

## 1583A 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, PVC Jacket.

### Usage (Overall)

**Suitable Applications:** Horizontal, 1000BaseT, Gigabit Ethernet, 100BaseTX, Fast Ethernet, 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 Material
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)

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

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

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

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

Bulk Cable Weight:	26.788 Kg/Km
Max. Recommended Pulling Tension:	155.687 N
Min. Bend Radius/Minor Axis:	20.320 mm
Min. Bend/Installation:	48.260 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
NEC Articles:	800
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

#### Flame Test

UL Flame Test:	UL1666 Vertical Riser
C(UL) Flame Test:	FT4
CSA Flame Test:	FT4
IEEE Flame Test:	1202

#### 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/m)
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49.215
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Maximum Capacitance Unbalance (pF/100 m):	330
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#### Nominal Velocity of Propagation:

VP (%)
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## 1583A Multi-Conductor - Category 5e Nonbonded-Pair Cable

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

**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 ANSI/TIA-568-C.2, Category 5e. Values above 100 MHz are for engineering purposes only.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1583A 002U1000	305 MT	10.886 KG	RED		CAT5E 4PR U/UTP CMR BOX
1583A 0021000	305 MT	2.268 KG	RED	C	CAT5E 4PR U/UTP CMR REEL
1583A 003U1000	305 MT	10.886 KG	ORANGE		CAT5E 4PR U/UTP CMR BOX

## METRIC MEASUREMENT VERSION

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

1583A 0031000	305 MT	9.072 KG	ORANGE	C	CAT5E 4PR U/UTP CMR REEL
1583A 004U1000	305 MT	10.886 KG	YELLOW		CAT5E 4PR U/UTP CMR BOX
1583A 0041000	305 MT	9.072 KG	YELLOW	C	CAT5E 4PR U/UTP CMR REEL
1583A 005U1000	305 MT	10.886 KG	GREEN, DARK		CAT5E 4PR U/UTP CMR BOX
1583A 0051000	305 MT	9.072 KG	GREEN, DARK	C	CAT5E 4PR U/UTP CMR REEL
1583A 006U1000	305 MT	10.886 KG	BLUE, LIGHT		CAT5E 4PR U/UTP CMR BOX
1583A 0061000	305 MT	9.072 KG	BLUE, LIGHT	C	CAT5E 4PR U/UTP CMR REEL
1583A 0061640	500 MT	15.622 KG	BLUE, LIGHT		CAT5E 4PR U/UTP CMR REEL
1583A 0063000	914 MT	27.216 KG	BLUE, LIGHT		CAT5E 4PR U/UTP CMR REEL
1583A 008U1000	305 MT	9.072 KG	GRAY	C	CAT5E 4PR U/UTP CMR BOX
1583A 0081000	305 MT	9.072 KG	GRAY	C	CAT5E 4PR U/UTP CMR REEL
1583A 0081640	500 MT	15.622 KG	GRAY	C	CAT5E 4PR U/UTP CMR REEL
1583A 0083000	914 MT	27.216 KG	GRAY	C	CAT5E 4PR U/UTP CMR REEL
1583A 009U1000	305 MT	10.886 KG	WHITE		CAT5E 4PR U/UTP CMR BOX
1583A 0091000	305 MT	9.072 KG	WHITE	C	CAT5E 4PR U/UTP CMR REEL
1583A 0093000	914 MT	27.216 KG	WHITE	C	CAT5E 4PR U/UTP CMR REEL
1583A 010U1000	305 MT	10.886 KG	BLACK		CAT5E 4PR U/UTP CMR BOX
1583A 0101000	305 MT	9.072 KG	BLACK	C	CAT5E 4PR U/UTP CMR REEL
1583A 012U1000	305 MT	10.886 KG	PINK		CAT5E 4PR U/UTP CMR BOX
1583A 0121000	305 MT	9.072 KG	PINK	C	CAT5E 4PR U/UTP CMR REEL

**Notes:**

C = CRATE REEL PUT-UP.

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