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

Page 1 of 3 09-11-2017

Detailed Specifications & Technical Data





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

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
lame Test	
UL Flame Test:	UL1666 Vertical Riser
C(UL) Flame Test:	FT4
CSA Flame Test:	FT4
uitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Suitability - Burial:	No
Sunlight Resistance:	No
lenum/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:

7							
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

330

Page 2 of 3 09-11-2017

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



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

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:

li	tem #	Putup	Ship Weight	Color	Notes	Item Desc
1	583B T30U1000	1,000 FT	21.000 LB	MAGENTA, CORONA		CAT5E 4PR U/UTP CMR BOX
1	583B 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

© 2017 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its bublication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).

Page 3 of 3

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Belden Wire & Cable: 1583B T301000