

1213 Multi-Conductor - Enhanced Category 5E Nonbonded-Pair Cable



For more Information
please call

1-800-Belden1



General Description:

CAT5e+ (350MHz), 4-Pair, U/UTP-Unshielded, Plenum-CMP, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Dual FRPO/FEP Insulation, Ripcord, Flamarrest® Jacket

Usage (Overall)

Suitable Applications: Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422

Physical Characteristics (Overall)

Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 4 | 24 | Solid | BC - Bare Copper |

Total Number of Conductors: 8

Insulation

Insulation Material:

| Insulation Material |
|--|
| FRPO/FEP - Flame Retardant Polyolefin/Fluorinated Ethylene Propylene |

Outer Shield

Outer Shield Material:

| Outer Shield Material |
|-----------------------|
| Unshielded |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Trade Name | Outer Jacket Material |
|-------------------------|---------------------------------------|
| Flamarrest® | LS PVC - Low Smoke Polyvinyl Chloride |

Outer Jacket Diameter:

| Nom. Dia. (in.) |
|-----------------|
| 0.205 |

Outer Jacket Ripcord: Yes

Overall Cable

Overall Nominal Diameter: 0.205 in.

Pair

Pair Color Code Chart:

| Number | Color |
|--------|------------------------------|
| 1 | White/Blue Stripe & Blue |
| 2 | White/Orange Stripe & Orange |
| 3 | White/Green Stripe & Green |
| 4 | White/Brown Stripe & Brown |

Mechanical Characteristics (Overall)

Installation Temperature Range: +5°C To +50°C

Operating Temperature Range: -20°C To +75°C

Bulk Cable Weight: 24 lbs/1000 ft.

Max. Recommended Pulling Tension: 35 lbs.

Min. Bend Radius/Minor Axis: 0.750 in.

Min. Bend/Installation: 2 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC(UL) Specification: CMP

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| | |
|---------------------------------------|---------------------------|
| NEC Articles: | 800 |
| CEC/C(UL) Specification: | CMP |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU CE Mark: | Yes |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2005 |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |
| Telecommunications Standards: | Category 5e - TIA 568.C.2 |
| Other Specification: | NEMA WC-63.1 Category 5e |

Applicable Patents:

Country

www.belden.com/p

Flame Test

| | |
|-------------------|---|
| UL Flame Test: | NFPA 262 Plenum Flame Test (UL910)(FT6) |
| C(UL) Flame Test: | FT6 |
| CSA Flame Test: | FT6 |

Suitability

| | |
|------------------------|-----|
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | No |
| Suitability - Aerial: | No |
| Suitability - Burial: | No |
| Sunlight Resistance: | No |
| Oil Resistance: | No |
| Non-halogenated: | No |

Plenum/Non-Plenum

| | |
|--------------------|------|
| Plenum (Y/N): | Yes |
| Non-Plenum Number: | 1212 |

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)

15

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

VP (%)

72.000

Maximum Delay:

Delay (ns/100 m)

510

Max. Delay Skew:

Delay Skew (ns/100 m)

25

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

8.900

Max. Operating Voltage - UL:

Voltage

300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

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Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

| Freq. (MHz) | Max. Attenuation (dB/100 m) | Min. NEXT (dB) | Min. PSNEXT (dB) | Min. ACR (dB) | Min. PSACR (dB) | Min RL (dB) |
|-------------|-----------------------------|----------------|------------------|---------------|-----------------|-------------|
| 1 | 2.000 | 70.3 | 69.3 | 68.3 | 67.3 | 20.000 |
| 4 | 4.000 | 61.3 | 60.3 | 57.3 | 56.3 | 23.000 |
| 8 | 5.700 | 56.8 | 55.8 | 51.1 | 50.1 | 24.500 |
| 10 | 6.400 | 55.3 | 54.3 | 48.9 | 47.9 | 25.000 |
| 16 | 8.100 | 52.2 | 51.2 | 44.1 | 43.1 | 25.000 |
| 20 | 9.100 | 50.8 | 49.8 | 41.7 | 40.7 | 25.000 |
| 25 | 10.200 | 49.3 | 48.3 | 39.1 | 38.1 | 24.300 |
| 31.25 | 11.400 | 47.9 | 46.9 | 36.4 | 35.4 | 23.600 |
| 62.5 | 16.700 | 43.4 | 42.4 | 27.0 | 26.0 | 21.500 |
| 100 | 21.000 | 40.3 | 39.3 | 19.3 | 18.3 | 20.100 |
| 155 | 26.600 | 37.4 | 36.4 | 10.9 | 9.9 | 18.800 |
| 200 | 30.500 | 35.8 | 34.8 | 5.3 | 4.3 | 18.000 |
| 250 | 34.400 | 34.3 | 33.3 | -0.1 | -1.1 | 17.300 |
| 300 | 38.000 | 33.1 | 32.1 | | | 14.400 |
| 350 | 41.400 | 32.1 | 31.1 | | | 13.800 |
| 400 | 44.600 | 31.3 | 30.3 | | | 13.300 |
| 450 | 47.700 | 30.5 | 29.5 | | | 12.800 |

