

1533P Multi-Conductor - Category 5e Nonbonded-Pair Cable



For more Information
please call

1-800-Belden1



General Description:

CAT5e (100MHz), 4-Pair, F/UTP-Foil shielded, Plenum-CMP, Premise Horizontal Cable, 24 AWG solid bare copper conductors, FEP insulation, overall Beldfoil® shield, Flamarrest® jacket, RJ-45 compatible

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, Noisy Environments, 100MHz Category 5e

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 |
|--------------------------------------|
| FEP - Fluorinated Ethylene Propylene |

Outer Shield

Outer Shield Material:

| Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|-------------------------|------|------------------------------|--------------|
| Beldfoil® | Tape | Aluminum Foil-Polyester Tape | 100 |

Outer Shield Drain Wire AWG:

| AWG | Stranding | Drain Wire | Conductor Material |
|-----|-----------|--------------------|--------------------|
| 24 | 7x32 | TC - Tinned Copper | |

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.) |
|-----------------|
| 0.235 |

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)

| | |
|--|-----------------|
| Operating Temperature Range: | 0°C To +75°C |
| Bulk Cable Weight: | 34 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 25 lbs. |
| Min. Bend Radius/Minor Axis: | 1 in. |
| Min. Bend/Installation: | 2.350 in. |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| | |
|--------------------------------|------------|
| NEC/(UL) Specification: | CMP, UL444 |
| CEC/(UL) Specification: | CMP |

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| | |
|---------------------------------------|---------------------------|
| 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 |

Flame Test

| | |
|-----------------|----------|
| UL Flame Test: | NFPA 262 |
| CSA Flame Test: | FT6 |

Plenum/Non-Plenum

| | |
|--------------------|-------|
| Plenum (Y/N): | Yes |
| Non-Plenum Number: | 1533R |

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

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 (%)
3

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 | 60.3 | 60.3 | 20.0 | 23.0 |
| 4 | 4.1 | 56.3 | 53.3 | 49.2 | 49.2 | 23.0 | 23.0 |
| 8 | 5.8 | 51.8 | 48.8 | 43.0 | 43.0 | 24.5 | 24.5 |
| 10 | 6.5 | 50.3 | 47.3 | 40.8 | 40.8 | 25.0 | 25.0 |
| 16 | 8.2 | 47.3 | 44.3 | 36.0 | 36.0 | 25.0 | 25.0 |
| 20 | 9.3 | 45.8 | 42.8 | 33.5 | 33.5 | 25.0 | 25.0 |
| 25 | 10.4 | 44.3 | 41.3 | 30.9 | 30.9 | 24.3 | 24.3 |
| 31.25 | 11.7 | 42.9 | 39.9 | 28.2 | 28.2 | 23.6 | 23.6 |
| 62.5 | 17.0 | 38.4 | 35.4 | 18.4 | 18.4 | 21.5 | 21.5 |
| 100 | 22.0 | 35.3 | 32.3 | 10.3 | 10.3 | 20.1 | 20.1 |

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 |

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| | | | | |
|-------|----------|----------|------|------|
| 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 | 24.8 |
| 100 | 100 ± 15 | 100 ± 15 | 23.8 | 20.8 |

Notes (Overall)

Notes: Shield is bonded to jacket inner wall for electrical stability. RJ-45 Compatible. Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-C.2, Category 5e.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|----------------|----------|-------------|-------------|-------|--------------------------|
| 1533P D15A1000 | 1,000 FT | 37.000 LB | BLUE | | CAT5E 4PR F/UTP CMP RIB |
| 1533P D15I1000 | 1,000 FT | 35.000 LB | BLUE | C | CAT5E 4PR F/UTP CMP REEL |
| 1533P 002A1000 | 1,000 FT | 37.000 LB | RED | | CAT5E 4PR F/UTP CMP RIB |
| 1533P 002I1000 | 1,000 FT | 35.000 LB | RED | C | CAT5E 4PR F/UTP CMP REEL |
| 1533P 003A1000 | 1,000 FT | 37.000 LB | ORANGE | | CAT5E 4PR F/UTP CMP RIB |
| 1533P 003I1000 | 1,000 FT | 35.000 LB | ORANGE | C | CAT5E 4PR F/UTP CMP REEL |
| 1533P 004A1000 | 1,000 FT | 37.000 LB | YELLOW | | CAT5E 4PR F/UTP CMP RIB |
| 1533P 004I1000 | 1,000 FT | 35.000 LB | YELLOW | C | CAT5E 4PR F/UTP CMP REEL |
| 1533P 005A1000 | 1,000 FT | 37.000 LB | GREEN, DARK | | CAT5E 4PR F/UTP CMP RIB |
| 1533P 005I1000 | 1,000 FT | 35.000 LB | GREEN, DARK | C | CAT5E 4PR F/UTP CMP REEL |
| 1533P 008A1000 | 1,000 FT | 37.000 LB | GRAY | | CAT5E 4PR F/UTP CMP RIB |
| 1533P 008I1000 | 1,000 FT | 35.000 LB | GRAY | C | CAT5E 4PR F/UTP CMP REEL |
| 1533P 010A1000 | 1,000 FT | 37.000 LB | BLACK | | CAT5E 4PR F/UTP CMP RIB |
| 1533P 010I1000 | 1,000 FT | 35.000 LB | BLACK | C | CAT5E 4PR F/UTP CMP REEL |
| 1533P 877A1000 | 1,000 FT | 37.000 LB | NATURAL | | CAT5E 4PR F/UTP CMP RIB |
| 1533P 877I1000 | 1,000 FT | 35.000 LB | NATURAL | C | CAT5E 4PR F/UTP CMP REEL |

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 08-14-2013

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