#### **ENGLISH MEASUREMENT VERSION**



## 1585LC Multi-Conductor - Category 5e Nonbonded-Pair Cable

For more Information please call

1-800-Belden1



## **Description:**

24 AWG Solid Bare Copper Conductors, Plenum, FEP Teflon® Insulation, Twisted Pairs, FEP 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 AW0 |    | Stranding | Conductor Material |  |  |  |
|-------------|----|-----------|--------------------|--|--|--|
| 4           | 24 | Solid     | BC - Bare Copper   |  |  |  |

#### Insulation

**Insulation Material:** 

| Insulation Trade Name | Insulation Material                  |  |  |  |
|-----------------------|--------------------------------------|--|--|--|
| Teflon®               | FEP - Fluorinated Ethylene Propylene |  |  |  |

#### **Outer Shield**

**Outer Shield Material:** 

Outer Shield Material
Unshielded

#### **Outer Jacket**

Outer Jacket Material:

Outer Jacket Material
FEP - Fluorinated Ethylene Propylene

#### **Outer Jacket Diameter:**

**Nom. Dia. (in.)** 0.184

Outer Jacket Ripcord: No

## **Overall Cable**

Overall Nominal Diameter: 0.184 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)**

| Operating Temperature Range:      | -40°C To +150°C |
|-----------------------------------|-----------------|
| Bulk Cable Weight:                | 25 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 35 lbs.         |

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| Min. Bend Radius (Install)/Minor Axis:    | 0.500 in.   |  |  |  |  |
|---|---|--|--|--|--|
| Applicable Specifications and Agency C    | ompliance (Overall)                                       |  |  |  |  |
| Applicable Standards & Environmental Prog | able Standards & Environmental Programs                   |  |  |  |  |
| NEC/(UL) Specification:                   | CMP, FHC 25/50  |  |  |  |  |
| NEC Articles:                             | NFPA 259, NFPA 255  |  |  |  |  |
| CEC/C(UL) Specification:                  | CMP, FHC 25/50  |  |  |  |  |
| Other Standards:                          | ISO/IEC 11801 ed 2.1 (2008) Class D                       |  |  |  |  |
| 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:                            | NFPA 262 Plenum Flame Test (UL910)(FT6), UL723 (NFPA 255) |  |  |  |  |
| C(UL) Flame Test:                         | Limited Smoke   |  |  |  |  |
| CSA Flame Test:                           | FT6, Limited Smoke  |  |  |  |  |
| Suitability                               |   |  |  |  |  |
| Suitability - Indoor:                     | Yes   |  |  |  |  |
| Suitability - Outdoor:                    | Yes   |  |  |  |  |
| Suitability - Aerial:                     | Yes - UL  |  |  |  |  |
| Suitability - Burial:                     | No  |  |  |  |  |
| Planum/Non-Planum                         |   |  |  |  |  |

## Plenum/Non-Plenum

Plenum (Y/N): Yes Plenum Number: 1585A Non-Plenum Number: 1583A

## **Electrical Characteristics (Overall)**

Nom. Mutual Capacitance:

Capacitance (pF/ft) 15

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

VP (%) 72

Maximum Delay:

Delay (ns/100 m) 510 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)

**Maximum Conductor DC Resistance:** 

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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          | 60.3            | 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 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. Thrid party verified to ANSI/TIA-568-C.2, Category 5e.

#### **Related Documents:**

No related documents are available for this product

## **Put Ups and Colors:**

| Item #          | Putup    | Ship Weight | Color       | Notes | Item Desc               |
|-----------------|----------|-------------|-------------|-------|-------------------------|
| 1585LC 006U1000 | 1,000 FT | 23.000 LB   | BLUE, LIGHT |       | CAT5E 4PR U/UTP LC BOX  |
| 1585LC 0061000  | 1,000 FT | 24.000 LB   | BLUE, LIGHT | С     | CAT5E 4PR U/UTP LC REEL |
| 1585LC 009U1000 | 1,000 FT | 23.000 LB   | WHITE       |       | CAT5E 4PR U/UTP LC BOX  |
| 1585LC 0091000  | 1,000 FT | 24.000 LB   | WHITE       | С     | CAT5E 4PR U/UTP LC REEL |

Notes:

C = CRATE REEL PUT-UP.

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