev C	Bare copper PVC insulated Matte PVC lacket in Black or Grey Color code: Black Red												

ACTIVE





Product Description

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

3 x 1.00 mm ²	43908	3 + 2	328	100	30	1.00 mm² (32 x 0.20)	< 13	0.098	2.50	0.464	11.80
2 x 0.14 mm ²			1640	500	150	0.14 mm² (18 x 0.10)					
Copper, polyethyle	ene insulated, double br	aid. PVC jac	ket in Black								

Descripti UL AWM S		Part No. UL NEC C (UL)		idard gths	Std. Unit	(Stranding)		ation kness		ninal D.
027	.,	CEC Type	ft.	m	kg		Inch	mm	Inch	mm

PARALLEL ZIP





Product Description

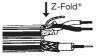
Belden's standard speaker cables are suitable for speaker applications.

60°C	9716	1000	304.8	26.3	(26 x 30)	0.027	0.69	0.115	2.92
16 Gage (2 x 1.3 mm²)								x 0.230	x 5.84
Stranded Conductors					Suggested worki	ng voltage: 300 V.	conductor tinned, of Stock color: Clear.		08, 9717,

Special Cables

Description UL AWM	Part No. UL NEC C (UL)	of		andard engths	Std. Unit	AWG (stranding	r)	D.C.R. Ω/km		acket okness		minal).D.		minal citance
Style	CEC Typ		ft.	m	kg kg	(3.13.13.1)	,,		Inch	mm	Inch	mm	pF/ft.	pF/m
	NSTRUME	VT		'			'							
	<i></i>	Analog Mobile		Product Belden's		otion art no. 46378	3 , is <u>ve</u>	ery flexib	<u>le</u> and	is used f	or conne	cting mu	usical inst	ruments.
24 Gage (0.25 mm²)	46378	1	328 1640	100 500	40 Bare copy	24 (7 x 0.0 per, foamed po		90 conducti	0.081	2.05	0.244	6.20	33 aid (48 x 0	110
						conductor, ma							aid (40 X 0.	122).
	GUITAR													
	<i></i>	Ana <mark>log</mark> Mobile		Product Belden's		otion art no. 46377	′ , is <u>ve</u>	ery flexib	<u>le</u> and	is particı	ılarly suit	able for	use with	guitars.
24 Gage (0.22 mm²)	46377	1	820 1640	250 500	42 Bare con	24 (28 x 0. per, foamed po		80	0.104	2.65	0.286	7.20	21	70
						conductor, ma				/ 90 /0 sp	iai scieeii (copper bit	aiu (30 x 0.	122).
INSTITUTE OF THE PROPERTY OF T	RUMENT/R	Analog Mobile		rubber ja	410 is <u>rut</u>	ober insulate		on braid				,	ton yarn ı	wrap <u>and</u>
60°C	8410	1	500	152.4	8.8	25 (7 x 33 copper, 4 strar		-	0.024	0.61	0.245	6.22	33	108
25 Gage (0.16 mm²)						ed copper braic								
	DMX 512	Analog Mobile			verall screadditional	eened two p			eedbac	k on dig				
80°C 100 % Shield	43906	2	1640 3280	500 1000	20 61	22 (7 x 0.2	5)	-	0.028	0.71	0.26	6.8	34	112
Coverage 2717						PE insulated, co								ick, each
22 Gage (0.34 mm²)														
Description UL AWM	Part No. UL NEC C (UL)	Standard Lengths	Out Lp	AWG tranding) ia. in mm]	Insulation & Noming Core O.	nal Nom		No. o Shields Materi Nom.	al I	lom. Normp. Vel	. Capac	ninal citance	Nom Attenu	ation
Style	CEC Type	ft. m	kg No	m. D.C.R.	Inch	mm Inch	mm	D.C.F		hms) Pro	pF/ft.	pF/m	MHz dE	

AUDIO/VIDEO





Product Description

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

Beldfoil® 91 20006 30V 60°C Electronic News	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	0.054	VC 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	Also a 2 Pair	58% code: Bla vailable Audio A in ma	e: 1 Co 0.34 m	ax + m²	_	-	-
Gathering (ENG), Field Production (EFP) and CCTV Applications					1 Coax 22 (7 x 30) 0.76 mm bare copper 15.0 Ω/M' 49.2 Ω/km	Polyet 0.146	3.71 O.D.			Bare copper braid 95 % shield coverage 2.6 Ω/M΄ 8.5 Ω/km	Type C with Be	78 % PVC jack table RG eldfoil® a ter shield	-59/U T Iuminiun	ype n-	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



Triax Cables



TRIAX 8





Product Description

Belden 7783A is a standard Triaxial cable with an impedance of $\underline{75~\text{ohms}}$ and is used to interconnect video cameras to related equipment.

