

2143A Multi-Conductor - Category 6 Indoor/Outdoor OSP/CM-LS LSZH Cable



For more Information
please call

1-800-Belden1



General Description:

CAT6 (250 MHz), 4 Pair, U/UTP-Unshielded, Indoor/Outdoor OSP/CM-LS, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Patented X-Spline, Gel-Filled, UV-Resistant Flame Retardant Haloarrest® LSZH Jacket

Usage (Overall)

Suitable Applications: OSP, CM-LS, Indoor/Outdoor, Low Smoke, Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 350MHz Category 6, Outside Plant, Duct

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	23	Solid	BC - Bare Copper

Total Number of Conductors: 8

Insulation

Insulation Material:

Insulation Material
PO - Polyolefin

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
FRPO - Polyolefin

Outer Jacket Diameter:

Nom. Dia. (in.)
0.275

Overall Cable

Overall Cabling Separator Material: Patented X-Spline

Pair

Pair Color Code Chart:

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Mechanical Characteristics (Overall)

Storage Temperature Range:	-40°C To +75°C
Installation Temperature Range:	-20°C To +75°C
Operating Temperature Range:	-20°C To +75°C
UL Temperature Rating:	75C
Bulk Cable Weight:	39 lbs/1000 ft.
Max. Recommended Pulling Tension:	45 lbs.
Min. Bend Radius/Minor Axis:	1.250 in.
Min. Bend/Installation:	2.750 in.

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Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM-LS
CEC/C(UL) Specification:	CM-LS
EU Directive 2011/65/EU (ROHS II):	Yes
IEEE Specification:	POE per IEEE 802.3af & POE+ per IEEE 802.3at-2009
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	07/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	Category 6 - TIA 568.C.2, ISO/IEC 11801:2011 Amendment 2.2 Class D
ANSI Specification:	ANSI/NEMA WC-66, ANSI/ICEA S-116-732-2013 Category 6
Other Specification:	ANSI/ICEA S-56-434 Outdoor Use, ANSI/ICEA S-99-689 Broadband Outdoor Use, ANSI/ICEA S-100-685 Indoor/Outdoor

Flame Test

UL Flame Test:	UL1685 Vertical Tray Flame Test
C(UL) Flame Test:	FT1
IEC Flame Test:	60332-1
Other Flame Test:	LS Low Smoke, Acid Gas Evolution 60754-2, Smoke Density IEC 61034

Suitability

Suitability - Indoor:	Yes - Indoor
Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	Yes
Sunlight Resistance:	Yes
Oil Resistance:	No
Non-halogenated:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1213
Non-Plenum Number:	1212

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15.700

Maximum Capacitance Unbalance (pF/100 m): 160

Nominal Velocity of Propagation:

VP (%)
65

Maximum Delay:

Freq. (MHz)	Delay (ns/100 m)
100.000	537.600

Max. Delay Skew:

Delay Skew (ns/100 m)
45.000

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
9.380

Max. Operating Voltage - UL:

Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

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Voltage
300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
3

Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.000	74.3	72.3	70.3	20.000
4	3.800	65.3	63.3	59.5	23.000
8	5.300	60.8	58.8	53.4	24.500
10	6.000	59.3	57.3	51.4	25.000
16	7.600	56.2	54.3	46.7	25.000
20	8.500	54.8	52.8	44.3	25.000
25	9.500	53.3	51.3	41.8	24.300
31.25	10.700	51.9	49.9	39.2	23.600
62.5	15.340	47.4	45.4	30.0	21.500
100	19.800	44.3	42.3	22.5	20.100
155	25.200	41.4	39.5	14.3	18.800
200	29.000	39.8	37.8	8.8	18.000
250	32.800	38.3	36.3	3.5	17.300

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	67.8	64.8
4	100 ± 15	100 ± 15	55.7	52.7
8	100 ± 15	100 ± 15	49.7	46.7
10	100 ± 15	100 ± 15	47.8	44.8
16	100 ± 15	100 ± 15	43.7	40.7
20	100 ± 15	100 ± 15	41.7	38.7
25	100 ± 15	100 ± 15	39.8	36.8
31.25	100 ± 15	100 ± 15	37.9	34.9
62.5	100 ± 15	100 ± 15	31.8	28.8
100	100 ± 15	100 ± 15	27.8	24.8
155	100 ± 18	100 ± 15	23.9	20.9
200	100 ± 18	100 ± 15	21.7	18.7
250	100 ± 22	100 ± 15	19.8	16.8

Notes (Overall)

Notes: Print Includes Descending Footage / Meter Markings, -20C Cold Bend Compliance Per UL1581, Reference T/8-6 for Burial, Reference T/8-36 for Sag and Span Aerial. Water Penetration per GR 421-CORE para. 4.3.5.1, ANSI/ICEA S-107-704 Para. 8.2.1, ANSI/ICEA S-99-689

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
2143A 0101000	1,000 FT	46.000 LB	BLACK		CAT6 4PR U/UTP OSP-CM REEL

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