

## 1583B Multi-Conductor - Category 5e Nonbonded-Pair Cable

For more Information  
please call

1-800-Belden1



### General Description:

CAT5e (200MHz), 4-Pair, U/UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Ripcord, Fluorescent Pink PVC 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	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
DataBrite®	PVC - Polyvinyl Chloride

**Outer Jacket Diameter:**

Nom. Dia. (mm)
4.826

**Outer Jacket Ripcord:** Yes

#### 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:** -20°C To +80°C

**Bulk Cable Weight:** 28.276 Kg/Km

**Max. Recommended Pulling Tension:** 155.687 N

## 1583B Multi-Conductor - Category 5e Nonbonded-Pair Cable

Min. Bend Radius/Minor Axis: 25.400 mm

Min. Bend/Installation: 48.260 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMR

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

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: UL1666 Vertical Riser

C(UL) Flame Test: FT4

CSA Flame Test: FT4

#### Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: No

Suitability - Aerial: No

Suitability - Burial: No

Sunlight Resistance: No

#### Plenum/Non-Plenum

Plenum (Y/N): No

Non-Plenum Number: 1583A

### 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)

538 @ 100MHz

#### Max. Delay Skew:

Delay Skew (ns/100 m)

45

METRIC MEASUREMENT VERSION

## 1583B Multi-Conductor - Category 5e Nonbonded-Pair Cable

### 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	60.3	20.0	23
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. Third party verified to ANSI/TIA-568-C.2, Category 5e.

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1583B T30U1000	305 MT	9.525 KG	MAGENTA, CORONA		CAT5E 4PR U/UTP CMR BOX
1583B T301000	305 MT	9.525 KG	MAGENTA, CORONA	C	CAT5E 4PR U/UTP CMR REEL

**Notes:**

C = CRATE REEL PUT-UP.

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## METRIC MEASUREMENT VERSION

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