80°C	7783A	1640	500	55.8	20 (19 x 32)	Foa		0.331	8.4	Silver plated	75	83%	16.5	54	71.5	1.9	6.2
RG-59/U Type High Flex		3280	1000	111.6	0.99 mm silver plated copper	Polyet 0.178	4.52			copper braid (90%) bare copper braid (80%)	betwee Belflex	nylene in en braids e jacket e outdoo	s. With R suitable	ed for	88.5 135 180 270	2.1 2.6 3.1 3.9	6.9 8.5 10.2 12.8
Version						Structu 21 dB 15 dB	re Returr 8	Loss 5 – 850 50 – 3000		Inner 12 Ω/km Outer 10 Ω/km	(-50 +8		л аррііс	ations	750 1500 2250 3000	6.8 10.0 12.5 14.7	22.3 32.8 41.0 48.2

TRIAX 9





Product Description

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

80°C	1856A	500	152.4	17.0	20 (solid)		am	0.360	9.14	2 bare copper	75	83 %	16.2	53.1	71.5	2.2	7.2
RG-59/U Type		1000	304.8	34.9	0.81 mm bare copper	0.143	hylene 3.68			braids 95 % shield coverage	. , .	ylene in			88.5 135	2.4 3.0	7.9 9.8
					10.6 Ω/M′	0.143	3.08			Inner	petwee	n braids Green, l		let	180	3.4	11.2
					32.8 Ω/km					2.5 Ω/M′ 8.2 Ω/km	or Blac	k Belfle	x® jacke	t	270 750	4.2 7.1	13.8
							re Returr			Outer		e for extentions (-5			1500	12.0	39.4
						21 dB 15 dB	8	5 – 850 50 – 3000		1.6 Ω/M′ 5.3 Ω/km		Sweep t		٥,٠	2250 3000	16.4 20.4	53.8 66.9

TRIAX 11





Product Description

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

80°C	7784A	1640	500	84.4	16 (19 x 29)		am	0.433	11.0	Silver plated	75	82%	16.5	54	71.5	1.4	4.7
RG-59/UType High Flex Version		3280	1000	172.8	1.42 mm silver plated copper	0.256	6.50			copper braid (90%) bare copper braid (80%) Inner 10 Ω/km Outer 8 Ω/km	betwee Red Be for extr tions (-	nylene in en braids elflex® j reme out 50 +80 available Bare C	s. acket su door ap °C). e: opper (iitable plica-	88.5 135 180 270 750 1500 2250 3000	1.6 2.0 2.4 3.0 5.2 7.6 9.4 11.0	5.2 6.6 7.9 9.8 17.1 24.9 30.8 36.1
						Structu 21 dB 15 dB	re Returr 8	1 Loss 5 – 850 350 – 3000				7784E 7784E 7784E	NH – FF				

TRIAX 14





Product Description

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

80°C RG-59/U Type	7785A	1640	500	139.6	13 (19 x 25) 2.21 mm silver plated copper		am hylene 9.70	0.571	14.5	Silver plated copper braid (90%) bare copper	75 Polyeth betwee Belflex	n braids	54	71.5 88.5 135 180	1.1 1.2 1.5 1.8	3.6 3.9 4.9 5.9
High Flex Version						Structu 21 dB 15 dB	re Returr 8	Loss 5 – 850		braid (80%) Inner 3 Ω/km Outer 3 Ω/km	for extr	eme out		270 750 1500 2250 3000	2.2 3.6 5.2 6.4 7.4	7.2 11.8 17.1 21.0 24.3

Video Cables - analog

Description UL AWM	Part No. UL NEC C (UL)		idard gths	Std. Unit	AWG (stranding) [Dia. in mm]	& No	ation minal O.D.	Non O.		No. of Shields & Material	Nom.	Nom. Vel. of	-	ninal sitance	А	Nominal ttenuatio	
Style	CEC Type	ft.	m	kg	Nom. D.C.R.	Inch	mm	Inch	mm	Nom. D.C.R.	(ohms)	Prop.	pF/ft.	pF/m	MHz	dB/ 100 ft.	dB/ 100 m

STANDARD





Product Description

Belden **8241** standard <u>analog</u> video cable with an impedance of <u>75 ohms</u> is typically used in video applications such as video equipment rack wiring, CCTV, MATV and color or monochrome video monitor hook-ups.

