

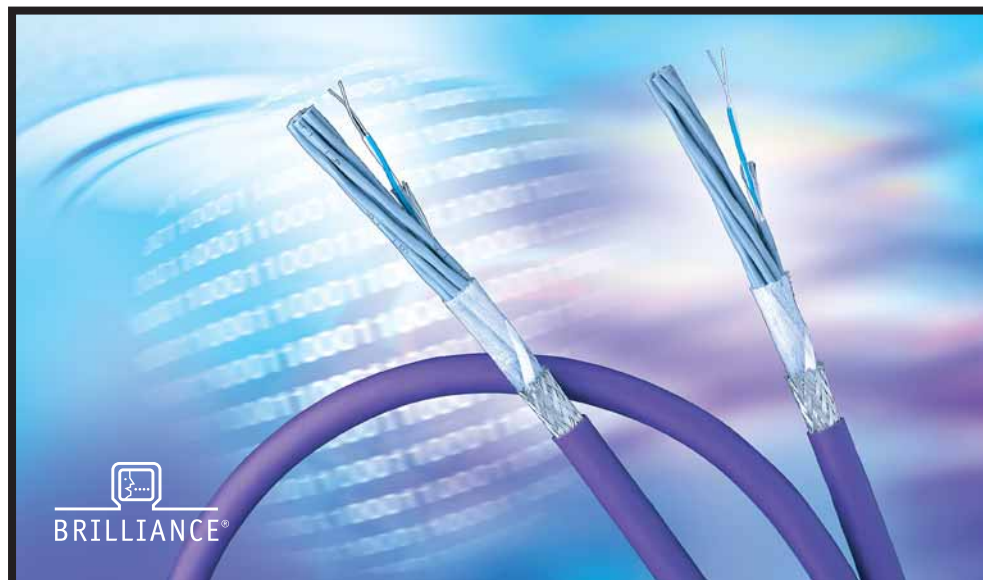
New Product Bulletin

NP 108E

Belden SlimSnake™ New Audio Multi-Pair Cable

SlimSnake™ is a new AES/EBU (digital) audio multi-pair cable. Available from a single source, its special name is derived from its construction – multi-pair *snake* cable – and from one of its key benefits: it is the *smallest* AES/EBU multi-pair cable.

Introducing Belden's New Halogen-Free AES/EBU (Digital) Audio Multi-Pair Snake Cable



Belden has introduced a halogen-free multi-pair cable for key broadcast applications. The new SlimSnake™ is designed for maximum flexibility and provides a cost effective solution for all professional broadcast installers and users looking for top performance from cables with an outside diameter of less than 11 mm.

Belden SlimSnake™ cables were designed for effective use in Professional Broadcast (e.g. post-production facilities, sound-mixing studios, Broadcast TV/Radio, OB vans); Sporting facilities (such as racetracks and venues/stadia); Buildings (such as conference rooms, airports, theatres and concert halls); and specialist applications (such as cruise ships).

Customers who may specifically benefit from the use of these cables include assembly houses, mixing console manufacturers and Broadcast installer/system integrators – as well as OB truck/van installers and users.

Benefits and Features

SlimSnake™ has many physical and performance advantages which make the cable superior to any similar products on the market. For example:

- The cable is designed to fit in D-sub connectors for digital console equipment. Therefore the 8-pair multi-pair snake cable should not be thicker than 11 mm. BE46266 has an OD of 10.30 mm!
- The SlimSnake™ multi-pair is designed to be as flexible and cost effective as possible
- It is completely halogen-free yet is still very flexible
- The cable has foam skin polyethylene insulation

- Matte purple outer jacket color
- Stable and consistent impedance 110 Ohms +/- 15 Ohms
- It is easier to solder wire with tinned copper
- It fits into D/SUB 25-pin connectors
- SlimSnake™ overall braid shield is always specified – shown as > 90%

Applications

Belden SlimSnake™ can be used for a variety of functions:

- Digitally interconnecting audio equipment
- Professional audio equipment and installations
- Digital multitrack interconnection
- Mixer boards
- Internal wiring of AES/EBU signals in outside broadcast (OB)

Construction

Belden's new SlimSnake™ audio multi-pair cable is halogen-free and features two 26 AWG/0.14 mm² stranded (7 x 0.16) tinned copper foamed polyethylene insulated conductors. The color code is white and blue.

Individual spiral serve (> 90% TC braid) is applied over the two conductors. Each pair is individually jacketed using a grey halogen-free polyamide material with an OD of 2.9 mm; for better identification it is numbered.

An overall paper tape has been placed between the pairs and the overall > 90% tinned copper braid. In addition, to increase portability and survivability, an overall flexible halogen-free purple jacket is used.

Flexible Halogen-Free Design

PVC normally gives cable flexibility. Belden has designed SlimSnake™ to have greater than normal flexibility than other halogen-free products. Below are the values which describe the flexibility of PVC against halogen-free materials:

Flexible Test acc. ASTM D747	Mpa*
Standard PVC material	23
Halogen-free SlimSnake™	32
Flexible (expensive) halogen-free material	70
Standard halogen-free material	110


* Mega Pascal

Belden at Your Service

Belden offers a complete line of AES/EBU multi-pair snake cables – all available from a single source.

Construction	
Beldfoil®	PVC
	78er Serie – 26 AWG (7880A)
	18er Serie – 24 AWG (1805F)
Spiral Braid	Halogen-free
	46er Serie – 26 AWG (BE46935)
	SlimSnake™ – 26 AWG (BE46266)

AES/EBU Digital Multi-Pair Snake Cables SlimSnake™, Installation Cable, Halogen-Free Individually Shielded and Jacketed Pairs

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
26 AWG • Stranded (7x0.16) 0.5 mm TC • Each Pair Individually TC Spiral Braid • Numbered PA Jackets • Overall > 90% TC Braid																			
Foam Polyethylene Insulation • Overall Purple Halogen-free Jacket																			
100V RMS 70°C							0.5 mm 26 AWG (7x0.16) TC	0.043	1.10	Individual Spiral Serve > 90% TC Braid + Overall Braid			110	60%	15.2	50.0	0.1	0.3	0.9
																	1.0	0.7	2.3
																	6.0	2.9	9.5
																	10.0	4.9	16.0
								Jacketed Pairs O.D.: 0.114 2.90									Pulling Tension:		
0.14 mm²	BE46273	1-Pair	820 1640	250 500	5.7 11.2	2.6 5.1					0.110	2.80					—		
	BE46202	1-Pair	820 1640	250 500	6.6 12.1	3.0 5.5					0.154	3.90					—		
	BE46203	2-Pair	820 1640	250 500	42.1 84.2	19.1 38.2					0.319	8.10					150 N		
	BE46204	4-Pair	820 1640	250 500	57.3 114.4	26.0 51.9					0.354	9.00					250 N		
	BE46266	8-Pair	820 1640	250 500	85.8 171.5	38.9 77.8					0.406	10.30					400 N		
	BE46208	10-Pair	820 1640	250 500	97.0 193.8	44.0 87.9					0.480	12.20					500 N		
	BE46205	12-Pair	820 1640	250 500	124.1 248.2	56.3 112.6					0.504	12.80					600 N		
	BE46207	16-Pair	820 1640	250 500	171.7 343.3	77.9 155.7					0.602	15.30					750 N		
Color code: White, Blue																			

TC = Tinned Copper • DCR = DC Resistance