

NP 125E

Belden® introduces a new Audio Cable Range – the perfect choice for cost effective high quality audio.



Belden® Audio Range for the Commercial A/V Market

The need for high-performance audio communications is greater than ever. Virtually every workplace – be it a corporate campus, high-rise office building, government agency, military base, hospital or health care facility, educational institution house of worship, retail center, sports stadium, entertainment venue, or hotel and convention center – needs to provide high-quality audio capabilities.

Audio systems may range from relatively simple to highly sophisticated networks. To meet a growing demand for high performance A/V communications, Belden has now introduced a new range of audio cabling systems, offering high audio quality combined with a favorable cost of ownership.

High Quality, High Performance

The new Belden Audio Range is the perfect choice for companies serving the public A/V and live performance marketplace, who need to run high quality audio on a limited budget. The range is highly cost-effective, yet delivers the traditional Belden professional quality and high performance. Most of the cables in the new audio range have been developed with halogen-free (HF) design according to IEC 332-1 standards and all are based on an oxygen-free copper conductor improving the quality of the signals and enabling the range deliver the best audio performance.

Offering a single design for each specific application, the cables have a very effective compact structure. Space saving is at a maximum level thanks to their thin construction and their lightweight form enable easy handling and deployment for both indoor and outdoor applications.

Meeting all A/V Requirements

Belden products have earned global acclaim for their precision engineering, rugged construction, high quality performance and rock-solid reliability. As the most trusted brand in the industry, Belden adheres to the same high standards and level of excellence. The commercial Audio Range has been designed for use in Boardrooms, Education & Healthcare, Transportation & Cruise Ships, Malls & Airports, Businesses, Theme Parks, Sports Venues, Government, Tradeshows, Company Events, Home Theater, Lightning & Energy Management, AV & Security Distribution, Home Office Systems, and Data Networking. Belden is the one cabling manufacturer with innovative products, technical expertise and a worldwide distribution network capable of fulfilling any and all A/V requirements.

Belden at Your Service


Belden offers a complete line of Brilliance® audio cables all available from a single source. All cables are featured in the EMEA Master Catalog (section 19).

Digital Audio Cables

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

24 AWG • Stranded (7x0.2) 0.6 mm Oxygen-Free Bare Copper • Twisted Pair • Overall Beldfoil® Shield • 24 AWG Tinned Copper Drain Wire
Foam Polyethylene Insulation • Purple Halogen-Free (FRNC/LSNH) Jacket


300V RMS 60°C	70049	IEC 332-1	1640	500	56.1	25.5	0.61 mm 24 AWG (7x0.2) BC	0.067	1.70	Overall Beldfoil® + Drain Wire (24 AWG TC)	0.197	5.00	110	76%	12.0	39.3	2.0	1.3	4.3
																4.1	1.6	5.2	
																5.6	1.8	5.8	



0.22 mm² Pulling Tension: 70 N

22 AWG • Stranded (7x0.25) 0.8 mm Oxygen-Free Bare Copper • Twisted Pair • Overall Beldfoil® Shield • 22 AWG Tinned Copper Drain Wire
Foam Polyethylene Insulation • Purple Halogen-Free (FRNC/LSNH) Jacket

300V RMS 60°C	70050	IEC 332-1	1640	500	81.2	36.8	0.76 mm 22 AWG (7x0.25) BC	0.083	2.10	Overall Beldfoil® + Drain Wire (22 AWG TC)	0.236	6.00	110	76%	13.0	42.6	2.0	0.9	2.9
																4.1	1.1	3.6	
																5.6	1.3	4.3	




0.34 mm² Pulling Tension: 70 N

26 AWG • Stranded (7x0.15) 0.5 mm Oxygen-Free Bare Copper • Individually Beldfoil® Shield • 26 AWG Tinned Copper Drain Wire • Numbered PA Jackets • Overall Beldfoil® Shield • Rip Cord
Foam Polyethylene Insulation • Overall Purple Halogen-Free (FRNC/LSNH) Jacket

100V RMS 70°C		IEC 332-1					0.5 mm 26 AWG (7x0.15) BC	0.043	1.10	Individual Beldfoil® + Drain Wire (26 AWG TC) + Overall Beldfoil®			110	60%	12.2	40.0	2.0	1.7	5.5
																4.0	2.1	6.9	
																6.0	2.5	8.1	

