

## 1583A Multi-Conductor - Category 5e Unbonded-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:** 0.500 in.

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

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & 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
Telecommunications Standards:	568-B.2 Category 5e
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
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### Electrical Characteristics (Overall)

#### Nom. Mutual Capacitance:

Capacitance (pF/ft)

15

#### Nominal Velocity of Propagation:

VP (%)

70

Maximum Capacitance Unbalance (pF/100 m): 330

#### Maximum Delay:

Delay (ns/100 m)

538 @ 100MHz

#### Max. Delay Skew:

Delay Skew (ns/100 m)

45

#### 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)
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. 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

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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 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.

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