

1583ANH Multi-Conductor - Category 5e Nonbonded-Pair Cable



For more Information
please call

1-800-Belden1

General Description:

CAT5e (100MHz), 4-Pair, U/UTP-Unshielded, Zero Halogen, Premise Horizontal Cable, 4 Pair UTP, 24 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Ripcord, LSZH 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, 200MHz Category 5e, Vertical Tray Rated

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 |
|---------------------|
| PO - Polyolefin |

Outer Shield**Outer Shield Material:**

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

Outer Jacket**Outer Jacket Material:**

| Outer Jacket Trade Name | Outer Jacket Material |
|-------------------------|------------------------------|
| Haloarrest® | LSNH - Low Smoke Non-Halogen |

Outer Jacket Diameter:

| Nom. Dia. (mm) |
|----------------|
| 4.953 |

Outer Jacket Ripcord:

Yes

Pair**Pair Color Code Chart:**

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

Mechanical Characteristics (Overall)

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

Operating Temperature Range: -20°C To +80°C

Bulk Cable Weight: 35.717 Kg/Km

Max. Recommended Pulling Tension: 177.928 N

Min. Bend Radius/Minor Axis: 20.320 mm

Min. Bend/Installation: 49.530 mm

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Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

EU Directive 2011/65/EU (ROHS II): Yes

Other Standards: ISO/IEC 11801 ed 2.1 (2008) Class D

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

IEC Flame Test: 60332-1

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/m)

49.215

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

VP (%)

70

Maximum Delay:

Delay (ns/100 m)

510 @ 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 | 63.0 | 60.0 | 20.0 | 23.0 |
| 4 | 4.1 | 56.3 | 53.3 | 51.0 | 49.0 | 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 | 41.0 | 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 | 28.0 | 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 | 11.0 | 20.1 | 20.1 |
| 155 | 28.1 | 32.5 | 29.5 | 4.4 | 1.4 | 15.8 | |

METRIC MEASUREMENT VERSION

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| | | | | | | | |
|-----|------|------|------|-----|-----|------|--|
| 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 | 24.8 |
| 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: Values above 100 MHz are for engineering purposes only.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|-----------------|----------|-------------|------------------|-------|---------------------------|
| 1583ANH F6H1000 | 1,000 FT | 21.000 LB | GRAY, DARK PEARL | C | CAT5E 4PR U/UTP LSZH REEL |

Notes:

C = CRATE REEL PUT-UP.

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