Jacketed Pairs O.D.:
0.114 2.90

	70051	1-Pair	1640	500	37.4	17.0					0.154	3.9							
0.14 mm ²	70052	2-Pair	1640	500	144.4	65.5					0.331	8.4							
	70053	4-Pair	1640	500	207.4	94.1					0.386	9.8							
	70054	8-Pair	1640	500	345.0	156.5					0.504	12.8							
	70055	12-Pair	1640	500	462.5	209.8					0.579	14.7							
	70056	16-Pair	1640	500	576.6	261.5					0.650	16.5							



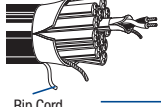
Rip Cord

24 AWG • Stranded (7x0.2) 0.6 mm Oxygen-Free Bare Copper • Individually Beldfoil® Shield • 24 AWG Tinned Copper Drain Wire • Numbered PA Jackets • Overall Beldfoil® Shield • Rip Cord
Foam Polyethylene Insulation • Overall Purple Halogen-Free (FRNC/LSNH) Jacket

100V RMS 70°C		IEC 332-1					0.6 mm 24 AWG (7x0.2) BC	0.055	1.40	Individual Beldfoil® + Drain Wire (24 AWG TC) + Overall Beldfoil®			110	60%	12.2	40.0	2.0	1.3	4.3
																4.0	1.6	5.1	
																6.0	1.8	5.9	

Jacketed Pairs O.D.:
0.134 3.40

	70057	2-Pair	1640	500	174.2	79.0					0.362	9.2							
0.22 mm ²	70058	4-Pair	1640	500	255.0	115.7					0.425	10.8							
	70059	8-Pair	1640	500	453.9	205.9					0.559	14.2							
	70060	12-Pair	1640	500	622.3	282.3					0.650	16.5							
	70061	16-Pair	1640	500	731.5	331.8					0.732	18.6							



Rip Cord

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



Analog Audio Cables

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

24 AWG • Stranded (7x0.2) 0.6 mm Oxygen-Free BC Conductors • Twisted Pair • Overall **Beldfoil®** Shield • 24 AWG Tinned Copper Drain Wire

Polyethylene Insulation • Grey Halogen-Free (FRNC/LSNH) Jacket

300V RMS	70030	IEC 332-1	1640	500	29.3	13.3	0.61 mm 24 AWG (7x0.2) BC	0.040	1.02	Overall Beldfoil® + Drain Wire (24 AWG TC)	0.122	3.10	80	–	CDR/CDR CDR/SCR	28 55	92 180	Black, Red
----------	--------------	-----------	------	-----	------	------	---------------------------------	-------	------	---	-------	------	----	---	--------------------	----------	-----------	------------



0.22 mm²

Pulling Tension: 71 N • Jacket and shield are bonded so both can be removed with automatic stripping equipment.

22 AWG • Stranded (7x0.25) 0.8 mm Oxygen-Free Bare Copper • Twisted Pair • Overall **Beldfoil®** Shield • 22 AWG Tinned Copper Drain Wire

Polyethylene Insulation • Grey Halogen-Free (FRNC/LSNH) Jacket

300V RMS	70031	IEC 332-1	1640	500	42.6	19.3	0.76 mm 22 AWG (7x0.25) BC	0.046	1.16	Overall Beldfoil® + Drain Wire (22 AWG TC)	0.138	3.50	80	–	CDR/CDR CDR/SCR	35 67	115 220	Black, Red
----------	--------------	-----------	------	-----	------	------	----------------------------------	-------	------	---	-------	------	----	---	--------------------	----------	------------	------------



0.34 mm²

Pulling Tension: 120 N • The jacket and shield are bonded so both can be removed with automatic stripping equipment. Drain wire is inside foil shield.

26 AWG • Stranded (7x0.16) 0.5 mm Oxygen-Free BC • Individually **Beldfoil®** Shield • Numbered PVC Jackets • **Overall >80% TC Braid**

Polyethylene Insulation • Overall Black PVC Jacket

100V RMS 75°C							0.48 mm 26 AWG (7x0.16) BC	0.039	1.00	Individual Beldfoil® Shield 100% + Overall Braid >80%			90	–	CDR/CDR CDR/SCR	18 34	60 110	White, Red
------------------	--	--	--	--	--	--	----------------------------------	-------	------	---	--	--	----	---	--------------------	----------	-----------	------------