91 1354	8241	U-500	152.4		23 (solid)	Polyet	hylene	0.242	6.15	Bare copper	75	66%	20.5	67.3	1	0.6	2.0
30 V 80°C	NEC CMX CEC CMX	500 1000 2000	U-152.4 304.8 609.6	8.7 17.3 36.2	0.58 mm bare copper covered steel	0.146	3.71			braid 95 % shield coverage	Green,	cket (Re Light Bl	ue, Whit		10 50 100	1.1 2.4 3.4	3.6 7.9 11.2
RG-59/U Type 0.6/3.7		5000 [Black only]	1 1	89.1	47 Ω/M΄ 154.2 Ω/km					2.6 Ω/M΄ 8.5 Ω/km	Also a	vailable , 8241E	e: [′]	F	200 400 700 900 1000	4.9 7.0 9.7 11.1 12.0	16.1 23.0 31.8 36.4 39.4





Product Description

Belden 9259 standard flexible video cable with an impedance of 75 ohms.

91 1354	9259	100		4.0	22 (7 x 30)	Foar		0.242	6.15	Bare copper	75	78%	17.3	56.8	1	0.3	1.0
30 V 80°C	NEC CM CEC CM	500	U-152.4 152.4 U-304.8	18.4 18.1 35.7	0.76 bare copper 15.0 Ω/M´	Polyethy 0.146	3.71			braid 95% shield coverage		PVC jack TV appli			10 50 100	0.9 2.1 3.0	3.0 6.9 9.8
0.7/3.7		1000	304.8	34.6	49.2 Ω/km					2.6 Ω/M′ 8.5 Ω/km					200 400	4.5 6.6	14.8 21.7
															700 900	8.9 10.1	29.2 33.1
															1000	10.9	35.8





Product Description

Belden 9248 standard analog video cable with Duofoil® and tinned copper braid.

30 V 80°C NEC CM U-1000 U-304.8 35.7 0.040 bare copper 0.180 4.57 1.50	91 1354	9248		U-152.4		18 (solid)	as	0.270	6.86	Duofoil®	75	82 %	16.2	53.1	1	0.3	1.0
RG-6			1000	U-304.8 304.8	35.7 38.2	6.4 Ω/M′	 			copper braid	100 %	sweep te			100	2.0	2.3 4.9 6.6
						21.0 Ω/km				coverage 5.6 Ω/M'		, <u>.</u>			400 700 900	4.0 5.3 6.1	9.2 13.1 17.4 20.0 21.3





Product Description

Belden 9292 standard RG-11 video cable with Duofoil® and tinned copper braid.

* Gas injected foam high density Polyethylene.

80°C	9292	1000	304.8	76.1	14 (solid)		am	0.405	10.29	Duofoil®	75	78%	17.3	56.7	1	0.17	0.6
RG-11					0.064 bare copper	0.285	hylene 7.24			+61 % tinned		PVC jack sweep te			10 50	0.50 1.0	1.6 3.3
1.6/7.2					2.6 Ω/M′ 8.5 Ω/km	0.200	1.24			copper braid 100 % shield	5 – 450		esteu.		100 200	1.4 2.1	4.6 6.9
										coverage 3.0 Ω/M'					400 700	2.9 3.9	9.5 12.8
										9.8 Ω/km					900	4.4	14.4
															1000	4.7	15.4

DOUBLE BRAID





Product Description

Belden **8281** standard <u>analog and digital</u> video cable with an impedance of <u>75 ohms</u> and <u>double braided shield</u> for use in noisy environment applications.

80°C	8281	500	152.4	16.4	20 (solid)	Polyet	hylene	0.305	7.75	Tinned copper	75	66 %	20.5	68.9	71.5	2.1	6.9
Double Braided RG-59/U Type 0.8/5.0		1000	304.8	33.3	0.78 mm bare copper 9.9 Ω/M΄ 32.5 Ω/km	0.198	5.03			double braid 98 % shield coverage 1.1 Ω/M΄ 3.6 Ω/km	White, polyeth 100 %	ellow, Gre Orange on Sweep to Sweep to Swailable 3, 8281	or Black cket. ested.		135 270 360 540 750 1500 3000	3.0 4.3 5.1 6.3 7.6 12.0 19.1	9.8 14.1 16.7 20.7 24.9 39.4 62.6



Video Cables - digital

Description UL AWM	Part No. UL NEC C (UL)		dard gths	Std. Unit	AWG [Dia. in mm]	Insul & No Core		Non O.	ninal D.	No. of Shields & Material	Nom. Imp.	Nom. Vel. of		ninal citance		Nominal ttenuatio	
Style	CEC Type	ft.	m	kg	Nom. D.C.R.	Inch	mm	Inch	mm	Nom. D.C.R.	(ohms)	Prop.	pF/ft.	pF/m	MHz	dB/ 100 ft.	dB/ 100 m

SMALL



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 <u>light weight</u> and <u>compact size</u> 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.

