



**Product:** [1701A](#)

Category 5E+ Cable, 4 Bonded-Pairs, U/UTP, CMP

## Product Description

Category 5E+ Premise Horizontal Cable (350MHz), 4 Bonded-Pairs, 24 AWG Solid Bare Copper Conductors, U/UTP, Plenum-CMP, Flamarrest® PVC-LS Jacket

## Technical Specifications

### Product Overview

Suitable Applications:	Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE
Patent:	This product has one or more applicable patents. More information on patents can be found at <a href="https://www.belden.com/resources/patents">https://www.belden.com/resources/patents</a> .

### Construction Details

#### Conductor

Size	Stranding	Material	Number of Pairs
24 AWG	Solid	BC - Bare Copper	4

#### Insulation

Material	Color Code
FEP - Fluorinated Ethylene Propylene	White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown
Bonded-Pair:	Yes

#### Outer Jacket

Material	Material Trade Name	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	Flamarrest®	0.195 in (4.95 mm)	Yes
Overall Cable Diameter (Nominal):	0.195 in (4.95 mm)		

### Electrical Characteristics

#### Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
90 Ohm/km (27 Ohm/1000ft)	66 pF/100m

#### Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	25 ns/100m	72%

#### High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. PSNEXT [dB]	Min. PSACR [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted) [Ohm]	Max./Min. Fitted Impedance [Ohm]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.0 dB/100m	69.3	67.3	65.8	20.0	100 ± 12	105 ± 10	40.0	35.0
4	4.0 dB/100m	60.3	56.3	53.8	23.0	100 ± 12	100 ± 10	40.0	23.0
8	5.7 dB/100m	55.8	50.1	47.7	24.5	100 ± 12	100 ± 10	40.0	16.9
10	6.4 dB/100m	54.3	47.9	45.8	25.0	100 ± 12	100 ± 10	40.0	15.0
16	8.1 dB/100m	51.2	43.1	41.7	25.0	100 ± 12	100 ± 10	38.0	10.9
20	9.1 dB/100m	49.8	40.7	39.8	25.0	100 ± 12	100 ± 10	37.0	9.0
25	10.2 dB/100m	48.3	38.2	37.8	25.0	100 ± 15	100 ± 10	36.0	7.0
31.25	11.4 dB/100m	46.9	35.5	35.9	25.0	100 ± 15	100 ± 10	35.1	

62.5	16.4 dB/100m	42.4	26.0	29.9	25.0	100 ± 15	100 ± 10	32.0	
100	21.0 dB/100m	39.3	18.3	25.8	25.0	100 ± 15	100 ± 10	30.0	
155	26.6 dB/100m	36.4	9.8	22.0	19.0	100 ± 18	100 ± 10	28.1	
200	30.4 dB/100m	34.8	4.4	19.8	19.0	100 ± 18	100 ± 10	27.0	
250	34.4 dB/100m	32.3		17.8	18.0	100 ± 20	100 ± 10	26.0	
300	38.0 dB/100m	28.1		14.3	18.0	100 ± 20	100 ± 10		
350	41.4 dB/100m	27.1		12.9	17.0	100 ± 20	100 ± 10		
400	44.5 dB/100m	26.3		11.8	17.0	100 ± 22	100 ± 10		
450	47.6 dB/100m	25.5		10.7	17.0	100 ± 22	100 ± 10		

#### Voltage

<b>UL Voltage Rating</b>
300 V (CMP)

## Mechanical Characteristics

#### Temperature

UL Temperature	Operating	Installation	Storage
75°C	-20°C To +75°C	0°C To +50°C	-20°C To +75°C

#### Bend Radius

Stationary Min.	Installation Min.
0.5 in (13 mm)	2.0 in (51 mm)

Max. Pull Tension:	40 lbs (18 kg)
Bulk Cable Weight:	22 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Plenum, Indoor
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum), FT6, FT6, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800, CMP
CEC / C(UL) Compliance:	CMP
ICEA Compliance:	S-90-661-2012
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3
NEMA Compliance:	NEMA WC-63.1
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
Third Party Performance Verification:	Category 5e
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
CENELEC Compliance:	Segregation class according EN50174-2 = a
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Non-Plenum Number:	1700A

## Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 MHz are for Engineering Information Only. Print Includes Descending Footage Markings from Max. Put-Up Length to 0.
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## History

Update and Revision:	Revision Number: 0.470 Revision Date: 05-04-2022
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## Part Numbers

#### Variants

Item #	Color	Putup Type	Length	UPC
1701A 0101000	Black	Reel	1,000 ft	612825121862
1701A 010U1000	Black	UnReel	1,000 ft	612825121855

1701A D151000	Blue	Reel	1,000 ft	612825121718
1701A D15U1000	Blue	UnReel	1,000 ft	612825121701
1701A D153000	Blue	Reel	3,000 ft	612825121725
1701A 0081000	Gray	Reel	1,000 ft	612825121824
1701A 008U1000	Gray	UnReel	1,000 ft	612825121817
1701A 0051000	Green	Reel	1,000 ft	612825121800
1701A 005U1000	Green	UnReel	1,000 ft	612825121794
1701A 8771000	Natural	Reel	1,000 ft	612825121886
1701A 877U1000	Natural	UnReel	1,000 ft	612825121879
1701A 8773000	Natural	Reel	3,000 ft	612825121893
1701A 0031000	Orange	Reel	1,000 ft	612825121763
1701A 003U1000	Orange	UnReel	1,000 ft	612825121756
1701A B021000	Purple	Reel	1,000 ft	612825121695
1701A B02U1000	Purple	UnReel	1,000 ft	612825121688
1701A 0021000	Red	Reel	1,000 ft	612825121749
1701A 002U1000	Red	UnReel	1,000 ft	612825121732
1701A 0091000	White	Reel	1,000 ft	612825121848
1701A 009U1000	White	UnReel	1,000 ft	612825121831
1701A 0041000	Yellow	Reel	1,000 ft	612825121787
1701A 004U1000	Yellow	UnReel	1,000 ft	612825121770

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