



Product: [10GXW12](#)

10GXW (0.260") Category 6A Cable, 4 Pair, U/UTP, CMR

Product Description

10GXW (0.260" Diameter) Category 6A Premise Horizontal Cable (500MHz), 4 Pair, 23 AWG Solid Bare Copper Conductors, U/UTP, Riser-CMR, PVC Jacket

Technical Specifications

Product Overview

| | |
|------------------------|--|
| Suitable Applications: | Premise Horizontal Cable, Ethernet 10GBASE-T, Wi-Fi 6, Wi-Fi 5, In-Building Wireless, In-Building Small Cells, Mobile RAN, PoE++, PoE+, PoE, HDBaseT |
| 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

| Size | Stranding | Material | Number of Pairs |
|--------|-----------|------------------|-----------------|
| 23 AWG | Solid | BC - Bare Copper | 4 |

Insulation

| Material | Color Code |
|-----------------|--|
| PO - Polyolefin | White & Blue, White & Orange, White & Green, White & Brown |

Outer Jacket

| Separator | Material | Nom. Diameter | Ripcord |
|---|--------------------------|--------------------|---------|
| Center Member (Patented T-Spline®), EquiBlock™ Barrier Technology | PVC - Polyvinyl Chloride | 0.260 in (6.60 mm) | Yes |

Overall Cable Diameter (Nominal): 0.260 in (6.60 mm)

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. Capacitance Unbalance |
|---------------------------|----------------------------|
| 82 Ohm/km (25 Ohm/1000ft) | 45 pF/100m |

Delay

| Frequency | Max. Delay | Max. Delay Skew | Nom. Velocity of Prop. |
|-----------|---------------|-----------------|------------------------|
| 100 MHz | 537.6 ns/100m | 45 ns/100ft | 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] | Max./Min. Input Impedance (unFitted) [Ohm] | Max./Min. Fitted Impedance [Ohm] | Min. PSANEXT [dB] | Min. PSAACRF [dB] | Min. TCL [dB] | Min. ELTCTL [dB] |
|-----------------|-----------------------------------|----------------|------------------|---------------|-----------------|-------------------------|-----------------------------|----------------------------|--|----------------------------------|-------------------|-------------------|---------------|------------------|
| 1 | 2.1 dB/100m | 74.3 | 72.3 | 72.2 | 70.2 | 67.8 | 64.8 | 20.0 | 100 ± 15 | 105 ± 10 | 67.0 | 67.0 | 40.0 | 35.0 |
| 4 | 3.8 dB/100m | 65.3 | 63.3 | 61.5 | 59.5 | 55.8 | 52.8 | 23.0 | 100 ± 15 | 105 ± 10 | 67.0 | 66.2 | 40.0 | 23.0 |
| 8 | 5.3 dB/100m | 60.8 | 58.8 | 55.4 | 53.4 | 49.7 | 46.7 | 24.5 | 100 ± 15 | 105 ± 10 | 67.0 | 60.1 | 40.0 | 16.9 |
| 10 | 5.9 dB/100m | 59.3 | 57.3 | 53.4 | 51.4 | 47.8 | 44.8 | 25.0 | 100 ± 15 | 105 ± 10 | 67.0 | 58.2 | 40.0 | 15.0 |
| 16 | 7.5 dB/100m | 56.2 | 54.2 | 48.8 | 46.8 | 43.7 | 40.7 | 25.0 | 100 ± 15 | 105 ± 10 | 67.0 | 54.1 | 38.0 | 10.9 |
| 20 | 8.4 dB/100m | 54.8 | 52.8 | 46.4 | 44.4 | 41.8 | 38.8 | 25.0 | 100 ± 15 | 105 ± 10 | 67.0 | 52.2 | 37.0 | 9.0 |
| 25 | 9.4 dB/100m | 53.3 | 51.3 | 44.0 | 42.0 | 39.8 | 36.8 | 24.3 | 100 ± 15 | 105 ± 10 | 67.0 | 50.2 | 36.0 | 7.0 |
| 31.25 | 10.5 dB/100m | 51.9 | 49.9 | 41.4 | 39.4 | 37.9 | 34.9 | 23.6 | 100 ± 15 | 105 ± 10 | 67.0 | 48.3 | 35.1 | 5.1 |