75°C	1855 A	500	152.4	8.2	23 (solid)		jected	0.159	4.03	Duofoil®	75	82 %	16.5	54.1	71.5	2.9	10.0
SDI/HDTV	NEC CMR	Black only			0.58 mm bare copper	0.102	HDPE 2.59			+95 % tinned		PVC jad			135 270	3.8 5.4	12.5 17.7
Digital Video	CEC CMR	1000	304.8	13.3	20.1 Ω/M′ 65.9 Ω/km					copper braid 7.6 Ω/M'	Blue, V		rey, Whit	e and	360 540	6.2 7.7	20.3 25.3
Sub-Miniature RG-59/U Type	HEAD									24.9 Ω/km	On red			NC/	750 1500	9.6 13.0	31.5 42.6
0.6/2.6	ROOM Belden					Structu 23 dB	re Returr) MHz					NH	3000	18.5	60.7
	DGIUGII					21 dB	8	50 – 3000			Burnin	g Energy	։ 940 kւ	J/m			

PRECISION





Product Description

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

Γ	75°C	1505A	500	152.4	7.6	20 (solid)		jected	0.235	5.97	Duofoil®	75	83 %	16.3	53.5	71.5	2.1	6.9
	SDI/HDTV Digital Video	NEC CMR CEC CMR	Black only 1000	304.8	14.6	0.81 mm bare copper 10.0 Ω/M' 32.8 Ω/km	0.145	3.68			+ 95% tinned copper braid 3.8 Ω/M'	Green, White	Blue, Vi or Black	range, Yo olet , Gre PVC jac	∋у,	135 270 360 540	2.7 3.8 4.4 5.5	8.9 12.5 14.4 18.0
F	0.8/3.7	HEAD									12.5 Ω/km		Sweep t	e: FR	NC/	750 1500 3000	6.4 9.4 13.8	21.0 30.5 44.0
		Belden					Structure Return Loss 23 dB - 850 MHz							YR4	6739			
		Doladii					21 dB	8	50 – 3000			Burnin	g Energy	r: 2350 k	J/m			





Product Description

Belden 1505F is an exceptionally $\underline{\text{flexible}}$ version of our popular 1505A RG-59 digital video coax cable.

75°C	1505 F	1000	304.8	20.0	22 (7x29)	Gas In		0.242	6.15	Tinned copper	75	80%	17.0	55.7	71.5	2.5	8.2
SDI/HDTV Video Patch RG-59/U Type 0.8/3.7	NEC CM CEC CM				0.79 mm bare compacted copper* 12.2 Ω/M΄ 40.0 Ω/km	0.145	3.68			double braid 95% shield coverage 2.4 Ω/M' 7.8 Ω/km	Violet, PVC ja	ellow, Gi White or cket. Sweep t	Matte E		135 270 360 540 720 1500 3000	3.5 5.1 6.0 7.4 8.7 13.3 20.3	11.5 16.7 19.7 24.3 28.5 43.6 66.6
High Flex Version						Structu 15 dB	re Returr	Loss 5 – 3000) MHz								

PERFORMANCE





Product Description

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

SDI/HDTV Digital Video CEC CMR Conly Solid Video CEC CMR Tool Solid Video Cec CMR Solid Video C	75°C	1694A	500	152.4	10.2	18 (solid)	Gas In	0.275	6.99	Duofoil®	75	83 %	16.2	53.1	71.5	1.6	5.2
RG-6/U Type 1.0/4.6 HEAD ROOM HEAD ROOM 100 % Sweep tested. Also available: FRNC/ LSNH FRNC/ FRNC/ LSNH FRNC/ FRNC/ LSNH FRNC/ FRNC/ FRNC/ FRNC/ FRNC/ FRNC/ FRNC/ FRN				304.8	20.5	6.4 Ω/M′				2.8 Ω/M′	Green,	Blue, Vi	olet, Gre	еу,	360	3.4	6.9 9.7 11.3
		NEAU				21.0 Ω/km				9.2 Ω/km	1		e: FR		750 1500	5.0 7.3	13.9 16.4 24.0 35.0
21 dB 850 – 3000 MHz Burning Energy: 3400 kJ/m		Belden					23 dB	- 850									

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

Video Cables - digital

Description UL AWM	Part No. UL NEC C (UL)		dard gths	Std. Unit	AWG (stranding) [Dia. in mm]	& No	lation minal O.D.	Non O.	ninal D.	No. of Shields & Material	Nom. Imp.	Nom. Vel. of	Non Capac	ninal itance		Nominal ttenuatio	
Style	CEC Type	ft.	m	kg	Nom. D.C.R.	Inch	mm	Inch	mm	Nom. D.C.R.	(ohms)	Prop.	pF/ft.	pF/m	MHz	dB/ 100 ft.	dB/ 100 m
7	пон она	<i>T 1/1</i> /1	7		•												

