



Product: 2203ENH ☑

Category 6A Cable, 4 Pair, U/FTP, LSZH Indoor CPR Eca

Product Description

Category 6A Premise Horizontal Cable (500MHz), 4-Pair, 23 AWG Solid Bare Copper conductors, U/FTP, Foam Polyethylene insulation, each pair with Beldfoil® shield, AWG 26 solid tinned copper drainwire, LSZH jacket, CPR Euroclass Eca

Technical Specifications

Product Overview

| Suitable Applications: | Horizontal and building backbone cable; Support current and future Category 6A and 6 applications, such as: 10GBase-T (10 Gigabit Ethernet), 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, FDDI, ATM |
|------------------------|--|
| Patent: | This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents. |

Construction Details

Conductor

| Element | Size | Stranding | Material | No. of Pairs | No. of Elements |
|--------------------------|--------|-----------|------------------|--------------|-----------------|
| Individual Shielded Pair | 23 AWG | Solid | BC - Bare Copper | 4 | 8 |

Insulation

| Element | Material | Nom. Insulation Diameter | Color Code |
|--------------------------|--------------------------|--------------------------|--|
| Individual Shielded Pair | PE - Polyethylene (Foam) | 1.32 mm (0.0520 in) | White / Blue, White / Orange, White / Green, White / Brown |

Cable Core

Description

2 twisted insulated conductors with overall foil, 4 pairs all twisted together with AWG 26 tinned copper drain wire

Inner Shield

| Element | Shield Type | Material | Coverage |
|--------------------------|-------------|-------------------------|----------|
| Individual Shielded Pair | Таре | Bi-Laminate (Alum+Poly) | 100% |
| Table Notes: | Alumi | num facing outside | |

Outer Shield

Drainwire Type
26 AWG (Solid) TC

Table Notes: Aluminium facing outside

Outer Jacket

| Material | | Nom. Diameter | Ripcord |
|-----------------------------------|----------------------|------------------|---------|
| LSZH - Low Smoke Zero Halog | en (Flame Retardant) | 6.9 mm (0.27 in) | Yes |
| Overall Cable Diameter (Nominal): | 6.9 mm (0.27 in) | | |

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. Mutual Capacitance | Max. Capacitance Unbalance | Nom. Characteristic Impedance |
|--------------------|-------------------------|----------------------------|-------------------------------|
| 95 Ohm/km | 56 pF/m (17 pF/ft) | 160 pF/100m | 100 Ohm |

Delay

| Max. Delay Skew | Nom. Velocity of Prop. |
|-----------------|------------------------|
| 45 ns/100m | 77% |

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. PSANEXT [dB] | Min. PSAACRF [dB] | Min. TCL [dB] | Min. ELTCTL [dB] |
|--------------------|---|----------------------|------------------------|---------------------|-----------------------|----------------------------|--------------------------------|----------------------------------|-------------------------|-------------------------|---------------------|------------------------|
| 1 | 2.1 dB/100m | 75.3 | 72.3 | 73.2 | 70.2 | 68 | 65 | 20 | 67 | 67 | 40 | 35 |
| 4 | 3.8 dB/100m | 66.3 | 63.3 | 62.5 | 59.5 | 56 | 53 | 23 | 67 | 66.2 | 34 | 23 |
| 10 | 5.9 dB/100m | 60.3 | 57.3 | 54.4 | 51.4 | 48 | 45 | 25 | 67 | 58.2 | 30 | 15 |
| 16 | 7.5 dB/100m | 57.2 | 54.2 | 49.8 | 46.8 | 43.9 | 40.9 | 25 | 67 | 54.1 | 28 | 10.9 |
| 31.2 | 10.5 dB/100m | 52.9 | 49.9 | 42.4 | 39.4 | 38.1 | 35.1 | 23.6 | 67 | 48.3 | 25.1 | 5.1 |
| 62.5 | 15 dB/100m | 48.4 | 45.4 | 33.4 | 30.4 | 32.1 | 29.1 | 21.5 | 65.6 | 42.3 | 22 | |
| 100 | 19.1 dB/100m | 45.3 | 42.3 | 26.2 | 23.2 | 28 | 25 | 20.1 | 62.5 | 38.2 | 20 | |
| 125 | 21.5 dB/100m | 43.8 | 40.8 | 22.3 | 19.3 | 26.1 | 23.1 | 19.4 | 61 | 36.3 | 19 | |
| 200 | 27.6 dB/100m | 40.8 | 37.8 | 13.2 | 10.2 | 22 | 19 | 18 | 58 | 32.2 | 17 | |
| 250 | 31.1 dB/100m | 39.3 | 36.3 | 8.3 | 5.3 | 20 | 17 | 17.3 | 56.5 | 30.2 | 16 | |
| 300 | 34.3 dB/100m | 38.1 | 35.1 | 3.9 | 0.9 | 18.5 | 15.5 | 17.3 | 55.3 | 28.7 | | |
| 500 | 45.3 dB/100m | 34.8 | 31.8 | -10.4 | -13.4 | 14 | 11 | 17.3 | 52 | 24.2 | | |
| Table Notes: | Table Notes: Limits below 4 MHz are for information only. Reference standard: IEC 61156-5 | | | | | | | | | | | |

Transfer Impedance

| Frequency | Max. Transfer Impedance |
|-----------|-------------------------|
| 1 Mhz | Max. 50 mOhm/m |
| 10 Mhz | Max. 100 mOhm/m |
| 30 Mhz | Max. 200 mOhm/m |
| 100 Mhz | Max. 1000 mOhm/m |

| Transfer Impedance Class: | Grade 2 |
|---------------------------|----------------------|
| Screening Class: | Type Ib |
| Table Notes: | Coupling Attenuation |

Voltage

Voltage Rating 72 V DC

Mechanical Characteristics

Temperature

| Operating | Installation |
|----------------|--------------|
| -30°C to +60°C | 0°C To +50°C |

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 33 mm (1.3 in) | 66 mm |

 Max. Pull Tension:
 110 N (25 lbf)

 Bulk Cable Weight:
 44 kg/km

Standards and Compliance

| Environmental Suitability: | Indoor - Euroclass Eca | | | | |
|-------------------------------------|--|--|--|--|--|
| Flammability / Reaction to Fire: | IEC 60332-1-2 | | | | |
| CPR Compliance: | CPR Euroclass: Eca | | | | |
| IEEE Compliance: | PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4 | | | | |
| Data Category: | Category 6A | | | | |
| TIA/EIA Compliance: | ANSI/TIA 568.2-D | | | | |
| ISO/IEC Compliance: | ISO/IEC 11801-1, IEC 61034-2 - Smoke Density Min Transmittance = 60% | | | | |
| CENELEC Compliance: | EN 50173-1, Segregation class according EN50174-2 = d | | | | |
| European Halogen Free Standards: | IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 μS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3 | | | | |
| European Directive Compliance: | EU CE Mark | | | | |
| UK Regulation Compliance: | UKCA Mark | | | | |

Product Notes

| Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. |
|--------|--|

History

| Update and Revision: | Revision Number: 0.156 Revision Date: 07-31-2024 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | Putup Type | Length | EAN |
|---------------|-------|------------|--------|---------------|
| 2203ENH.00500 | Blue | Reel | 500 m | 8719605159366 |

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.