



Product: [3612](#)

Category 6+ Premium Cable, 4 Pair, U/UTP, CMR

Product Description

Category 6+ Premium Premise Horizontal Cable (400MHz), 4 Pair, 23 AWG Solid Bare Copper Conductors, U/UTP, Riser-CMR, PVC Jacket

Technical Specifications

Product Overview

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

Outer Jacket

| Separator | Material | Nom. Diameter | Ripcord |
|------------------------------------|--------------------------|--------------------|---------|
| Center Member (Patented X-Spline®) | PVC - Polyvinyl Chloride | 0.231 in (5.87 mm) | Yes |

| | |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.231 in (5.87 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. Capacitance Unbalance |
|---------------------------|----------------------------|
| 77 Ohm/km (23 Ohm/1000ft) | 330 pF/100m |

Delay

| Frequency | Max. Delay | Max. Delay Skew | Nom. Velocity of Prop. | Typical Delay Skew |
|-----------|---------------|-----------------|------------------------|--------------------|
| 100 MHz | 537.6 ns/100m | 35 ns/100m | 70% | 35 ns/100m |

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] |
|-----------------|-----------------------------------|----------------|------------------|---------------|-----------------|-------------------------|-----------------------------|----------------------------|--|
| 1 | 2.0 dB/100m | 84.3 | 82.3 | 80.3 | 80.3 | 76.8 | 73.8 | 20.0 | 100 ± 15 |
| 4 | 3.7 dB/100m | 75.3 | 73.3 | 69.5 | 69.5 | 64.8 | 61.8 | 23.6 | 100 ± 15 |
| 8 | 5.3 dB/100m | 70.8 | 68.8 | 63.5 | 63.5 | 58.7 | 55.7 | 25.3 | 100 ± 15 |
| 10 | 5.9 dB/100m | 69.3 | 67.3 | 61.4 | 61.4 | 56.8 | 53.8 | 26.0 | 100 ± 15 |
| 16 | 7.4 dB/100m | 66.2 | 64.2 | 56.8 | 56.8 | 52.7 | 49.7 | 26.0 | 100 ± 15 |
| 20 | 8.3 dB/100m | 64.8 | 62.8 | 54.4 | 54.4 | 50.8 | 47.8 | 26.0 | 100 ± 15 |
| 25 | 9.4 dB/100m | 63.3 | 61.3 | 52.0 | 52.0 | 48.8 | 45.8 | 25.5 | 100 ± 15 |
| 31.25 | 10.5 dB/100m | 61.9 | 59.9 | 49.4 | 49.4 | 46.9 | 43.9 | 25.0 | 100 ± 15 |
| 62.5 | 15.1 dB/100m | 57.4 | 55.4 | 40.3 | 40.3 | 40.9 | 37.9 | 23.5 | 100 ± 15 |

| | | | | | | | | | |
|-----|--------------|------|------|------|------|------|------|------|----------|
| 100 | 19.3 dB/100m | 54.3 | 52.3 | 33.0 | 33.0 | 36.8 | 33.8 | 22.5 | 100 ± 15 |
| 155 | 24.5 dB/100m | 51.4 | 49.4 | 24.9 | 24.9 | 33.0 | 30.0 | 21.6 | 100 ± 22 |
| 200 | 28.2 dB/100m | 49.8 | 47.8 | 19.6 | 19.6 | 30.8 | 27.8 | 21.0 | 100 ± 22 |
| 250 | 31.8 dB/100m | 48.3 | 46.3 | 14.5 | 14.5 | 28.8 | 25.8 | 20.5 | 100 ± 32 |
| 300 | 35.2 dB/100m | 47.1 | 45.1 | 9.9 | 9.9 | 27.3 | 24.3 | 20.1 | 100 ± 32 |
| 350 | 38.4 dB/100m | 46.1 | 44.1 | 5.7 | 5.7 | 25.9 | 22.9 | 19.8 | 100 ± 32 |
| 400 | 41.5 dB/100m | 45.3 | 43.3 | 1.8 | 1.8 | 24.8 | 21.8 | 19.5 | 100 ± 32 |
| 450 | 44.3 dB/100m | 44.5 | 42.5 | | | 23.7 | 20.7 | 19.2 | 100 ± 32 |
| 500 | 47.1 dB/100m | 43.8 | 41.8 | | | 22.8 | 19.8 | 19.0 | 100 ± 32 |
| 550 | 49.7 dB/100m | 43.2 | 41.2 | | | 22.0 | 19.0 | 18.8 | 100 ± 32 |
| 600 | 52.3 dB/100m | 42.6 | 40.6 | | | 21.2 | 18.2 | 18.7 | 100 ± 32 |
| 650 | 54.8 dB/100m | 42.1 | 40.1 | | | 20.5 | 17.5 | 18.5 | 100 ± 32 |

