## **Detailed Specifications & Technical Data**

**Applicable Specifications and Agency Compliance (Overall)** 

Applicable Standards & Environmental Programs

NEC/(UL) Specification:

CEC/C(UL) Specification:

Other Standards:

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

#### **ENGLISH MEASUREMENT VERSION**



## 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. (in.) 0.190	
Outer Jacket Ripcord:	Yes
Pair Pair Color Code Chart:  Number Color  White/Blue Stripe & Blue White/Orange Stripe & Orange White/Green Stripe & Green White/Brown Stripe & Brown	
Mechanical Characteristics (Overall)	
Operating Temperature Range:	-20°C To +80°C
Bulk Cable Weight:	19 lbs/1000 ft.
Max. Recommended Pulling Tension:	35 lbs.
Min. Bend Radius/Minor Axis:	1 in.
Min. Bend/Installation:	1.900 in.

CMR

CMR

ISO/IEC 11801 ed 2.1 (2008) Class D

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	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			
Fla	me Test				
	UL Flame Test:	UL1666 Vertical Riser			
	C(UL) Flame Test:	FT4			
	CSA Flame Test:	FT4			
Su	itability				
	Suitability - Indoor:	Yes			
	Suitability - Outdoor:	No			
	Suitability - Aerial:	No			
	Suitability - Burial:	No			
	Sunlight Resistance:	No			
Ple	num/Non-Plenum				
	Plenum (Y/N):	No			
	Non-Plenum Number:	1583A			

### **Electrical Characteristics (Overall)**

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m):

Nominal Velocity of Propagation:

**VP (%)** 

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 (%)

### **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

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## **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



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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	1,000 FT	21.000 LB	MAGENTA, CORONA		CAT5E 4PR U/UTP CMR BOX
1583B T301000	1,000 FT	21.000 LB	MAGENTA, CORONA	С	CAT5E 4PR U/UTP CMR REEL

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 08-06-2013

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