

1700A 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, Non-Plenum, Polyolefin Insulation, Rip Cord, See Color Code Chart (Below), PVC Jacket (Red, Orange, White, Black, Yellow, Green, Blue, Purple, Light Gray or Gray).

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 ^ US Patent #'s 5,606,151; 5,734,126, CMR, Riser

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 Diameter:

Nom. Dia. (mm)
5.131

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)

Bulk Cable Weight: 31.252 Kg/Km

Max. Recommended Pulling Tension: 177.928 N

Min. Bend Radius (Install)/Minor Axis: 25.400 mm

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Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
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:	Category 5e - TIA 568.C.2
Other Specification:	NEMA WC-63.1 Category 5e, UL Verified to Category 5e

Flame Test

UL Flame Test:	UL1666 Vertical Riser
C(UL) Flame Test:	FT4
IEC Flame Test:	60332-3-24 (Category C)
IEEE Flame Test:	1202

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1701A

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/m)
49.215

Maximum Capacitance Unbalance (pF/100 m): 66

Nominal Velocity of Propagation:

VP (%)
70

Maximum Delay:

Delay (ns/100 m)
510

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

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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 ± 18	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
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. U.S. Patents 5424491, 5606151 and 5734126. Third party verified to TIA/EIA-568-C.2 Category 5e

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
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METRIC MEASUREMENT VERSION

1700A Multi-Conductor - Enhanced Category 5E Bonded-Pair Cable

1700A B02U1000	305 MT	9.525 KG	PURPLE		4 PR #24 DATATWIST FR PVC
1700A B021000	305 MT	9.979 KG	PURPLE	C	4 PR #24 DATATWIST FR PVC
1700A F2VU1000	305 MT	9.525 KG	GRAY, DEC		4 PR #24 DATATWIST FR PVC
1700A F2V1000	305 MT	9.979 KG	GRAY, DEC	C	4 PR #24 DATATWIST FR PVC
1700A F2V3000	914 MT	28.576 KG	GRAY, DEC	C	4 PR #24 DATATWIST FR PVC
1700A 002U1000	305 MT	9.525 KG	RED		4 PR #24 DATATWIST FR PVC
1700A 0021000	305 MT	9.979 KG	RED	C	4 PR #24 DATATWIST FR PVC
1700A 0023000	914 MT	28.576 KG	RED	C	4 PR #24 DATATWIST FR PVC
1700A 003U1000	305 MT	9.525 KG	ORANGE		4 PR #24 DATATWIST FR PVC
1700A 0031000	305 MT	9.979 KG	ORANGE	C	4 PR #24 DATATWIST FR PVC
1700A 004U1000	305 MT	9.525 KG	YELLOW		4 PR #24 DATATWIST FR PVC
1700A 0041000	305 MT	9.979 KG	YELLOW	C	4 PR #24 DATATWIST FR PVC
1700A 005U1000	305 MT	9.525 KG	GREEN, DARK		4 PR #24 DATATWIST FR PVC
1700A 0051000	305 MT	9.979 KG	GREEN, DARK	C	4 PR #24 DATATWIST FR PVC
1700A 006U1000	305 MT	9.525 KG	BLUE, LIGHT		4 PR #24 DATATWIST FR PVC
1700A 0061000	305 MT	9.979 KG	BLUE, LIGHT	C	4 PR #24 DATATWIST FR PVC
1700A 0061640	500 MT	16.366 KG	BLUE, LIGHT	C	4 PR #24 DATATWIST FR PVC
1700A 0063000	914 MT	28.576 KG	BLUE, LIGHT	C	4 PR #24 DATATWIST FR PVC
1700A 008U1000	305 MT	9.525 KG	GRAY		4 PR #24 DATATWIST FR PVC
1700A 009U1000	305 MT	9.525 KG	WHITE	C	4 PR #24 DATATWIST FR PVC
1700A 0091000	305 MT	9.979 KG	WHITE	C	4 PR #24 DATATWIST FR PVC
1700A 0093000	914 MT	28.576 KG	WHITE	C	4 PR #24 DATATWIST FR PVC
1700A 010U1000	305 MT	9.525 KG	BLACK		4 PR #24 DATATWIST FR PVC
1700A 0101000	305 MT	9.979 KG	BLACK	C	4 PR #24 DATATWIST FR PVC

Notes:

C = CRATE REEL PUT-UP.

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