



Product: [2139A](#)

Category 5e Indoor/Outdoor Cable, 25 Pair, F/UTP, OSP/CM-LS, LSZH, CAT Armor

Product Description

Category 5e Premise Backbone Cable (100MHz), Indoor/Outdoor OSP/CM-LS, 25 Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Gel-Filled, Corrugated Aluminum Tape Armor, UV Resistant Flame Retardant Haloarrest® LSZH Outer Jacket

Technical Specifications

Product Overview

Suitable Applications:	OSP-Outdoor, Indoor/Outdoor, Premise Backbone Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments
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Construction Details

Conductor

Size	Stranding	Material	Number of Pairs
24	Solid	BC - Bare Copper	25

Insulation

Material	Color Code
PO - Polyolefin	Western Electric

Inner Jacket

Material	Nom. Diameter	Ripcord
PE - Polyethylene	0.51 in (13 mm)	Yes

Armor

Armor Type & Material	Armor Thickness
CAT - Corrugated Aluminum Tape	.008 in (0.20 mm)

Outer Jacket

Material	Nom. Diameter	Ripcord
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.730 in (18.5 mm)	Yes

Overall Cable Diameter (Nominal):	0.730 in (18.5 mm)
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Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km (28.6 Ohm/1000ft)	330 pF/100m

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	45 ns/100m	68%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. PSNEXT [dB]	Min. RL (Return Loss) [dB]	Max./Min. Fitted Impedance
1	2.0 dB/100m	62.3	20.0	100 ± 15%
4	4.1 dB/100m	53.3	23.0	100 ± 15%

8	5.8 dB/100m	48.8	24.5	100 ± 15%
10	6.5 dB/100m	47.3	25.0	100 ± 15%
16	8.2 dB/100m	44.3	25.0	100 ± 15%
20	9.3 dB/100m	42.8	25.0	100 ± 15%
25	10.4 dB/100m	41.3	24.3	100 ± 15%
31.25	11.7 dB/100m	39.9	23.6	100 ± 15%
62.5	17.0 dB/100m	35.4	21.5	100 ± 15%
100	22.0 dB/100m	32.3	20.1	100 ± 15%

Voltage

UL Voltage Rating
300 V (CM)

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.	Installation Min.
7.5 in (190 mm)	14.75 in (374.7 mm)

Max. Pull Tension:	150 lbs (68 kg)
Bulk Cable Weight:	240 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Aerial - When supported by messenger wire
Flammability / Reaction to Fire:	UL 1685 (UL Loading-Limited Smoke)
NEC / UL Compliance:	CM
CEC / C(UL) Compliance:	CM
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
ISO/IEC Compliance:	11801 ed 2.2 (2011) Class D
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2017-07-10
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	Outdoor Use ANSI/ICEA S56434, Broadband Outdoor Use ANSI/ICEA S99689, Indoor/Outdoor Use ANSI/ICEA S100685

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Print Includes Descending Footage Markings. Not Suitable for Direct Burial.
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History

Update and Revision:	Revision Number: 0.370 Revision Date: 01-20-2023
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Part Numbers

Variants

Item #	Color	UPC
2139A 0101000	Black	612825377870

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