

## 1701A Multi-Conductor - Enhanced Category 5E Bonded-Pair Cable

For more Information  
please call

1-800-Belden1



### Description:

24 AWG Bonded-Pairs, Solid Bare Copper Conductors, FEP insulation, Rip Cord, Flamarrest® 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, Noisy Environments

### Physical Characteristics (Overall)

#### Conductor

**AWG:**

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare Copper

#### Insulation

**Insulation Material:**

Insulation Material
FEP - 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. (in.)
0.195

**Outer Jacket Ripcord:** Yes

#### Overall Cable

**Overall Nominal Diameter:** 0.195 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:** +5°C To +50°C

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

## 1701A Multi-Conductor - Enhanced Category 5E Bonded-Pair Cable

Bulk Cable Weight: 22 lbs/1000 ft.

Max. Recommended Pulling Tension: 40 lbs.

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

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

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): 01/01/2005

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	Patent
US	5606151
US	5734126

#### Flame Test

UL Flame Test: NFPA 262

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 - Indoor

#### Plenum/Non-Plenum

Plenum (Y/N): Yes

Non-Plenum Number: 1700A

### Electrical Characteristics (Overall)

#### Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m): 66

#### Nominal Velocity of Propagation:

VP (%)
72

#### Maximum Delay:

Delay (ns/100 m)
510

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**Max. Delay Skew:**

Delay Skew (ns/100 m)
25

**Maximum Conductor DC Resistance:**

DCR @ 20°C (Ohm/100 m)
9

**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. PSNEXT (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.000	68.3	66.3	20.000
4	4.000	59.3	55.3	23.000
8	5.700	54.8	49.1	24.500
10	6.400	53.3	46.9	25.000
16	8.100	50.3	42.2	25.000
20	9.100	48.8	39.7	25.000
25	10.200	47.3	37.1	25.000
31.25	11.400	45.9	34.5	25.000
62.5	16.400	41.4	25.0	25.000
100	21.000	38.3	17.3	25.000
155	26.600	35.4	8.8	19.000
200	30.500	33.8	3.3	19.000
250	34.300	32.3	>0	18.000
300	38.000	28.2		18.000
350	41.400	27.2		17.000

**Premise Cable Electrical Table 2:**

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. PSACRF (dB)
1	100 ± 12	105 ± 10	64.8
4	100 ± 12	100 ± 10	52.8
8	100 ± 12	100 ± 10	46.7
10	100 ± 12	100 ± 10	44.8
16	100 ± 12	100 ± 10	40.7
20	100 ± 12	100 ± 10	38.8
25	100 ± 15	100 ± 10	36.8
31.25	100 ± 15	100 ± 10	34.9
62.5	100 ± 15	100 ± 10	28.9
100	100 ± 15	100 ± 10	24.8
155	100 ± 18	100 ± 10	21.0
200	100 ± 20	100 ± 10	18.8
250	100 ± 20	100 ± 10	16.8
300	100 ± 20	100 ± 10	11.2
350	100 ± 22	100 ± 10	9.9

**Premise Cable Electrical Table 4:**

Frequency (MHz)	Min. TCL (dB)	Min. ELTCTL (dB)
1.000	40.000	35.000
4.000	40.000	23.000
8.000	40.000	16.900
10.000	40.000	15.000
16.000	38.000	10.900
20.000	37.000	9.000
25.000	36.000	7.000

## 1701A Multi-Conductor - Enhanced Category 5E Bonded-Pair Cable

31.250	35.100	
62.500	32.000	
100.000	30.000	
155.000	28.100	
200.000	27.000	
250.000	26.000	

### Notes (Overall)

**Notes:** Belden IBDN. Jacket sequentially marked at 2 ft. intervals. Third party verified to ANSI/TIA-568-C.2, Category 5e.

### Related Documents:

No related documents are available for this product

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1701A B02U1000	1,000 FT	23.000 LB	PURPLE		CAT5E+ 4PRB U/UTP CMP BOX
1701A B02I1000	1,000 FT	24.000 LB	PURPLE	C	CAT5E+ 4PRB U/UTP CMP REEL
1701A D15U1000	1,000 FT	23.000 LB	BLUE		CAT5E+ 4PRB U/UTP CMP BOX
1701A D153000	3,000 FT	69.000 LB	BLUE	C	CAT5E+ 4PRB U/UTP CMP REEL
1701A 002U1000	1,000 FT	23.000 LB	RED		CAT5E+ 4PRB U/UTP CMP BOX
1701A 002I1000	1,000 FT	24.000 LB	RED	C	CAT5E+ 4PRB U/UTP CMP REEL
1701A 003U1000	1,000 FT	23.000 LB	ORANGE		CAT5E+ 4PRB U/UTP CMP BOX
1701A 003I1000	1,000 FT	24.000 LB	ORANGE	C	CAT5E+ 4PRB U/UTP CMP REEL
1701A 004U1000	1,000 FT	23.000 LB	YELLOW		CAT5E+ 4PRB U/UTP CMP BOX
1701A 004I1000	1,000 FT	24.000 LB	YELLOW	C	CAT5E+ 4PRB U/UTP CMP REEL
1701A 005U1000	1,000 FT	23.000 LB	GREEN, DARK		CAT5E+ 4PRB U/UTP CMP BOX
1701A 005I1000	1,000 FT	24.000 LB	GREEN, DARK	C	CAT5E+ 4PRB U/UTP CMP REEL
1701A 008U1000	1,000 FT	23.000 LB	GRAY		CAT5E+ 4PRB U/UTP CMP BOX
1701A 008I1000	1,000 FT	24.000 LB	GRAY	C	CAT5E+ 4PRB U/UTP CMP REEL
1701A 009U1000	1,000 FT	23.000 LB	WHITE		CAT5E+ 4PRB U/UTP CMP BOX
1701A 009I1000	1,000 FT	24.000 LB	WHITE	C	CAT5E+ 4PRB U/UTP CMP REEL
1701A 010U1000	1,000 FT	23.000 LB	BLACK	C	CAT5E+ 4PRB U/UTP CMP BOX
1701A 010I1000	1,000 FT	24.000 LB	BLACK		CAT5E+ 4PRB U/UTP CMP REEL
1701A 877U1000	1,000 FT	23.000 LB	NATURAL		CAT5E+ 4PRB U/UTP CMP BOX
1701A 877I1000	1,000 FT	24.000 LB	NATURAL	C	CAT5E+ 4PRB U/UTP CMP REEL
1701A 8773000	3,000 FT	69.000 LB	NATURAL	C	CAT5E+ 4PRB U/UTP CMP REEL

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

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