

Product Bulletin

PB 135E

High Performance Shielded CatSnake™ Cat 6_A Cable

Belden launches a range of high performance Shielded CatSnake™ Cat 6A cables for use in studios and in tactical field deployable audio/data installations



Belden® CatSnake™ Cat 6A tested cables deliver superior performance thanks to the 100% coverage of the pairs individually shielded with Beldfoil® aluminium/polyester foil and an overall braided shield.

- Maximum uptime and reliability for critical live events
- Able to withstand repeated pulling, flexing, bending, coiling and crushing during stage and live sound applications
- Designed to meet the requirements of the latest digital audio formats

The Belden range of high performance CatSnake™ Cat 6A cables offers the highest standard Cat 6A shielded cable in a flexible and rugged design for use in the harshest environments.

Applications

Broadcast crews on the move routinely subject their cables to repeated pulling, flexing, bending and crushing. Under these circumstances a conventional cable might develop discontinuities that could lead to degraded signal transmission – or the cable could even break. Belden CatSnake™ Cat 6A cables have exceptional flexibility and flex life, making them easy to route through building walls and conduits in studio settings and other temporary installations. Their exceptional physical and electrical characteristics really make these cables ideal for outdoor use, in broadcast truck applications, in studios and for portable, professional broadcast use.

A new product to serve your needs. Be certain.

Your Benefits

Designed as the ultimate field deployable product, these exceptionally robust cables can be used in the harshest environments, yet deliver reliable performance for maximum uptime. To make the whole cable extra robust, durable and sustainable, you can choose optionally to have an

additional overall jacket in PVC or PUR. Moreover the compact round cable design eases transportation and deployment. These cables meet the requirements of the latest digital audio formats that run on Ethernet cables. These applications include CobraNet™, EtherSound™, RockNet™, DMX over Ethernet and Roland's DigitalSnake™.

Exceptional Flexibility and Flex Life

The cables have been tested for repeated bending according the EN 50289-3-9-5, and exceed the required 100 bends (radius 40 mm, weight 8 kg) while maintaining electrical performance. For simulating the coiling and uncoiling on a reel, the CatSnake™ Cat 6A has been subjected to a Track Chain test. Even after 1 million bendings (radius 100 mm, length 5 m, speed 3.5 m/s) the cable performed according the electrical performance stated in the data sheet.

Connectors and Cable Drums

Belden's shielded CatSnake™ features Beldfoil® shielded twisted pairs with 24 AWG stranded bare copper conductors and polyolefin insulation and is RJ-45 compatible. Belden R301602 Field Installable connectors are recommended to be used. A Neutrik EtherCon™ connector is under development to lock the cable to the patch bay. This connector includes the RJ45 plug as well as a robust die cast shell as a carrier. The new connector is downwards compatible with the existing Cat 5e EtherCon™ chassis connector. The cable can also be delivered on Schill drum GT.380.RM or GT.450.RM for field use. The length can be custom specific, but maximum on GT.380.RM is 100 meters, and on GT.450.RM is 150 meters.



Ordering Information

Part No.	UL NEC/C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD		Mean Char- acteristic	Freq	Max Atten.	Min. PSUM	Min. PSUM ACR	Min. PSUM ACR-F	Min. RL
			Ft.	m	Lbs.	kg	Inch	mm	Impedance at 100 MHz (Ω)	(MHz)	(dB/100 m)	NEXT (dB)	(dB/100m)	(dB/100m)	(dB)
Cat 6 _A • 2	24 AWG S	trand	ed BC	Cond	lucto	rs • T	wisted	l Pair	• Individ	ual Beldfo	oil® + Over	all Tinned	l Copper I	Braid • Ri) Cord
Foam Skin	Polyolefin I	nsulatio		Jacke	t (Blac	k)									
1302E	-	4	1.640	500	153	69.4	0.31	7.9	100 ± 5	1 4 10 16 31.25 62.5 100 125 200 250 300 500	2.5 4.6 7.1 9.0 12.6 18.0 23.0 25.8 33.1 37.3 41.1 54.3	72.3 63.3 57.3 54.2 49.9 45.4 42.3 40.8 37.8 36.3 35.1 31.8	69.8 58.7 50.2 45.3 47.3 27.4 19.3 15.0 4.7 (1.0) (6.0) (22.5)	65.0 53.0 45.0 40.9 35.1 9.1 25.0 23.1 19.0 17.0 15.5	20.0 23.0 25.0 25.0 23.6 21.5 20.1 19.4 18.0 17.3 17.3
Foam Skin	Polyolefin I	nsulatio	n • PVC	Inner	Jacket	(Black) • PVC	Outer	Jacket (Blac	k)					
1303E	_	4	1.640	500	183		0.34 Nominal 0.28	7.2		1 4 10 16 31.25 62.5 100 125 200 250 300 500	2.5 4.6 7.1 9.0 12.6 18.0 23.0 25.8 33.1 37.3 41.1 54.3	72.3 63.3 57.3 54.2 49.9 45.4 42.3 40.8 37.8 36.3 35.1 31.8	69.8 58.7 50.2 45.3 47.3 27.4 19.3 15.0 4.7 (1.0) (6.0) (22.5)	65.0 53.0 45.0 40.9 35.1 9.1 25.0 23.1 19.0 17.0 15.5	20.0 23.0 25.0 25.0 23.6 21.5 20.1 19.4 18.0 17.3 17.3
	Polyolefin I	nsulatio	n • PVC	Inner	Jacket	(Black) • PUR	Outer	Jacket (Blac	:k)					
1303EPU	-	4	1.640	500	183	82.8	0.34 Nominal 0.28	8.7 Core ID 7.2	100 ± 5	1 4 10 16 31.25 62.5 100 125 200 250 300 500	2.5 4.6 7.1 9.0 12.6 18.0 23.0 25.8 33.1 37.3 41.1 54.3	72.3 63.3 57.3 54.2 49.9 45.4 42.3 40.8 37.8 36.3 35.1 31.8	69.8 58.7 50.2 45.3 47.3 27.4 19.3 15.0 4.7 (1.0) (6.0) (22.5)	65.0 53.0 45.0 40.9 35.1 9.1 25.0 23.1 19.0 17.0 15.5	20.0 23.0 25.0 25.0 23.6 21.5 20.1 19.4 18.0 17.3 17.3

NOTE: Limits below 4 MHz are for information only. Recommended Connectors: Belden R301601, EtherCon® compatible

BC = Bare Copper • ACR = Attenuation Crosstalk Ratio • NEXT = Near-End Crosstalk • PSUM = Power Sum • RL = Return Loss • ACR-F = Attenuation Crosstalk Ratio Far-end



Color Coding

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

CobraNetTM is a trademark of Cirrus Logic Inc. EtherSoundTM is a registered trademark of Digigram S.A. Digital SnakeTM is a trademark of Roland Corporation EtherCon® is a Neutrik trademark RocknetTM is a trademark of Riedel Communications GmbH



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