HIGH OUALITY





Product Description

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

75°C	7855 A	1000	304.8	58.26	16 (solid)		njected	0.320	8.13	Duofoil®	75	84%	16.1	52.8	71.5	1.4	4.4
					1.3 mm	Foam	HDPE			+ 95 % tinned	Brown.	Red, O	range.		135	1.8	5.8
SDI/HDTV	HEAD				bare copper	0.225	5.71			copper braid		Green,			270	2.5	8.1
Digital Video	ПРУБ				1.2 Ω/M′	' '				1.7 Ω/M′		Grey, W			360	2.9	9.4
	ROOM				3.9 Ω/km					5.6 Ω/km		PVC jack			540	3.6	11.7
RG-7/U Type											Diack	v O jacr	ισι.		750	4.3	14.0
1.3/5.7	Belden				NEC CMR										1500	6.1	20.0
	<u> </u>				CEC CMR										3000	8.7	28.5

LONG RUN





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	7731 A	1000	304.8	42.8	14 (solid)		jected	0.405	10.3	Duofoil®	75	85 %	16.0	52.4	71.5	1.1	3.6
SDI/HDTV Digital Video RG-11/U Type	NEC CMP CEC CMR	4000	1219.2	212.3	1.62 mm bare copper 2.5 Ω/M΄ 8.2 Ω/km	0.285	7.24			+95 % tinned copper braid 1.5 Ω/M' 4.9 Ω/km	Green, White of 100 %	Red, On Blue, Vi or Black Sweep t	olet, Gre PVC jac ested.	ey, cket.	135 270 360 540 750 1500	1.5 2.1 2.5 3.1 3.7 5.5	4.8 6.9 8.0 10.0 12.0 18.0
	ROOM Belden					Structu 23 dB 21 dB	re Returr 8) MHz) MHz		Burning	g Energy	YR4	7003 xJ/m	3000	8.2	26.9

PERFORMANCE/small





Product Description

Belden 1865A digital cable where small size is required.

75°C	1865 A	1000	304.8	13.9	25 (19 x 37)	Gas In		0.150	3.81	Duofoil®	75	82 %	16.5	54.1	71.5	3.7	12.1
Sub-Miniature RG-59/U Type 0.5/2.4	NEC CMP CEC CMR				0.53 mm bare copper 27.4 Ω/M΄ 81.0 Ω/km	0.094	2.39			$+ 95 \%$ tinned copper braid $5.4 \ \Omega/M$ 17.7 Ω/km	Red, O Blue, V	PVC jac range, Y liolet, Gro 100 % S	ellow, G ey, White	reen, e and	135 270 360 540 750 1500 3000	5.0 7.1 8.2 10.1 12.0 16.7 23.3	16.4 23.3 26.9 33.1 39.5 54.8 76.4

STANDARD/FRNC







Product Description

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

75°C	1855ENH	328	100	3.0	22 (solid)	Gas Ir	njected	0.199	4.50	Duofoil®	75	84%	16.1	52.8	71.5	2.62	8.6
SDI Digital Video RG-59/U Type 0.6/2.8	NEC CMX CEC CMX	1640 3280	500 1000	15.0 30.0	0.6 mm tinned copper 72 Ω/km	0.110	2.8			+ 90 % tinned copper braid	For th	with FRI e UK m 865 SD' t).	arket	et.	135 270 360 540 750 1500	3.51 4.91 5.67 6.95 8.20 11.80	11.5 16.1 18.6 22.8 26.9 38.7
															3000	17.10	56.1

DOUBLE BRAID





Product Description

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

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



Video Multicore Cables – analog

Description UL AWM	Part No. UL NEC C (UL)		idard gths	Std. Unit	AWG (stranding) [Dia. in mm]	Insul & No Core		Non O.	ninal D.	No. of Shields & Material	Nom. Imp.	Nom. Vel. of		ninal sitance	А	Nominal ttenuatio	
Style	CEC Type	ft.	m	kg	Nom. D.C.R.	Inch	mm	Inch	mm	Nom. D.C.R.	(ohms)	Prop.	pF/ft.	pF/m	MHz	dB/ 100 ft.	dB/ 100 m

RGB/miniature





Product Description

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

Belden's 152xA-series multicore video cables are	"pre-timed" to this	s specification: nom. d	elay < 4.0 ns/	m
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91 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	High I Polyet 0.056	am Density thylene 1.42 O.D.'s 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	inner F	VC jack	17.3 PVC jackets color reen and tested.	 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
	1521 A 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	High I Polyet 0.056	am Density thylene 1.42 O.D.'s 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	inner F coded and W	VC jack Red, G	17.3 PVC jackets color reen, Blutested.	 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
	1522 A 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	High I Polyet 0.056	am Density thylene 1.42 O.D.'s 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	inner F coded White	VC jack		 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

