

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



For more Information  
please call

1-800-Belden1

**Description:**

24 AWG solid bare copper conductors, polyolefin insulation, twisted pairs, rip cord, PVC jacket.

**Usage (Overall)****Suitable Applications:**

Horizontal 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

**Insulation****Insulation Material:**

Insulation Material
PO - Polyolefin

**Outer Shield****Outer Shield Material:**

Outer Shield Material
Unshielded

**Outer Jacket****Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

**Outer Jacket Ripcord:**

Yes

**Overall Cabling****Overall Nominal Diameter:**

0.189 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)**

**Storage Temperature Range:** -20°C To +75°C

**Installation Temperature Range:** 0°C To +60°C

**Operating Temperature Range:** -20°C To +60°C

**Bulk Cable Weight:** 20 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 35 lbs.

**Min. Bend Radius (Install)/Minor Axis:** 1 in.

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

## Applicable Specifications and Agency Compliance (Overall)

## Applicable Standards &amp; Environmental Programs

NEC/(UL) Specification:	CMR
NEC Articles:	800
CEC/C(UL) Specification:	CMR
Other Standards:	11801 Category 5
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
Other Specification:	NEMA WC-63.1 Category 5e, UL verified to Category 5e

## Flame Test

UL Flame Test:	UL1666 Riser, UL1685 FT4/IEEE 1202 Vertical Tray Flame Test
CSA Flame Test:	FT4

## Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Suitability - Burial:	No
Sunlight Resistance:	No
Oil Resistance:	No
Non-halogenated:	No

## Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

## Electrical Characteristics (Overall)

## Nom. Mutual Capacitance:

Capacitance (pF/ft)

15

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

## Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

9.38

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

## 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)
1	2.000	65.3	62.3	63.0	60.3	20.000
4	4.100	56.3	53.3	51.0	49.2	23.000
8	5.800	51.8	48.8	46.0	43.0	24.500
10	6.500	50.3	47.3	43.0	40.8	25.000
16	8.200	47.3	44.3	39.0	36.0	25.000
20	9.300	45.8	42.8	36.5	33.5	25.000
25	10.400	44.3	41.3	33.9	30.9	24.300
31.25	11.700	42.9	39.9	31.0	28.2	23.600
62.5	17.000	38.4	35.4	22.0	19.0	21.500
100	22.000	35.3	32.3	14.0	10.3	20.100
155	28.100	32.5	29.5	4.4	1.4	15.800
200	32.400	30.8	27.8	4.0	1.0	15.000

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	63.8	60.8
4	100 ± 15	51.7	48.7
8	100 ± 15	45.7	42.7
10	100 ± 15	43.8	40.8
16	100 ± 15	39.7	36.7
20	100 ± 15	37.7	34.7
25	100 ± 15	35.8	32.8
31.25	100 ± 15	33.9	30.9
62.5	100 ± 15	27.8	24.9
100	100 ± 15	23.8	20.8
155	100 ± 25	19.9	16.9
200	100 ± 25	17.7	14.7

## Notes (Overall)

**Notes:** Jacket sequentially marked at 2 ft. intervals. US Patent 5424491. Third party verified to TIA/EIA-568-B.2, Category 5e.

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1583A 002U1000	1,000 FT	21.000 LB	RED		4 PR #24 PO PVC
1583A 0021000	1,000 FT	21.000 LB	RED	C	4 PR #24 PO PVC
1583A 003U1000	1,000 FT	21.000 LB	ORANGE		4 PR #24 PO PVC
1583A 0031000	1,000 FT	21.000 LB	ORANGE	C	4 PR #24 PO PVC
1583A 004U1000	1,000 FT	21.000 LB	YELLOW		4 PR #24 PO PVC
1583A 0041000	1,000 FT	19.000 LB	YELLOW	C	4 PR #24 PO PVC
1583A 005U1000	1,000 FT	20.000 LB	GREEN, DARK		4 PR #24 PO PVC
1583A 0051000	1,000 FT	19.000 LB	GREEN, DARK	C	4 PR #24 PO PVC
1583A 006U1000	1,000 FT	21.000 LB	BLUE, LIGHT		4 PR #24 PO PVC
1583A 0061000	1,000 FT	19.000 LB	BLUE, LIGHT	C	4 PR #24 PO PVC
1583A 0061640	1,640 FT	34.440 LB	BLUE, LIGHT		4 PR #24 PO PVC
1583A 0063000	3,000 FT	60.000 LB	BLUE, LIGHT	C	4 PR #24 PO PVC
1583A 008U1000	1,000 FT	20.000 LB	GRAY	C	4 PR #24 PO PVC
1583A 0081000	1,000 FT	21.000 LB	GRAY	C	4 PR #24 PO PVC
1583A 0081640	1,640 FT	34.440 LB	GRAY	C	4 PR #24 PO PVC

**1583A Multi-Conductor - Category 5e Nonbonded-Pair Cable**

1583A 0083000	3,000 FT	60.000 LB	GRAY	C	4 PR #24 PO PVC
1583A 009U1000	1,000 FT	21.000 LB	WHITE		4 PR #24 PO PVC
1583A 0091000	1,000 FT	19.000 LB	WHITE	C	4 PR #24 PO PVC
1583A 0093000	3,000 FT	60.000 LB	WHITE	C	4 PR #24 PO PVC
1583A 010U1000	1,000 FT	21.000 LB	BLACK		4 PR #24 PO PVC
1583A 0101000	1,000 FT	21.000 LB	BLACK	C	4 PR #24 PO PVC
1583A 012U1000	1,000 FT	21.000 LB	PINK		4 PR #24 PO PVC
1583A 0121000	1,000 FT	21.000 LB	PINK	C	4 PR #24 PO PVC

**Notes:**

C = CRATE REEL PUT-UP.

Revision Number: 1    Revision Date: 07-08-2009

© 2008 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, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. 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 73/23/EEC), as amended by directive 93/68/EEC.