Voltage

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

Mechanical Characteristics

Temperature

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

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 1.0 in (25 mm) | 2.5 in (64 mm) |

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

Standards and Compliance

| | |
|---------------------------------------|---|
| Environmental Suitability: | Riser, Indoor |
| Sustainability: | Product Lens™, Environmental Product Declaration (EPD) Available |
| Flammability / Reaction to Fire: | UL 1666 Riser, FT4, IEC 60332-1-2 |
| CPR Compliance: | CPR Euroclass: Eca; CPR UKCA Class: Eca |
| NEC / UL Compliance: | Article 800, CMR |
| 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 6 |
| TIA/EIA Compliance: | ANSI/TIA-568.2-D Category 6 |
| Third Party Performance Verification: | 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) |
| Plenum Number: | 3613 |

Product Notes

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| Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 400 MHz are for Engineering Information Only. 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: 0.548 Revision Date: 04-29-2024 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC | Footnote |
|---------------|--------|-------------|----------|--------------|----------|
| 3612 0101000 | Black | Reel | 1,000 ft | 612825145707 | C |
| 3612 010A1000 | Black | Reel-in-Box | 1,000 ft | 612825145684 | C |
| 3612 010U1000 | Black | UnReel | 1,000 ft | 612825145691 | |
| 3612 0061000 | Blue | Reel | 1,000 ft | 612825145585 | C |
| 3612 006A1000 | Blue | Reel-in-Box | 1,000 ft | 612825145561 | C |
| 3612 006U1000 | Blue | UnReel | 1,000 ft | 612825145578 | |
| 3612 0062500 | Blue | Reel | 2,500 ft | 612825145592 | |
| 3612 0081000 | Gray | Reel | 1,000 ft | 612825145639 | C |
| 3612 008A1000 | Gray | Reel-in-Box | 1,000 ft | 612825335061 | C |
| 3612 008U1000 | Gray | UnReel | 1,000 ft | 612825145622 | |
| 3612 0051000 | Green | Reel | 1,000 ft | 612825145554 | C |
| 3612 005A1000 | Green | Reel-in-Box | 1,000 ft | 612825145530 | C |
| 3612 005U1000 | Green | UnReel | 1,000 ft | 612825145547 | |
| 3612 003A1000 | Orange | Reel-in-Box | 1,000 ft | 612825145479 | C |
| 3612 003U1000 | Orange | UnReel | 1,000 ft | 612825145486 | |
| 3612 007A1000 | Purple | Reel-in-Box | 1,000 ft | 612825145608 | C |
| 3612 007U1000 | Purple | UnReel | 1,000 ft | 612825145615 | |
| 3612 0091000 | White | Reel | 1,000 ft | 612825145660 | C |
| 3612 009A1000 | White | Reel-in-Box | 1,000 ft | 612825145646 | C |
| 3612 009U1000 | White | UnReel | 1,000 ft | 612825145653 | |
| 3612 0092500 | White | Reel | 2,500 ft | 612825145677 | |
| 3612 0041000 | Yellow | Reel | 1,000 ft | 612825145516 | C |
| 3612 004A1000 | Yellow | Reel-in-Box | 1,000 ft | 612825145493 | C |
| 3612 004U1000 | Yellow | UnReel | 1,000 ft | 612825145509 | |
| 3612 0042500 | Yellow | Reel | 2,500 ft | 612825145523 | |

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