



## **Product Description**

Category 6+ Premise Horizontal Cable (350MHz), 4 Bonded-Pairs, 23 AWG Solid Bare Copper Conductors, U/UTP, Riser-CMR, PVC Jacket

## **Technical Specifications**

## **Product Overview**

| Suitable Applications: F | 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/resources/patents- |

## **Construction Details**

### Conductor

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

| Material        |  |               | Color Co | de |  |
|-----------------|--|---------------|----------|----|--|
| PO - Polyolefin | PO - Polyolefin White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown |               |          |    |  |
| Bonded-Pair:    |  | Yes           |          |    |  |
| Outer Jacket Ma | terial   |               |          |    |  |
| Materia         |  | Nom. Diameter | lipcord  |    |  |

PVC - Polyvinyl Chloride 0.365 x 0.165 in Yes

### **Electrical Characteristics**

### Electricals

| Max. Conductor DCR | Max. DCR Unbalance | Max. Capacitance Unbalance | Nom. Mutual Capacitance |  |
|--------------------|--------------------|----------------------------|-------------------------|--|
| 75 Ohm/km          | 3%                 | 49 pF/100m                 | 15 pF/ft                |  |

#### Delay

| Frequency [MHz] | Max. Delay    | Max. Delay Skew | Nom. Velocity of Propagation (VP) [%] |
|-----------------|---------------|-----------------|---------------------------------------|
| 100 MHz         | 537.6 ns/100m | 25 ns/100m      | 70%                                   |

### High Freq

| Frequency<br>[MHz] | Max. Insertion Loss<br>(Attenuation) | Min.<br>NEXT [dB] | Min.<br>PSNEXT [dB] | Min.<br>ACR [dB] | Min.<br>PSACR [dB] | Min. ACRF<br>(ELFEXT) [dB] | Min. PSACRF<br>(PSELFEXT) [dB] | Min. RL (Return<br>Loss) [dB] | Max./Min. Input<br>Impedance (unFitted) | Max./Min. Fitted<br>Impedance |
|--------------------|--------------------------------------|-------------------|---------------------|------------------|--------------------|----------------------------|--------------------------------|-------------------------------|---|-------------------------------|
| 1 MHz              | 1.9 dB/100m                          | 75.3 dB           | 75.3 dB             | 73.4 dB          | 73.4 dB            | 67.8 dB                    | 64.8 dB                        | 20.0 dB                       | 100 ± 12 Ohm                            | 100 ± 15 Ohm                  |
| 4 MHz              | 3.7 dB/100m                          | 66.3 dB           | 66.3 dB             | 62.6 dB          | 62.6 dB            | 55.7 dB                    | 52.8 dB                        | 23.0 dB                       | 100 ± 12 Ohm                            | 100 ± 15 Ohm                  |
| 8 MHz              | 5.3 dB/100m                          | 61.8 dB           | 61.8 dB             | 56.5 dB          | 56.5 dB            | 49.7 dB                    | 46.7 dB                        | 24.5 dB                       | 100 ± 12 Ohm                            | 100 ± 15 Ohm                  |
| 10 MHz             | 5.9 dB/100m                          | 60.3 dB           | 60.3 dB             | 54.4 dB          | 54.4 dB            | 47.8 dB                    | 44.8 dB                        | 25.0 dB                       | 100 ± 12 Ohm                            | 100 ± 15 Ohm                  |
| 16 MHz             | 7.5 dB/100m                          | 57.2 dB           | 57.2 dB             | 49.7 dB          | 49.7 dB            | 43.7 dB                    | 40.7 dB                        | 25.0 dB                       | 100 ± 12 Ohm                            | 100 ± 8 Ohm                   |
| 20 MHz             | 8.4 dB/100m                          | 55.8 dB           | 55.8 dB             | 47.3 dB          | 47.3 dB            | 41.8 dB                    | 38.8 dB                        | 25.0 dB                       | 100 ± 12 Ohm                            | 100 ± 8 Ohm                   |
| 25 MHz             | 9.5 dB/100m                          | 54.3 dB           | 54.3 dB             | 44.9 dB          | 44.9 dB            | 39.8 dB                    | 36.8 dB                        | 24.3 dB                       | 100 ± 15 Ohm                            | 100 ± 8 Ohm                   |
| 31.25 MHz          | 10.6 dB/100m                         | 52.9 dB           | 52.9 dB             | 42.2 dB          | 42.2 dB            | 37.9 dB                    | 34.9 dB                        | 23.6 dB                       | 100 ± 15 Ohm                            | 100 ± 8 Ohm                   |
| 62.5 MHz           | 15.4 dB/100m                         | 48.4 dB           | 48.4 dB             | 33.0 dB          | 33.0 dB            | 31.8 dB                    | 28.9 dB                        | 21.5 dB                       | 100 ± 15 Ohm                            | 100 ± 8 Ohm                   |

