

1588A Paired - Category 5e Unbonded-Pair Cable

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|   | <p>For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p> <p>Related Documents : No. 8 for DataTwist Cables (Modified Western Electric).pdf</p> |
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Description:

24 AWG solid bare copper conductors, non-plenum Polyolefin insulation, twisted pairs, rip cord, see color code chart (below), PVC jacket (dark gray or blue).

SUITABLE APPLICATIONS:

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|-----------------------|--|
| 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:

CONDUCTOR:

| | |
|----------------------------|------------------|
| Number of Pairs | 2 |
| Total Number of Conductors | 4 |
| AWG | 24 |
| Stranding | Solid |
| Conductor Material | BC - Bare Copper |

INSULATION:

| | |
|---------------------|-----------------|
| Insulation Material | PO - Polyolefin |
|---------------------|-----------------|

Pair Color Code Chart :

| Number | Color | Number | Color |
|--------|--------------------------|--------|------------------------------|
| 1 | White/Blue Stripe & Blue | 2 | White/Orange Stripe & Orange |

OUTER SHIELD:

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

OUTER JACKET:

| | |
|-----------------------|--------------------------|
| Outer Jacket Material | PVC - Polyvinyl Chloride |
| Outer Jacket Ripcord | Yes |

OVERALL NOMINAL DIAMETER:

| | |
|--------------------------|----------|
| Overall Nominal Diameter | .183 in. |
|--------------------------|----------|

MECHANICAL CHARACTERISTICS:

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|----------------------------------|-----------------|
| Operating Temperature Range | -20°C To +75°C |
| Bulk Cable Weight | 15 lbs/1000 ft. |
| Max. Recommended Pulling Tension | 13 lbs. |
| Min. Bend Radius (Install) | 0.8 in. |

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

| | |
|---------------------------------------|--|
| NEC/(UL) Specification | CM, UL444 |
| CEC/C(UL) Specification | CM |
| EU CE Mark (Y/N) | Yes |
| EU RoHS Compliant (Y/N) | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004 |
| TIA/EIA Specification | 568-B.2 Category 5e |
| Other Specification | NEMA WC-63.1 Category 5e, UL verified to Category 5e |

FLAME TEST:

| | |
|----------------|-------------------|
| UL Flame Test | UL1685 UL Loading |
| CSA Flame Test | FT1 |

PLENUM/NON-PLENUM:

| | |
|---------------|-------|
| Plenum (Y/N) | N |
| Plenum Number | 1590A |

ELECTRICAL CHARACTERISTICS:

| | |
|---|-----------------------|
| Nom. Mutual Capacitance @ 1 KHz | 15 pF/ft |
| Maximum Capacitance Unbalance (pF/100 m) | 330 pF/100 m |
| Nominal Velocity of Propagation | 70 % |
| Maximum Delay (ns/100 m) | 538 @ 100MHz ns/100 m |
| Maximum Delay Skew (ns/100m) | 45 ns/100 m |
| Maximum Conductor DC Resistance @ 20 Deg. C | 9.38 Ohms/100 m |
| Maximum DCR Unbalance @ 20 Deg. C | 5 % |
| Max. Operating Voltage - UL | 300 V RMS |

ELECTRICAL CHARACTERISTICS - PREMISE:

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|-------------------------------------|
| Premise Cable Electricals Table 1 : |
|-------------------------------------|

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| Frequency (MHz) | Max. Attenuation (dB/100 m) | Min. NEXT (dB) | Min. PSNEXT (dB) | Min. ACR (dB) | Min. PSACR (dB) | Min. Return Loss (dB) | Min. Structural Return Loss (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 |
| 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 Electricals Table 2 :

| Frequency (MHz) | Input (Unfitted) Impedance (Ohms) | Fitted Impedance (Ohms) | 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:

Notes

Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e.

PUT-UPS AND COLORS:

| Item | Description | Put-Up (ft.) | Ship Weight (lbs.) | Jacket Color | Notes |
|----------------|--------------------|--------------|--------------------|------------------|-------|
| 1588A 0061000 | 2 PR #24 PP FR PVC | 1000 | 15 | BLUE, LIGHT | C |
| 1588A 006U1000 | 2 PR #24 PP FR PVC | U1000 | 14 | BLUE, LIGHT | |
| 1588A F6H1000 | 2 PR #24 PP FR PVC | 1000 | 15 | GRAY, DARK PEARL | C |
| 1588A F6H1640 | 2 PR #24 PP FR PVC | 1640 | 24.6 | GRAY, DARK PEARL | |

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|----------------|--------------------|-------|----|------------------|---|
| 1588A F6HU1000 | 2 PR #24 PP FR PVC | U1000 | 14 | GRAY, DARK PEARL | Z |
|----------------|--------------------|-------|----|------------------|---|

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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