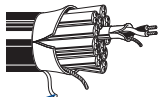
Jacketed Pairs O.D.:
0.110 2.80

0.14 mm ²	70032	4-Pair	1640	500	235.3	106.7					0.390	9.9						
	70033	8-Pair	1640	500	361.5	164.0					0.492	12.5						
	70034	12-Pair	1640	500	517.8	234.9					0.571	14.5						
	70035	16-Pair	1640	500	661.2	299.9					0.646	16.4						
	70036	24-Pair	1640	500	735.0	333.4					0.768	19.5						
	70037	40-Pair	1640	500	1356.2	615.2					0.866	22.0						

26 AWG • Stranded (7x0.16) 0.5 mm Oxygen-Free Bare Copper • Each Pair **Beldfoil®** Shielded • 26 AWG Tinned Copper Drain Wire • Numbered FRNC/LSNH Jackets • Overall **Beldfoil®** Shield • Rip Cord

Polyethylene Insulation • Overall Black Halogen-Free (FRNC/LSNH) Jacket

300V RMS 75°C		IEC 332-1					0.5 mm 26 AWG (7x0.16) BC	0.039	1.00	Individual Beldfoil® + Drain Wire (26 AWG TC) + Overall Beldfoil®			60	–	CDR/CDR CDR/SCR	31 58	102 190	White, Red
------------------	--	-----------	--	--	--	--	---------------------------------	-------	------	--	--	--	----	---	--------------------	----------	------------	------------



Jacketed Pairs O.D.:
0.111 2.82

Rip Cord	70041	2-Pair	1640	500	235.3	106.7					0.315	8.0						
0.14 mm ²	70042	4-Pair	1640	500	361.5	164.0					0.366	9.3						
	70043	8-Pair	1640	500	517.8	234.9					0.476	12.1						
	70044	12-Pair	1640	500	661.2	299.9					0.551	14.0						

Microphone Cable

24 AWG • Stranded (32x0.1) 0.6 mm Oxygen-Free Bare Copper • Conductors Cabled with Fillers • 90% Bare Copper Spiral Serve Braid

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

100V RMS 60°C	70040		328 1640	100 500	9.3 46.3	4.2 21.0	0.6 mm 24 AWG (32x0.1) BC	0.057	1.45	Overall Spiral Serve + 90% BC Braid	0.240	6.10	–	–	CDR/CDR CDR/SCR	18 34	60 110	Red, Blue
------------------	--------------	--	-------------	------------	-------------	-------------	---------------------------------	-------	------	--	-------	------	---	---	--------------------	----------	-----------	-----------






0.25 mm²

Pulling Tension: 44 N

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

Analog Audio Cables

Speaker Cables

De- scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Color Code	
			ft.	m	lbs.	kg		inch	mm		inch	mm			pF/ft.	pF/m		
16 AWG • 2 Conductor • Stranded (30x0.25) 1.5 mm Oxygen-Free Bare Copper																		
FRNC Insulation • Matte Halogen-Free (FRNC/LSNH) Jacket (Grey or Black)																		
300V RMS 60°C	70045	IEC 332-1	1640	500	136.5	61.9	1.5 mm 16 AWG (30x0.25) BC	0.091	2.30	Unshielded	0.248	6.30	12	–	CDR/CDR	35	115	Black, Red
																		
2x1.5 mm ²			Pulling Tension: 200 N															
13 AWG • 2 Conductor • Stranded (50x0.25) 2.1 mm Oxygen-Free Bare Copper																		
FRNC Insulation • Matte Halogen-Free (FRNC/LSNH) Jacket (Grey or Black)																		
300V RMS 60°C		IEC 332-1					2.05 mm 13 AWG (50x0.25) BC	0.106	2.70	Unshielded			7.4	–	CDR/CDR	40	131	Black, Red
																		
											Pulling Tension:							
70046	2x2.5 mm ²	1640	500	191.5	86.9						0.287	7.30						350 N
70047	4x2.5 mm ²	1640	500	312.8	141.9						0.335	8.50						700 N
11 AWG • 2 Conductor • Stranded (56x0.3) 2.6 mm Oxygen-Free Bare Copper																		
FRNC Insulation • Matte Halogen-Free (FRNC/LSNH) Jacket (Grey or Black)																		
300V RMS 60°C	70048	IEC 332-1	1640	500	288.7	130.9	2.6 mm 11 AWG (56x0.3) BC	0.130	3.30	Unshielded	0.339	8.60	4.5	–	CDR/CDR	35	116	Black, Red
																		
2x4.0 mm ²			Pulling Tension: 550 N															

BC = Bare Copper • DCR = DC resistance • CDR = Capacitance between conductors