

2140A Multi-Conductor - Category 6 Indoor/Outdoor OSP/CM-LS F/UTP LSZH Cable



For more Information
please call

1-800-Belden1



General Description:

CAT6 (250 MHz), 4 Pair, F/UTP-Foil Shielded, Indoor/Outdoor OSP/CM-LS, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Patented X-Spline, Gel-Filled, Haloarrest® LSZH Inner Jacket, Overall Beldfoil® Shield with Drain Wire, Ripcord, UV-Resistant Flame Retardant Haloarrest® LSZH Outer Jacket

Usage (Overall)

Suitable Applications:

OSP, CM-LS, Premise Horizontal, 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

Inner Shield

Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)	Dia. (mm)
Beldfoil	Bi-Laminate	Polyester / Foil	100.000	6.604

Inner Shield Drain Wire AWG:

AWG	Stranding	Dia. (mm)	Conductor Material
26	7 x 34	0.483	TC

Inner Jacket

Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (mm)
Haloarrest(R) LSZH	6.858

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Haloarrest(R) LSZH

Outer Jacket Diameter:

Nom. Dia. (mm)
9.144

Overall Cable

Overall Cabling Separator Material: Patented X-Spline

Pair

Pair Color Code Chart:

Number	Color
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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
Bulk Cable Weight:	46.134 Kg/Km
Max. Recommended Pulling Tension:	155.687 N
Min. Bend Radius/Minor Axis:	76.200 mm
Min. Bend/Installation:	95.250 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(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 E
ANSI Specification:	ANSI/NEMA WC-66 and 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 Use

Flame Test

UL Flame Test:	UL1581 Vertical Tray
IEC Flame Test:	60332-1

Suitability

Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	Yes
Sunlight Resistance:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1352A
Non-Plenum Number:	1351A

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/m)
51.512

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Maximum Capacitance Unbalance (pF/100 m): 66

Nominal Velocity of Propagation:

VP (%)
65

Max. Delay Skew:

Delay Skew (ns/100 m)
25

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
8.9

Max. Operating Voltage - UL:

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. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
0.772	1.830	76	74	74.2	72.2	19.400
1	2.030	74.31	72.3	72.3	70.3	20.000
4	3.780	65.28	63.3	61.5	59.5	23.000
8	5.320	60.77	58.8	55.4	53.4	24.500
10	5.950	59.31	57.3	53.4	51.4	25.000
16	7.550	56.25	54.3	48.7	46.7	25.000
20	8.470	54.80	52.8	46.3	44.3	25.000
25	9.510	51.35	51.3	43.8	41.8	24.300
31.25	10.670	51.89	49.9	41.2	39.2	23.600
62.5	15.380	47.38	45.4	32.00	30.0	21.500
100	19.800	44.31	42.3	24.5	22.5	20.100
155	25.160	41.46	39.5	16.3	14.3	18.800
200	28.980	39.80	37.8	10.8	8.8	18.000
250	32.850	38.35	36.3	5.5	3.5	17.300

Premise Cable Electrical Table 2:

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

Notes (Overall)

Notes: Third party channel verified to TIA/EIA-568-C.2, Category 6, Print Includes Descending Footage / Meter Markings, -20C Cold Bend Compliance Per UL1581, Reference T/8-6 for Burial, Water Penetration per GR 421-CORE para. 4.3.5.1 and ANSI/ICEA S-107-704 Para. 8.2.1, ANSI/ICEA S-99-689

Reference (Overall)

METRIC MEASUREMENT VERSION

2140A Multi-Conductor - Category 6 Indoor/Outdoor OSP/CM-LS F/UTP LSZH Cable

Previous Part Number: 24564495

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
2140A 0101000	1,000 FT	71.000 LB	BLACK		CAT6 4PR F/UTP OSP-CM REEL

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