




Product: [1300SB](#) 

Category 5e Shipboard Cable, ABS, 4 Pair, F/UTP, LSZH

Product Description

Category 5e Shipboard Cable, ABS, 4 Pair, 24 AWG Solid Bare Copper Conductors, F/UTP - Foil Shielded, CMG-LS, LSZH Jacket

Technical Drawing



Technical Specifications

Product Overview

| | |
|------------------------|--|
| Suitable Applications: | Shipboard, Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE |
|------------------------|--|

Construction Details

Conductor

| Size | Stranding | Material | Number of Pairs |
|--------|-----------|------------------|-----------------|
| 24 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 |

Outer Shield

| Shield Type | Material | Coverage | Drainwire Type |
|-------------|-------------------------------------|----------|------------------|
| Tape | Polyester + Bi-Laminate (Alum+Poly) | 100% | 24 AWG (7x32) TC |

Outer Jacket

| Material | Material Trade Name | Nom. Diameter | Ripcord |
|---|---------------------|------------------|---------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | Haloarrest® | 0.26 in (6.6 mm) | No |

Overall Cable Diameter (Nominal): 0.26 in (6.6 mm)

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. Capacitance Unbalance |
|-------------------------------|----------------------------|
| 93.8 Ohm/km (28.6 Ohm/1000ft) | 90 pF/100m |

Delay

| Frequency | Max. Delay | Max. Delay Skew | Nom. Velocity of Prop. |
|-----------|-------------|-----------------|------------------------|
| 100 MHz | 538 ns/100m | 45 ns/100m | 70% |

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. PSNEXT [dB] | Min. ACR [dB] | Min. PSACR [dB] | Min. ACRF (ELFEXT) [dB] | Min. PSACRF (PSELFEXT) [dB] | Min. RL (Return Loss) [dB] | Min. SRL (Structural Return Loss) [dB] | Max./Min. Input Impedance (unFitted) [Ohm] | Max./Min. Fitted Impedance [Ohm] |
|-----------------|-----------------------------------|----------------|------------------|---------------|-----------------|-------------------------|-----------------------------|----------------------------|--|--|----------------------------------|
| 1 | 2.0 dB/100m | 65.3 | 62.3 | 60.3 | 60.3 | 63.8 | 60.8 | 20 | 20 | 100 ± 15 | 100 ± 15 |
| 4 | 4.1 dB/100m | 56.3 | 53.3 | 49.2 | 49.2 | 51.7 | 48.7 | 23 | 23 | 100 ± 15 | 100 ± 15 |
| 8 | 5.8 dB/100m | 51.8 | 48.8 | 43 | 43 | 45.7 | 42.7 | 24.5 | 24.5 | 100 ± 15 | 100 ± 15 |
| 10 | 6.5 dB/100m | 50.3 | 47.3 | 40.8 | 40.8 | 43.8 | 40.8 | 25 | 25 | 100 ± 15 | 100 ± 15 |
| 16 | 8.2 dB/100m | 47.3 | 44.3 | 36.1 | 36.1 | 39.7 | 36.7 | 25 | 25 | 100 ± 15 | 100 ± 15 |
| 20 | 9.3 dB/100m | 45.8 | 42.8 | 33.5 | 33.5 | 37.7 | 34.7 | 25 | 25 | 100 ± 15 | 100 ± 15 |
| 25 | 10.4 dB/100m | 44.3 | 41.3 | 30.9 | 30.9 | 35.8 | 32.8 | 24.3 | 24.3 | 100 ± 15 | 100 ± 15 |
| 31.25 | 11.7 dB/100m | 42.9 | 39.9 | 28.2 | 28.2 | 33.9 | 30.9 | 23.6 | 23.6 | 100 ± 15 | 100 ± 15 |
| 62.5 | 17.0 dB/100m | 38.4 | 35.4 | 18.4 | 18.4 | 27.8 | 24.8 | 21.5 | 21.5 | 100 ± 15 | 100 ± 15 |
| 100 | 22.0 dB/100m | 35.3 | 32.3 | 10.3 | 10.3 | 23.8 | 20.8 | 20.1 | 20.1 | 100 ± 15 | 100 ± 15 |

Voltage

| UL Voltage Rating |
|-------------------|
| 300 V (CMG-LS) |

Mechanical Characteristics

Temperature

| UL Temperature | Operating | Installation | Storage |
|----------------|----------------|----------------|----------------|
| 90°C | -20°C To +75°C | -25°C To +75°C | -20°C To +75°C |

Bend Radius

| Stationary Min. |
|-----------------|
| 1.0 in (25 mm) |

| | |
|--------------------|----------------|
| Max. Pull Tension: | 40 lbs (18 kg) |
| Bulk Cable Weight: | 32 lbs/1000ft |

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Indoor/Outdoor, Indoor, Outdoor, Non-Halogenated, Sunlight Resistance, Aerial - When supported by messenger wire |
| Flammability / Reaction to Fire: | UL 1685 (UL Loading-Limited Smoke), IEC 60332-1-2 |
| CPR Compliance: | CPR Euroclass: Dca-s2,d2,a1; CPR UKCA Class: Dca-s2,d2,a1 |
| NEC / UL Compliance: | Article 800, CMG-LS |
| CEC / C(UL) Compliance: | CMG-ST1 |
| IEEE Compliance: | IEEE 802.3bt Type 1, Type 2, Type 3 |
| Data Category: | Category 5e |
| Marine Compliance: | ABS certificate 18-HS1803790-PDA |
| 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

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|--------|---|
| Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. RJ-45 Compatible. Jacket sequentially marked at 2 ft. intervals. |
|--------|---|

History

Update and Revision: Revision Number: 0.463 Revision Date: 01-20-2023

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC |
|----------------|-------|------------|----------|--------------|
| 1300SB 0101000 | Black | Reel | 1,000 ft | 612825111092 |

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