| | | | | | | | | | | | | | | |
|------|--------------|------|------|------|------|------|------|------|----------|----------|------|------|------|--|
| 62.5 | 15.0 dB/100m | 47.4 | 45.4 | 32.4 | 30.4 | 31.9 | 28.9 | 21.5 | 100 ± 15 | 105 ± 10 | 65.6 | 42.3 | 32.0 | |
| 100 | 19.1 dB/100m | 44.3 | 42.3 | 25.2 | 23.2 | 27.8 | 24.8 | 20.1 | 100 ± 15 | 105 ± 10 | 62.5 | 38.2 | 30.0 | |
| 200 | 27.6 dB/100m | 39.8 | 37.8 | 12.2 | 10.2 | 21.8 | 18.8 | 18.0 | 100 ± 22 | 100 ± 10 | 58.0 | 32.2 | 27.0 | |
| 250 | 31.1 dB/100m | 38.3 | 36.3 | 7.3 | 5.3 | 19.8 | 16.8 | 17.3 | 100 ± 32 | 100 ± 10 | 56.5 | 30.2 | 26.0 | |
| 300 | 34.3 dB/100m | 37.1 | 35.1 | 2.9 | 0.9 | 18.3 | 15.3 | 16.8 | 100 ± 32 | 100 ± 10 | 55.3 | 28.7 | 25.2 | |
| 350 | 37.2 dB/100m | 36.1 | 34.1 | | | 16.9 | 13.9 | 16.3 | 100 ± 32 | 100 ± 10 | 54.3 | 27.3 | 24.6 | |
| 400 | 40.1 dB/100m | 35.3 | 33.3 | | | 15.8 | 12.8 | 15.9 | 100 ± 32 | 100 ± 10 | 53.5 | 26.2 | 24.0 | |
| 450 | 42.7 dB/100m | 34.5 | 32.5 | | | 14.7 | 11.7 | 15.5 | 100 ± 32 | 100 ± 10 | 52.7 | 25.1 | 23.5 | |
| 500 | 45.3 dB/100m | 33.8 | 31.8 | | | 13.8 | 10.8 | 15.2 | 100 ± 32 | 100 ± 10 | 52.0 | 24.2 | 23.0 | |

Voltage

| |
|---------------------------|
| UL Voltage Rating |
| 300 V (CMR), 300 V (CL3R) |

Mechanical Characteristics

Temperature

| UL Temperature | Operating | Installation | Storage |
|----------------|----------------|--------------|----------------|
| 90°C | -20°C To +75°C | 0°C To +50°C | -20°C To +75°C |

Bend Radius

| |
|------------------------|
| Stationary Min. |
| 1 in (25 mm) |

| | |
|--------------------|----------------|
| Max. Pull Tension: | 25 lbs (11 kg) |
| Bulk Cable Weight: | 31 lbs/1000ft |

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Riser, Indoor |
| Flammability / Reaction to Fire: | UL 1666 Riser, FT4, IEC 60332-1-2 |
| CPR Compliance: | CPR Euroclass: Eca |
| NEC / UL Compliance: | Article 800 |
| CEC / C(UL) Compliance: | CMR |
| ICEA Compliance: | S-116-732 |
| IEEE Compliance: | IEEE 802.3bt Type 1, Type 2, Type 3, Type 4 |
| NEMA Compliance: | ANSI/NEMA WC-66 |
| Data Category: | Category 6A |
| TIA/EIA Compliance: | ANSI/TIA-568.2-D Category 6A |
| ISO/IEC Compliance: | ISO/IEC 11801-1, IEC 61156-5 |
| 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 |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |
| Plenum Number: | 10GXW13 |

Product Notes

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| 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. |
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History

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| Update and Revision: | Revision Number: 0.146 Revision Date: 03-02-2023 |
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