



Product: <u>7997A</u> ☑

Category 5e OSP Cable, 4 Pair, U/UTP, Burial, Gel Filled

Product Description

Category 5e Premise Horizontal Cable (200MHz), OSP Rated, 4 Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Gel-Filled, Polyethylene Jacket

Technical Specifications

Product Overview

| Suitable | OSP-Outdoor, Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, Filternet 100BASE-T, Ethernet 10BASE-T, Ethern | PoE++, PoE+, PoE |
|---------------|--|------------------|
| Applications: | Out Outdoor, From the Fronzental Outside, Euromot 10005/102 17, Euromot 1005/102 17, Euromot | 02.1,102.,102 |

Construction Details

Conductor

| AWG | Stranding | Material | Number of Pairs |
|-----|-----------|------------------|-----------------|
| 24 | Solid | BC - Bare Copper | 4 |

Insulation

| Material | aterial Color Code | |
|-----------------|--|--|
| PO - Polyolefin | White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown | |
| Bonded-Pair: | No | |

Outer Jacket Material

| Material | Nom. Diameter | Ripcord |
|-------------------|---------------|---------|
| PE - Polyethylene | 0.226 in | Yes |

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. DCR Unbalance | Max. Capacitance Unbalance | Nom. Mutual Capacitance |
|--------------------|--------------------|----------------------------|-------------------------|
| 93.8 Ohm/km | 5% | 160 pF/100m | 17 pF/ft |

Delay

| Frequency [MHz] | Max. Delay | Max. Delay Skew | Nom. Velocity of Propagation (VP) [%] |
|-----------------|---------------|-----------------|---------------------------------------|
| 100 MHz | 537.6 ns/100m | 45 ns/100m | 65% |

High Freq

| 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) | Max./Min. Fitted Impedance |
|--------------------|--------------------------------------|-------------------|---------------------|------------------|--------------------|----------------------------|--------------------------------|-------------------------------|---|-------------------------------|
| 1 MHz | 2.0 dB/100m | 65.3 dB | 62.3 dB | 63.3 dB | 60.3 dB | 63.8 dB | 60.8 dB | 20.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 4 MHz | 4.1 dB/100m | 56.3 dB | 53.3 dB | 52.2 dB | 49.2 dB | 51.8 dB | 48.8 dB | 23.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 8 MHz | 5.8 dB/100m | 51.8 dB | 48.8 dB | 46.0 dB | 43.0 dB | 45.7 dB | 42.7 dB | 24.5 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 10 MHz | 6.5 dB/100m | 50.3 dB | 47.3 dB | 43.8 dB | 40.8 dB | 43.8 dB | 40.8 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 16 MHz | 8.2 dB/100m | 47.2 dB | 44.2 dB | 39.0 dB | 36.0 dB | 39.7 dB | 36.7 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 20 MHz | 9.3 dB/100m | 45.8 dB | 42.8 dB | 36.5 dB | 33.5 dB | 37.8 dB | 34.8 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 25 MHz | 10.4 dB/100m | 44.3 dB | 41.3 dB | 33.9 dB | 30.9 dB | 35.8 dB | 32.8 dB | 24.3 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 31.25 MHz | 11.7 dB/100m | 42.9 dB | 39.9 dB | 31.2 dB | 28.2 dB | 33.9 dB | 30.9 dB | 23.6 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 62.5 MHz | 17.0 dB/100m | 38.4 dB | 35.4 dB | 21.4 dB | 18.4 dB | 27.9 dB | 24.9 dB | 21.5 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 100 MHz | 22.0 dB/100m | 35.3 dB | 32.3 dB | 13.3 dB | 10.3 dB | 23.8 dB | 20.8 dB | 20.1 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |

| 155 MHz | 28.1 dB/100m | 32.4 dB | 29.4 dB | 4.4 dB | 1.4 dB | 20.0 dB | 17.0 dB | 18.8 dB | |
|---------|--------------|---------|---------|---------|---------|---------|---------|---------|--|
| 200 MHz | 32.4 dB/100m | 30.8 dB | 27.8 dB | -1.6 dB | -4.6 dB | 17.8 dB | 14.8 dB | 18.0 dB | |

Voltage

Non-UL Voltage Rating 300 V

Mechanical Characteristics

Temperature

| Operating | Installation | Storage |
|----------------|----------------|----------------|
| -40°C To +75°C | -40°C To +60°C | -40°C To +75°C |

Bend Radius

| Stationary Min. | Installation Min. |
|-------------------|-------------------|
| 1.0 in | 2.25 in |
| Max. Pull Tension | n: 25 lbs |
| Bulk Cable Weigh | nt: 23 lbs/1000ft |

Standards and Compliance

| Environmental Suitability: | Outdoor, Outdoor, Sunlight Resistance |
|--------------------------------|--|
| Sustainability: | Product Lens™, Environmental Product Declaration (EPD) Available |
| ICEA Compliance: | S-116-732-2013 |
| ICEA Compliance: | S-56-434 |
| ICEA Compliance: | S-99-689 |
| ICEA Compliance: | S-100-685 |
| IEEE Compliance: | IEEE 802.3bt Type 1, Type 2, Type 3 |
| NEMA Compliance: | NEMA WC-63.1 |
| Data Category: | Category 5e |
| TIA/EIA Compliance: | ANSI/TIA-568.2-D Category 5e |
| CPR Euroclass: | Fca |
| European Directive Compliance: | 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

Variants

| Item # | Color | Putup Type | Length | UPC |
|---------------|-------|------------|----------|--------------|
| 7997A 0101000 | Black | Reel | 1,000 ft | 612825192596 |
| 7997A 0101000 | Black | Reel | 1,000 ft | 612825192596 |

Product Notes

| Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 100 MHz are for Engineering Information Only. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0. Not Suitable for Direct Burial. Belden recommends using an entrance demarcation point when transitioning inside buildings with gel-filled OSP cables due to the cable design containing gel specific for wet outdoor environments. The suggested transition point is the REVConnect core coupler, part number RVACPKUBK-S1. |
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History

| Update and Revision: | Revision Number: 0.391 Revision Date: 09-30-2020 |
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