RGB





Product Description

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

50°C 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 2.29 0.146 in. (3.71 mm) is O.D. of ea. indiv. coax	0.388	9.86	Duofoil® +93% tinned copper braid 100% shield coverage 8.6 Ω/M' 28.2 Ω/km	jacket. color c and Blu	78% matte B Inner P\ oded: Re ue. Sweep t	/C jacke ed, Gree	t	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
	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 2.29 0.146 in. (3.71 mm) is O.D. of ea. indiv. coax	0.455	11.56	Duofoil® +93% tinned copper braid 100% shield coverage 8.6 Ω/M' 28.2 Ω/km	jacket. color c Blue ar	78% matte E Inner P\ oded: Re nd White Sweep t	/C jacke ed, Gree	t	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
	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 2.29 0.146 in. (3.71 mm) is O.D. of ea. indiv. coax	0.477	12.12	Duofoil® +93% tinned copper braid 100% shield coverage 8.6 Ω/M΄ 28.2 Ω/km	jacket. color c Blue, V	78% matte B Inner P\ oded: Re White and Sweep t	/C jacke ed, Gree d Yellow.	t en,	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

Video Multicore Cables – digital



Description UL AWM	Part No. UL NEC C (UL)	No.		ndard gths	Std. Unit	AWG (stranding) [Dia. in mm]	Insul & No Core	minal	Non O.	ninal .D.	No. of Shields & Material	Nom. Imp.	Nom. Vel. of		ninal citance		Nominal ttenuatio	
Style	CEC Type	Cond.	ft.	m	kg	Nom. D.C.R.	Inch	mm	Inch	mm	Nom. D.C.R.	(ohms)	Prop.	pF/ft.	pF/m	MHz	dB/ 100 ft.	dB/ 100 m

VIDEOFLEX Mini High-Res





Product Description

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

						Belden's Mir	ni Hign-F	res mult	icore vid	deo cab	es are "pre-tim	ea" to t	nis spec	cification	: nom.	delay •	< 4.0 n	s/m
75°C	1277R	3	500	152.4	15.9	25 (solid)	Foai	m PE	0.320	8.13	Duofoil®	75	80 %	17.0	55.7	5	1.17	3.8
			1000	304.8	31.8	0.45 mm	0.0919	2.33			+95%	1277R	Red, G	reen an	d Blue	50	3.7	12.1
SDI/HDTV Digital Video	1278R	4	500 1000	152.4 304.8	16.8 33.6	bare copper 6.4 Ω/M'	Coax	O.D.	0.351	8.92	tinned copper braid	1278R	Red, G White	ireen, Bl	ue and	100 200	4.9 6.7	16.1 22.0
0.4/0.0						21.0 Ω/km	0.114	2.90		1		1279R		reen, Bl		400	9.5	31.2
0.4/2.3	1279R	5	500 1000	152.4 304.8	19.5 37.2				0.403	10.24		1280R	Red, G	and Yello ireen, Bl	ue,	750 900	13.4 15.0	44.0 49.2
NEC CMR (UL 1666)	1280R	6	500 1000	152.4 304.8	23.1 46.3				0.423	10.74			Brown	Yellow a	ana	1000 3000	15.8 31.2	51.8 102.4

VIDEOFLEX 778xA-series





Product Description

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

						Belden's 778	xA-serie	es multi	core vid	eo cable	es are "pre-time	ed" to t	nis spec	cification	i: nom.	delay	< 4.0 n	is/m
23 Gage	7787A	3	500 1000	152.4 304.8	22.7 44.9	23 (solid) 0.58 mm		njected HDPE	0.432	10.97	Duofoil® +95% tinned	75	83 % ex PVC	16.5	54.1	71.5 135	3.0 3.8	9.8 12.5
SDI/HDTV Digital Video	7788A	4	1000	304.8	54.0	bare copper 20.1 Ω/M΄ 65.9 Ω/km	0.102 Coax	2.55 O.D.	0.481	12.22	copper braid 100% shield coverage	7787A	: Red, G : Red, G : White	íreen an		270 360 540	5.4 6.2 7.7	17.7 20.3 25.3
(1855A Bundled)	7789A	5	500 1000	152.4 304.8	35.2 68.0		0.159	4.03	0.539	13.69	7.6 Ω/M΄ 24.9 Ω/km		: Red, G	and Yello	ow o	750 1500 3000	9.0 13.0 18.5	29.5 42.6 60.7
0.6/2.6	7790A	6	500 1000	152.4 304.8	42.6 84.4				0.579	15.16		7790A		Yellow a		3000	10.5	00.7
NEC CMR CEC CMR	7792A	12	500 1000	152.4 304.8	85.3 168.7				1.150	29.21								

VIDEOFLEX 779xA-series





Product Description

Belden has bundled its highly popular **779xA-series** cables into new, multi-channel <u>audio/video cable</u>. 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 <u>for applications requiring multiple channels of video</u>. 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.