| 100 MHz | 19.8 dB/100m | 45.3 dB | 45.3 dB | 25.5 dB | 25.5 dB | 27.8 dB | 24.8 dB | 21.0 dB | 100 ± 15 Ohm | 100 ± 8 Ohm |
|---------|--------------|---------|---------|---------|---------|---------|---------|---------|--------------|-------------|
| 155 MHz | 25.1 dB/100m | 42.4 dB | 42.4 dB | 17.3 dB | 17.3 dB | 24.0 dB | 21.0 dB | 21.0 dB | 100 ± 15 Ohm | 100 ± 8 Ohm |
| 200 MHz | 29.0 dB/100m | 40.8 dB | 40.8 dB | 11.8 dB | 11.8 dB | 21.7 dB | 18.8 dB | 21.0 dB | 100 ± 15 Ohm | 100 ± 8 Ohm |
| 250 MHz | 32.8 dB/100m | 39.3 dB | 39.3 dB | 6.5 dB  | 6.5 dB  | 19.8 dB | 16.8 dB | 18.0 dB | 100 ± 20 Ohm | 100 ± 8 Ohm |
| 300 MHz | 36.4 dB/100m | 38.1 dB | 38.1 dB | 1.7 dB  | 1.7 dB  | 18.3 dB | 15.3 dB | 18.0 dB | 100 ± 20 Ohm | 100 ± 8 Ohm |
| 310 MHz | 39.8 dB/100m | 37.1 dB | 37.1 dB | -2.6 dB | -2.6 dB | 16.9 dB | 13.9 dB | 17.0 dB | 100 ± 22 Ohm | 100 ± 8 Ohm |
| 350 MHz | 43.0 dB/100m | 36.3 dB | 36.3 dB |         |         | 15.8 dB | 12.8 dB | 14.0 dB | 100 ± 32 Ohm | 100 ± 8 Ohm |
| 400 MHz | 46.0 dB/100m | 35.5 dB | 35.5 dB |         |         | 14.7 dB | 11.7 dB | 14.0 dB | 100 ± 32 Ohm | 100 ± 8 Ohm |
| 500 MHz | 48.9 dB/100m | 34.8 dB | 34.8 dB |         |         | 13.8 dB | 10.8 dB | 14.0 dB | 100 ± 32 Ohm | 100 ± 8 Ohm |
| 550 MHz | 51.8 dB/100m | 34.2 dB | 34.2 dB |         |         | 13.0 dB | 10.0 dB | 14.0 dB | 100 ± 32 Ohm | 100 ± 8 Ohm |

## Voltage

## UL Voltage Rating

300 V (CMR)

## **Mechanical Characteristics**

| Temperature |                |              |                |  |  |  |  |  |  |  |
|-------------|----------------|--------------|----------------|--|--|--|--|--|--|--|
| UL Rating.  | 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 | tion Min.  |
|-------------------|--------------|------------|
| 0.5 in            | 1.75 in      |            |
| Max. Pull Tensior | n: 40        | 40 lbs     |
| Bulk Cable Weigh  | nt: 32       | 32 lbs/100 |

## **Standards and Compliance**

| Environmental Suitability:         | Environmental Suitability: Riser, Indoor   |  |  |  |  |  |  |  |
|------------------------------------|--|--|--|--|--|--|--|--|
| Sustainability:                    | Product Lens™, Environmental Product Declaration (EPD) Available   |  |  |  |  |  |  |  |
| Flammability / Fire<br>Resistance: | UL 1666 Riser, FT4, FT4, IEC 60332-1-2   |  |  |  |  |  |  |  |
| NEC / UL Compliance:               | 800, CMR   |  |  |  |  |  |  |  |
| CEC / C(UL)<br>Compliance:         | CMR  |  |  |  |  |  |  |  |
| ICEA Compliance:                   | S-116-732-2013   |  |  |  |  |  |  |  |
| 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  |  |  |  |  |  |  |  |
| CPR Euroclass:                     | Eca  |  |  |  |  |  |  |  |
| European Directive<br>Compliance:  | EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16 |  |  |  |  |  |  |  |
| APAC Compliance:                   | China RoHS II (GB/T 26572-2011)  |  |  |  |  |  |  |  |

## Part Number

Plenum Number: 1874A

### Variants

| ltem #         | Color  | Putup Type  | Length   | UPC          |
|----------------|--------|-------------|----------|--------------|
| 1872A 0101000  | Black  | Reel        | 1,000 ft | 612825125464 |
| 1872A 0061000  | Blue   | Reel        | 1,000 ft | 612825125419 |
| 1872A 006A1000 | Blue   | Reel-in-Box | 1,000 ft | 612825125402 |
| 1872A X6G1000  | Gold   | Reel        | 1,000 ft | 612825125310 |
| 1872A X6GA1000 | Gold   | Reel-in-Box | 1,000 ft | 612825125303 |
| 1872A F6H1000  | Gray   | Reel        | 1,000 ft | 612825125297 |
| 1872A F6HA1000 | Gray   | Reel-in-Box | 1,000 ft | 612825320647 |
| 1872A 0051000  | Green  | Reel        | 1,000 ft | 612825125396 |
| 1872A 005A1000 | Green  | Reel-in-Box | 1,000 ft | 612825125389 |
| 1872A 0031000  | Orange | Reel        | 1,000 ft | 612825125358 |
| 1872A 003A1000 | Orange | Reel-in-Box | 1,000 ft | 612825125341 |
| 1872A 0071000  | Purple | Reel        | 1,000 ft | 612825125433 |

| 1872A 007A1000 | Purple | Reel-in-Box | 1,000 ft | 612825125426 |
|----------------|--------|-------------|----------|--------------|
| 1872A 0021000  | Red    | Reel        | 1,000 ft | 612825125334 |
| 1872A 002A1000 | Red    | Reel-in-Box | 1,000 ft | 612825125327 |
| 1872A 0091000  | White  | Reel        | 1,000 ft | 612825125457 |
| 1872A 009A1000 | White  | Reel-in-Box | 1,000 ft | 612825125440 |
| 1872A 0041000  | Yellow | Reel        | 1,000 ft | 612825125372 |
| 1872A 004A1000 | Yellow | Reel-in-Box | 1,000 ft | 612825125365 |

#### **Product Notes**

|  | Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 MHz are for Engineering Information Only. Print Includes Descending Footage Markings from Max. Put-Up Length to 0. |
|--|--------|--|
|--|--------|--|

### **History**

Update and Revision: Revision Number: 0.418 Revision Date: 09-30-2020

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