



Product: [2143A](#)

Category 6 Indoor/Outdoor Cable, 4 Pair, U/UTP, OSP/CM-LS, LSZH

Product Description

Category 6 Premise Horizontal Cable (350MHz), Indoor/Outdoor OSP/CM-LS, 4 Pair, 23 AWG Solid Bare Copper Conductors, U/UTP, Gel-filled, Haloarrest® UV Resistant Flame Retardant LSZH Jacket

Technical Specifications

Product Overview

Suitable Applications:	OSP-Outdoor, Indoor/Outdoor, Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE, Noisy Environments, Not Suitable for Marine Application
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents .

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs
23 AWG	Solid	BC - Bare Copper	4

Insulation

Material	Color Code
PO - Polyolefin	White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown

Waterblocking:	Gel Filled
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Outer Jacket

Separator	Material	Material Trade Name	Nom. Diameter
Center Member (Patented X-Spline®)	LSZH - Low Smoke Zero Halogen (Flame Retardant)	Haloarrest®	0.275 in (6.99 mm)

Overall Cable Diameter (Nominal):	0.275 in (6.99 mm)
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Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km (28.6 Ohm/1000ft)	160 pF/100m

Delay

Frequency	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	45 ns/100m	65%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted) [Ohm]	Max./Min. Fitted Impedance [Ohm]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.0 dB/100m	74.3	72.3	70.3	67.8	64.8	20.0	100 ± 15	100 ± 15	40.0	35.0
4	3.8 dB/100m	65.3	63.3	59.5	55.7	52.7	23.0	100 ± 15	100 ± 15	40.0	23.0
8	5.3 dB/100m	60.8	58.8	53.4	49.7	46.7	24.5	100 ± 15	100 ± 15	40.0	16.9
10	6.0 dB/100m	59.3	57.3	51.4	47.8	44.8	25.0	100 ± 15	100 ± 15	40.0	15.0
16	7.6 dB/100m	56.3	54.3	46.7	43.7	40.7	25.0	100 ± 15	100 ± 15	38.0	10.9

20	8.5 dB/100m	54.8	52.8	44.3	41.7	38.7	25.0	100 ± 15	100 ± 15	37.0	9.0
25	9.5 dB/100m	53.3	51.3	41.8	39.8	36.8	24.3	100 ± 15	100 ± 15	36.0	7.0
31.25	10.7 dB/100m	51.9	49.9	39.2	37.9	34.9	23.6	100 ± 15	100 ± 15	35.1	5.1
62.5	15.4 dB/100m	47.4	45.4	30.0	31.8	28.8	21.5	100 ± 15	100 ± 15	32.0	
100	19.8 dB/100m	44.3	42.3	22.5	27.8	24.8	20.1	100 ± 15	100 ± 15	30.0	
155	25.2 dB/100m	41.5	39.5	14.3	23.9	20.9	18.8	100 ± 22	100 ± 15	28.1	
200	29.0 dB/100m	39.8	37.8	8.8	21.7	18.7	18.0	100 ± 22	100 ± 15	27.0	
250	32.8 dB/100m	38.3	36.3	3.5	19.8	16.8	17.3	100 ± 32	100 ± 15	26.0	

Voltage

UL Voltage Rating
300 V (CM-LS)

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
75°C	-40°C To +75°C	-20°C To +75°C	-40°C To +75°C

Bend Radius

Stationary Min.
2.75 in (69.9 mm)

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	39 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Non-Halogenated, Sunlight Resistance, Aerial - When supported by messenger wire, Burial - Engineered burial only
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	UL 1685 (UL Loading-Limited Smoke), IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800, CM-LS
CEC / C(UL) Compliance:	CMG-ST1
ICEA Compliance:	S-116-732, S-56-434, S-99-689, S-100-685
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
NEMA Compliance:	ANSI/NEMA WC-66
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 6
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
CENELEC Compliance:	Segregation class according EN50174-2 = a
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Cable not guaranteed to meet TIA 568.2 specification for delay above lengths of 90m. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0. Fully Water Blocked. Suitable for burial or use in Buildings in Wet Locations. Not recommended for Direct Burial applications without additional crush and impact protection. Additional crush and impact protection would include cable armoring, installation in conduit or installation with over top barriers per Belden Technical Bulletin T/8-6. Sunlight Resistant (Black Jacket Only).
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History

Update and Revision:	Revision Number: 0.563 Revision Date: 03-17-2025
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Part Numbers

Variants

Item #	Color	UPC
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