											<u> </u>							
20 Gage	7794A	3	500	152.4	40.6	20 (solid)		jected	0.631	16.03	Duofoil®	75	83 %	16.3	53.1	71.5	2.1	6.9
SDI/HDTV			1000	304.8	80.7	0.81 mm	Foam	HDPE			+90 % tinned	Hiah-fl	ex PVC	iacket.		135	2.7	8.9
Digital Video	7795A	4	500	152.4	50.1	bare copper	0.145	3.68	0.706	17.93	copper braid			reen and	d Blue	270	3.8	12.5
Digital Video			1000	304.8	102.1	10.0 Ω/M′	Coax	O D	000		100% shield	7795A:	Red, G	reen, Bl	ue and	360	4.4	14.4
(1505A			1000	001.0	102.1	32.8 Ω/km	Coax	U.D.			coverage		White			540	5.5	18.0
Bundled)	7796A	5	500	152.4	64.6		0.235	5.57	0.790	20.07	9.5 Ω/M′	7796A:	Red, G	ireen, Bl	ue,	750	6.4	21.0
' ' ' '		-	1000	304.8	126.6						11.5 Ω/km		White	and Yello	w	1500	9.4	30.8
0.8/3.7												7798A:	Red, G	reen, Bl	ue,	3000	13.8	45.3
	7798A	10	500	152.4	137.9				1.166	29.62			White.	Yellow, I	3rown.			
NEC CMR			1000	304.8	269.4									e, Grey, \				
CEC CMR													and Bl					

VIDEOFLEX 771xA-series





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 <u>pre-timed to less than 5.0 ns/100 ft. delay difference</u> between each coax. This allows <u>installation with no TDR</u> (available with 4, 5, 10 coaxes). Overall matte Black PVC jacket.

						Delueirs // I	AA-Selie	3 mulli	Joie viu	eu cabie	es are pre-time	eu io ii	iis shec	ilicatioi	. HOIII.	uelay	< 4.0 II	3/III
75°C	7710A	3	500	152.4	72.2	18 (solid)		ijected HDPE	0.770	19.56	Duofoil®	75	82 %	16.2	53.1	71.5	1.6	5.2
SDI/HDTV			1000	304.8	125.4	1.01 mm					+95% tinned		Red, G			135 270	2.1 3.0	6.9 9.8
Digital Video	7711 A	4	500	152.4	87.7	bare copper 6.4 Ω/M'	0.180	4.57	0.843	21.41	copper braid	7711A:	Red, G White	reen, Bl	ue and	360	3.4	11.2
(1694A Bundled)			1000	304.8	156.4	21.0 Ω/km	Coax	O.D.			2.8 Ω/M′	7712A	Red, G	reen Bl	IIE	540	4.3	14.1
(/	7712A	5	500	152.4	103.1		0.275	6.99	0.942	23.93	9.2 Ω/km			and Yello		750	5.0	16.4
1.0/4.6		-	1000	304.8	187.1							7713A:	Red, G			1500	7.3	23.9
NEO CMD														Yellow, I		3000	10.0	32.8
NEC CMR CEC CMR	7713A	10	500 1000	152.4 304.8	192.8 366.6				1.386	35.20			Orange and Bla	e, Grey, \	Violet			
OLO OIVIIT			1000	304.8	300.0								and Bi	ack				



Technical Information

Equivalency Chart for American Wire Gauge (AWG)

