

## 1585A Multi-Conductor - Category 5e Nonbonded-Pair Cable

For more Information  
please call

1-800-Belden1



### General Description:

CAT5e (100MHz), 4-Pair, U/UTP-Unshielded, Plenum-CMP, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Dual FRPO/FEP Insulation, Rip Cord, Flamarrest® Jacket.

### Usage (Overall)

**Suitable Applications:** Horizontal, 1000BaseT, Gigabit Ethernet, POE, POE+, 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
FRPO/FEP - Flame Retardant Polyolefin/Fluorinated Ethylene Propylene

#### Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke 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)

<b>Storage Temperature Range:</b>	-20°C To +75°C
<b>Installation Temperature Range:</b>	0°C To +60°C
<b>Operating Temperature Range:</b>	-20°C To +60°C
<b>Bulk Cable Weight:</b>	29.764 Kg/Km
<b>Max. Recommended Pulling Tension:</b>	155.687 N
<b>Min. Bend Radius/Minor Axis:</b>	20.320 mm
<b>Min. Bend/Installation:</b>	48.260 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

<b>NEC/(UL) Specification:</b>	CMP
<b>NEC Articles:</b>	800

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CEC/C(UL) Specification:	CMP
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, UL Verified to Category 5e

**Applicable Patents:**

Country
www.belden.com/p

**Flame Test**

UL Flame Test:	NFPA 262 Plenum Flame Test (UL910)(FT6)
C(UL) Flame Test:	FT6
CSA Flame Test:	FT6

**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):	Yes
Non-Plenum Number:	1583A

**Electrical Characteristics (Overall)**

**Nom. Mutual Capacitance:**

Capacitance (pF/m)
49.215

Maximum Capacitance Unbalance (pF/100 m): 330

**Nominal Velocity of Propagation:**

VP (%)
72

**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 (%)
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### 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	23.0
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
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. Values above 100 MHz are for engineering purposes only.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1585A D15U1000	1,000 FT	23.000 LB	BLUE		CAT5E 4PR U/UTP CMP BOX
1585A D15I1000	1,000 FT	23.000 LB	BLUE	C	CAT5E 4PR U/UTP CMP REEL
1585A D153000	3,000 FT	66.000 LB	BLUE	C	CAT5E 4PR U/UTP CMP REEL
1585A 002U1000	1,000 FT	23.000 LB	RED		CAT5E 4PR U/UTP CMP BOX
1585A 002I1000	1,000 FT	23.000 LB	RED	C	CAT5E 4PR U/UTP CMP REEL
1585A 003U1000	1,000 FT	0.000 LB	ORANGE		CAT5E 4PR U/UTP CMP BOX
1585A 003I1000	1,000 FT	23.000 LB	ORANGE	C	CAT5E 4PR U/UTP CMP REEL
1585A 004U1000	1,000 FT	23.000 LB	YELLOW		CAT5E 4PR U/UTP CMP BOX
1585A 004I1000	1,000 FT	23.000 LB	YELLOW	C	CAT5E 4PR U/UTP CMP REEL
1585A 005U1000	1,000 FT	23.000 LB	GREEN, DARK		CAT5E 4PR U/UTP CMP BOX
1585A 005I1000	1,000 FT	23.000 LB	GREEN, DARK	C	CAT5E 4PR U/UTP CMP REEL
1585A 008U1000	1,000 FT	23.000 LB	GRAY		CAT5E 4PR U/UTP CMP BOX
1585A 008I1000	1,000 FT	23.000 LB	GRAY	C	CAT5E 4PR U/UTP CMP REEL
1585A 009U1000	1,000 FT	23.000 LB	WHITE		CAT5E 4PR U/UTP CMP BOX
1585A 009I1000	1,000 FT	23.000 LB	WHITE	C	CAT5E 4PR U/UTP CMP REEL
1585A 010U1000	1,000 FT	23.000 LB	BLACK		CAT5E 4PR U/UTP CMP BOX
1585A 010I1000	1,000 FT	23.000 LB	BLACK	C	CAT5E 4PR U/UTP CMP REEL
1585A 010500	500 FT	10.500 LB	BLACK		CAT5E 4PR U/UTP CMP REEL
1585A 012U1000	1,000 FT	23.000 LB	PINK		CAT5E 4PR U/UTP CMP BOX
1585A 012I1000	1,000 FT	23.000 LB	PINK	C	CAT5E 4PR U/UTP CMP REEL
1585A 877U1000	1,000 FT	23.000 LB	NATURAL		CAT5E 4PR U/UTP CMP BOX
1585A 877I1000	1,000 FT	23.000 LB	NATURAL	C	CAT5E 4PR U/UTP CMP REEL

**Notes:**  
C = CRATE REEL PUT-UP.

### 1585A Multi-Conductor - Category 5e Nonbonded-Pair Cable

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