



**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 <a href="https://www.belden.com/patents">https://www.belden.com/patents</a> . |

#### 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

|                          |
|--------------------------|
| <b>UL Voltage Rating</b> |
| 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

|        |  |
|--------|--|
| 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. |
|--------|--|

### History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.545 Revision Date: 01-20-2023 |
|----------------------|--|

### 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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