_quit			
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

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 1.365 15 Solid 1.450 1.651 14 Solid 1.650 1.651 14 <	AWG Size	Composition of Conductor	Approx. O.D. mm	Section mm ²
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 0.845 17 Solid 1.150 1.039 16 Solid 1.290 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 1.365 15 Solid 1.450 1.651 14 Solid 1.650 1.651 <	21	Solid	0.724	0.412
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 1.650 1.651 14 Solid 1.630 2.070 7/20 1.850 2.260 19/27 1.850	20			
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		10/30	0.890	0.504
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 1.650 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		19/32	0.940	0.612
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 2.050 3.290 7/20 2.440		26/34	0.914	0.520
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		41/36	0.914	0.533
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	19	Solid	0.912	0.653
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	18	Solid	1.020	0.816
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 <td></td> <td>7/26</td> <td>1.220</td> <td>0.891</td>		7/26	1.220	0.891
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		16/30	1.200	0.808
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		19/30	1.240	0.957
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		41/34	1.200	0.819
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		65/34	1.200	0.845
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	17	Solid	1.150	1.039
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	16	Solid	1.290	1.300
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		7/24	1.520	1.420
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		19/29	1.470	1.216
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		26/30	1.500	1.310
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		65/34	1.500	1.300
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		105/36	1.500	1.365
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	15	Solid	1.450	1.651
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	14	Solid	1.630	2.070
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		7/20	1.850	2.260
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		19/27	1.850	1.930
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		41/30	1.850	2.060
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		105/36	1.850	2.100
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	13	Solid	1.830	2.630
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	12	Solid	2.050	3.290
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		7/20	2.440	3.610
165/34 2.410 3.300 11 Solid 2.300 4.155 10 Solid 2.600 5.230 37/26 2.920 4.710		19/25	2.360	3.070
11 Solid 2.300 4.155 10 Solid 2.600 5.230 37/26 2.920 4.710		65/30	2.410	3.270
10 Solid 2.600 5.230 37/26 2.920 4.710		165/34	2.410	3.300
37/26 2.920 4.710		Solid	2.300	
	10		2.600	
65/28 2.950 5.230				
		65/28		5.230
105/30 2.950 5.355		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							

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 val	ue					

- * = 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	_	_

Connector Cross/Transmission Distance

Connector Cross

Belden	Туре	ADC	Bomar	Damar + Hagen	Fischer	Lemo	Neutrik	Radiall	Telegärtner	Trompeter	Vitelec
152xA	0.3/2.6 RGB	-	_	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	0.5/3.7 RGB	BNC-13	-	1-3397-3602	-	-	NBTC75 BVV5	-	-	– D1	-
1865A	0.5/2.4	BNC-12	_	on request	-	FFS0A.250.NTAC40	NBTC75 BXX6	R142.078.161	J01002F1350	– D1	VB10-2063
1855A	0.6/2.6	BNC-7	SBC1855A	1-6097-2100	-	FFS0A.250.NTAC47	NBNC75 PDE6	R142.081.320	J01002A0030	– D1	_
1855ENH	0.6/2.8	1	-	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	Composite	Component	Component	Component	
	NTSC	PAL	Video	Widescreen	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.



Part Number Index / Product Information

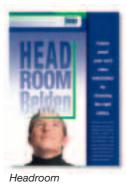
Part Number Index

Part No.	Page								
1172A	8	1800B	10	7713A	23	8281	19	46334	13
1192A	8	1800F	10	7731A	21	8410	17	46340	7
1277R	23	1802B	10	7783A	18	8412	7	46349	7
1278R	23	1803F	14	7784A	18	8424	8	46377	17
1279R	23	1804A	8	7785A	18	8451	9	46378	17
1280R	23	1805F	14	7787A	23	8728	9	46379	16
1406B	22	1806F	14	7788A	23	9180	10	46380	16
1407B	22	1810A	16	7789A	23	9248	19	46381	16
1417B	22	1811A	16	7790A	23	9259	19	46382	16
1505A	20	1850F	14	7792A	23	9265	17	46801	11
1505F	20	1852F	14	7794A	23	9292	19	46923	15
1508A	12	1854F	14	7795A	23	9397	7	46924	15
1509C	12	1855A	20	7796A	23	9398	8	46925	15
1510C	12	1855ENH	21	7798A	23	9451	9	46926	15
1511C	12	1856A	18	7804C	6	9452	9	46935	15
1512C	12	1865A	21	7855A	21	9716	16	46936	15
1513C	12	1883A	9	7880A	14	40550	15	46937	15
1514C	12	1902A	11	7891A	14	43187	21	46938	15
1515C	12	1904A	11	7884A	13	43906	17	46948	13
1516C	12	1906A	11	7885A	13	43907	16	46959	15
1517C	12	1908A	11	7886A	13	43908	16	GMMT104	6
1518C	12	1912A	11	7887A	13	46305	13	GMMT106	6
1519C	12	1916A	11	7888A	13	46306	13	GMMT108	6
1520A	22	1924A	11	7889A	13	46312	13	GMMT204	6
1521A	22	1932A	11	7890A	14	46313	13	GMMT206	6
1522A	22	7710A	23	7892A	14	46315	13	GMMT208	6
1694A	20	7711A	23	7893A	14	46332	13		
1696A	10	7712A	23	8241	19	46333	13		

Product Information



Optical Fibre Catalog



Catalog



Digital Studio Cable Guide



Master Catalog



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