Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

1588A Multi-Conductor - Category 5e Nonbonded-Pair Cable



For more Information please call

1-800-Belden1



General Description:

CAT5e (200MHz), 2-Pair, U/UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Ripcord, PVC Jacket

Usage (Overall)

| 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 | |
| 2 24 Solid BC - Bare Copper | |
| Total Number of Conductors: | 4 |
| Insulation | |
| Insulation Material: | |
| Insulation Material PO - Polyolefin | |
| Outer Shield | |
| Outer Shield Material: | |
| Outer Shield Material | |
| Unshielded | |
| Outer Jacket | |
| Outer Jacket Material: | |
| Outer Jacket Material PVC - Polyvinyl Chloride | |
| Outer Jacket Diameter: | |
| Nom. Dia. (in.) | |
| 0.183 | |
| Outer Jacket Ripcord: | Yes |
| Pair | |
| Pair Color Code Chart: | |
| Number Color 1 White/Blue Stripe & Blue | |
| 2 White/Orange Stripe & Orange | |
| | |
| Mechanical Characteristics (Overall) | |
| Storage Temperature Range: | -20°C To +75°C |
| Installation Temperature Range: | 0°C To +60°C |
| Operating Temperature Range: | -20°C To +75°C |
| Bulk Cable Weight: | 15 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 13 lbs. |
| Min. Bend Radius/Minor Axis: | 1 in. |
| Min. Bend/Installation: | 1.800 in. |
| Applicable Specifications and Agency Complia | ance (Overall) |
| Applicable Standards & Environmental Programs | |
| NEC/(UL) Specification: | CMR |
| CEC/C(UL) Specification: | CMR |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| | |

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| 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): | 01/01/2004 |
| 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, UL verified to Category 5e |
| Flame Test | |
| UL Flame Test: | UL1666 Vertical Riser |
| C(UL) Flame Test: | FT4 |
| IEEE Flame Test: | 1202 |
| Suitability | |
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | No |
| Suitability - Aerial: | No |
| Suitability - Burial: | No |
| Sunlight Resistance: | No |
| Plenum/Non-Plenum | |
| Plenum (Y/N): | No |
| Plenum Number: | 1590A |
| Electrical Characteristics (Overall) Nom. Mutual Capacitance: Capacitance (pF/ft) 15 Maximum Capacitance Unbalance (pF/100 m): Nominal Velocity of Propagation: | 330 |
| VP (%) 70 Maximum Delay: Delay (ns/100 m) 538 @ 100MHz | |
| Max. Delay Skew: Delay Skew (ns/100 m) 45 Maximum Conductor DC Resistance: | |
| DCR @ 20°C (Ohm/100 m) 9.38 Max. Operating Voltage - UL: Voltage 300 V RMS | |
| Maximum DCR Unbalanced: DCR Unbalance @ 20°C (%) 5 | |

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) | Min. SRL (dB) |
|-------------|-----------------------------|----------------|------------------|---------------|-----------------|-------------|---------------|
| 1 | 2.0 | 65.3 | 62.3 | 63.0 | 60.3 | 20.0 | 23.0 |
| 4 | 4.1 | 56.3 | 53.3 | 51.0 | 49.2 | 23.0 | 23.0 |
| 8 | 5.8 | 51.8 | 48.8 | 46.0 | 43.0 | 24.5 | 24.5 |
| 10 | 6.5 | 50.3 | 47.3 | 43.0 | 40.8 | 25.0 | 25.0 |
| 16 | 8.2 | 47.3 | 44.3 | 39.0 | 36.0 | 25.0 | 25.0 |
| 20 | 9.3 | 45.8 | 42.8 | 36.5 | 33.5 | 25.0 | 25.0 |

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| 25 | 10.4 | 44.3 | 41.3 | 33.9 | 30.9 | 24.3 | 24.3 |
|-------|------|------|------|------|------|------|------|
| 31.25 | 11.7 | 42.9 | 39.9 | 31.0 | 28.2 | 23.6 | 23.6 |
| 62.5 | 17.0 | 38.4 | 35.4 | 22.0 | 19.0 | 21.5 | 21.5 |
| 100 | 22.0 | 35.3 | 32.3 | 14.0 | 10.3 | 20.1 | 20.1 |
| 155 | 28.1 | 32.5 | 29.5 | 4.4 | 1.4 | 15.8 | |
| 200 | 32.0 | 30.8 | 27.8 | 4.0 | 1.0 | 15.0 | |

Premise Cable Electrical Table 2:

| Freq. (MHz) | Input (Unfitted) Imp. (Ohms) | Fitted Impedance | Min. ELFEXT (dB) | Min. PSELFEXT (dB) |
|-------------|------------------------------|------------------|------------------|--------------------|
| 1 | 100 ± 15 | 100 ± 15 | 63.8 | 60.8 |
| 4 | 100 ± 15 | 100 ± 15 | 51.7 | 48.7 |
| 8 | 100 ± 15 | 100 ± 15 | 45.7 | 42.7 |
| 10 | 100 ± 15 | 100 ± 15 | 43.8 | 40.8 |
| 16 | 100 ± 15 | 100 ± 15 | 39.7 | 36.7 |
| 20 | 100 ± 15 | 100 ± 15 | 37.7 | 34.7 |
| 25 | 100 ± 15 | 100 ± 15 | 35.8 | 32.8 |
| 31.25 | 100 ± 15 | 100 ± 15 | 33.9 | 30.9 |
| 62.5 | 100 ± 15 | 100 ± 15 | 27.8 | 24.9 |
| 100 | 100 ± 15 | 100 ± 15 | 23.8 | 20.8 |
| 155 | 100 ± 25 | 100 ± 15 | 19.9 | 16.9 |
| 200 | 100 ± 25 | 100 ± 15 | 17.7 | 14.7 |

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to ANSI/TIA-568-C.2, Category 5e.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|----------------|----------|-------------|------------------|-------|--------------------------|
| 1588A F6HU1000 | 1,000 FT | 15.000 LB | GRAY, DARK PEARL | | CAT5E 2PR U/UTP CMR BOX |
| 1588A F6H1000 | 1,000 FT | 15.000 LB | GRAY, DARK PEARL | С | CAT5E 2PR U/UTP CMR REEL |
| 1588A F6H1640 | 1,640 FT | 24.600 LB | GRAY, DARK PEARL | | CAT5E 2PR U/UTP CMR REEL |
| 1588A 006U1000 | 1,000 FT | 15.000 LB | BLUE, LIGHT | | CAT5E 2PR U/UTP CMR BOX |
| 1588A 0061000 | 1,000 FT | 15.000 LB | BLUE, LIGHT | С | CAT5E 2PR U/UTP CMR REEL |

Notes:

C = CRATE REEL PUT-UP.

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