Premise Cable Electrical Table 2:

| Freq. (MHz) | Input (Unfitted) Imp. (Ohms) | Fitted Impedance | Min. ACRF (dB) | Min. PSACRF (dB) |
|-------------|------------------------------|------------------|----------------|------------------|
| 1 | 100 ± 15 | 100 ± 15 | 67.8 | 65.8 |
| 4 | 100 ± 15 | 100 ± 15 | 55.8 | 53.8 |
| 8 | 100 ± 15 | 100 ± 15 | 49.7 | 47.7 |
| 10 | 100 ± 15 | 100 ± 15 | 47.8 | 45.8 |
| 16 | 100 ± 15 | 100 ± 15 | 43.7 | 41.7 |
| 20 | 100 ± 15 | 100 ± 15 | 41.8 | 39.8 |
| 25 | 100 ± 15 | 100 ± 15 | 39.8 | 37.8 |
| 31.25 | 100 ± 15 | 100 ± 15 | 37.9 | 35.9 |
| 62.5 | 100 ± 15 | 100 ± 15 | 31.9 | 29.9 |
| 100 | 100 ± 15 | 100 ± 15 | 27.8 | 25.8 |
| 155 | 100 ± 22 | 100 ± 15 | 24.0 | 22.0 |
| 200 | 100 ± 22 | 100 ± 15 | 21.8 | 19.8 |
| 250 | 100 ± 22 | 100 ± 15 | 19.8 | 17.8 |
| 300 | 100 ± 32 | 100 ± 15 | 18.3 | 16.3 |
| 350 | 100 ± 32 | 100 ± 15 | 16.9 | 14.9 |
| 400 | 100 ± 32 | 100 ± 15 | 15.8 | 13.8 |
| 450 | 100 ± 32 | 100 ± 15 | 14.7 | 12.7 |

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft./1m intervals. Third party verified to ANSI/TIA-568-C.2, Category 5e. Values above 350 MHz are for Engineering Information Only.

Reference (Overall)

Previous Part Number:

24570808, 24597505, 24570835, 24597805, 24577005, 24570845, 24570942, 24570810, 24570840, 24570830, 24570812, 24570944, 24570800

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|-------------|-------|---------------------------|
| 1213 D15A1000 | 1,000 FT | 25.000 LB | BLUE | C | CAT5E+ 4PR U/UTP CMP RIB |
| 1213 D15U1000 | 1,000 FT | 23.000 LB | BLUE | | CAT5E+ 4PR U/UTP CMP BOX |
| 1213 D151000 | 1,000 FT | 24.000 LB | BLUE | | CAT5E+ 4PR U/UTP CMP REEL |
| 1213 D152500 | 2,500 FT | 57.500 LB | BLUE | | CAT5E+ 4PR U/UTP CMP REEL |
| 1213 003U1000 | 1,000 FT | 23.000 LB | ORANGE | | CAT5E+ 4PR U/UTP CMP BOX |
| 1213 004U1000 | 1,000 FT | 23.000 LB | YELLOW | | CAT5E+ 4PR U/UTP CMP BOX |
| 1213 005U1000 | 1,000 FT | 23.000 LB | GREEN, DARK | | CAT5E+ 4PR U/UTP CMP BOX |
| 1213 007U1000 | 1,000 FT | 23.000 LB | VIOLET | | CAT5E+ 4PR U/UTP CMP BOX |
| 1213 008U1000 | 1,000 FT | 23.000 LB | GRAY | | CAT5E+ 4PR U/UTP CMP BOX |
| 1213 009A1000 | 1,000 FT | 26.000 LB | WHITE | C | CAT5E+ 4PR U/UTP CMP RIB |
| 1213 009U1000 | 1,000 FT | 23.000 LB | WHITE | | CAT5E+ 4PR U/UTP CMP BOX |
| 1213 0091000 | 1,000 FT | 24.000 LB | WHITE | C | CAT5E+ 4PR U/UTP CMP REEL |
| 1213 010U1000 | 1,000 FT | 23.000 LB | BLACK | | CAT5E+ 4PR U/UTP CMP BOX |
| 1213 012U1000 | 1,000 FT | 23.000 LB | PINK | | CAT5E+ 4PR U/UTP CMP BOX |

Notes:

C = CRATE REEL PUT-UP.

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