

# Product: 10GXE00D

10GX Category 6A Enhanced Cable, 4 Pair, F/UTP, LSZH Indoor CPR Dca

## Product Description

Category 6A Enhanced Premise Horizontal Cable (625MHz), 4-Pair, 23 AWG Solid Bare Copper Conductors, F/UTP, Polyethylene Insulation, Beldfoil® shield, AWG 26 solid tinned copper drainwire, LSZH Jacket

## 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 Pair | 23 AWG | Solid | BC - Bare Copper | 4 | 8 |

**Insulation**

| Element | Material | Nom. Insulation Diameter | Color Code |
|---|---|---|---|
| Individual Pair | PE - Polyethylene | 1.18 mm (0.0465 in) | White/Blue & Blue, White/Orange & Orange, White/Green & Green, White/Brown & Brown |

**Cable Core**

| Description | Separator |
|---|---|
| 4 pairs twisted to cable core covered with a polyester foil | Center Member (Patented X-Spline®) |

**Outer Shield**

| Shield Type | Material | Coverage | Drainwire Type |
|---|---|---|---|
| Tape | Bi-Laminate (Alum+Poly) | 100% | 26 AWG (Solid) TC |

| | |
|---|---|
| Table Notes: | Aluminum facing outside |

**Outer Jacket**

| Material | Nom. Diameter | Ripcord |
|---|---|---|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 7.2 mm (0.28 in) | Yes |

| | |
|---|---|
| Overall Cable Diameter (Nominal): | 7.2 mm (0.28 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 | 67% |

**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 | | |
| 625 | 51.2 dB/100m | 33.4 | 30.4 | -17.8 | -20.8 | 12.1 | 9.1 | 17.3 | 50.6 | 22.3 | | |

| | |
|---|---|
| Table Notes: | Limits below 4 MHz and at 625 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 II |
| 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. |
|---|---|
| 29 mm (1.1 in) | 58 mm |

| | |
|---|---|
| Max. Pull Tension: | 110 N (25 lbf) |
| Bulk Cable Weight: | 50 kg/km |

## Standards and Compliance

| | |
|---|---|
| Environmental Suitability: | Indoor - Euroclass Dca |
| Flammability / Reaction to Fire: | IEC 60332-1-2 |
| CPR Compliance: | CPR Euroclass: Dca-s2,d1,a1 |
| 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 = c |
| 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: 0.202 Revision Date: 07-31-2024 |

## Part Numbers

**Variants**

| Item # | Color | Putup Type | Length | EAN |
|---|---|---|---|---|
| 10GXE00D.06100 | Blue | Reel | 100 m | 8719605142504 |
| 10GXE00D.06500 | Blue | Reel | 500 m | 8719605139832 |
| 10GXE00D.08100 | Gray | Reel | 100 m | 8719605142511 |
| 10GXE00D.08305 | Gray | Reel | 305 m | 8719605142528 |
| 10GXE00D.08500 | Gray | Reel | 500 m | 8719605142641 |
| 10GXE00D.04100 | Yellow | Reel | 100 m | 8719605155658 |
| 10GXE00D.04500 | Yellow | Reel | 500 m | 8719605155665 |

© 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.