



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 <a href="https://www.belden.com/patents">https://www.belden.com/patents</a> .                    |

#### 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

##### 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)

#### Electrical Characteristics

##### Electricals

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

##### Delay

| Frequency | Max. Delay    | Max. Delay Skew | Nom. Velocity of Prop. |
|-----------|---------------|-----------------|------------------------|
| 100 MHz   | 537.6 ns/100m | 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

|                          |
|--------------------------|
| <b>UL Voltage Rating</b> |
| 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

|                        |
|------------------------|
| <b>Stationary Min.</b> |
| 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                                    |
| 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. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0. Suitable for use in Buildings in Wet Locations. Not Suitable for Direct Burial. Fully Water Blocked and Sunlight Resistant (Black Jacket Only). |
|--------|---|

### History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.432 Revision Date: 04-29-2024 |
|----------------------|--|

### Part Numbers

#### Variants

| Item #        | Color | UPC          |
|---------------|-------|--------------|
| 2143A 0101000 | Black | 612825130437 |

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