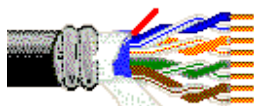


121700R Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable



For more Information
please call

1-800-Belden1

**Description:**

24 AWG Bonded-Pairs solid bare copper conductors, polyolefin insulation, PVC inner jacket, rip cord, polyester wrap, aluminum interlocked armor, industrial grade outer PVC jacket. Sequential marking at one meter intervals.

Usage (Overall)**Suitable Applications:**

Industrial Ethernet Cable, Harsh Environments, 350MHz Enhanced Category 5e, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, RJ-45 Compatible, Flexible Applications, Armored for Extra Protection

Physical Characteristics (Overall)**Conductor****AWG:**

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
4	24	Solid	BC - Bare Copper	.020

Insulation**Insulation Material:**

Insulation Material	Wall Thickness (in.)	Dia. (in.)
PO - Polyolefin	.009	.035

Inner Jacket**Inner Jacket Material:**

Inner Jacket Material	Nom. Dia. (in.)
PVC - Polyvinyl Chloride	.200

Inner Jacket Ripcord:

Yes

Outer Shield**Outer Shield Material:**

Outer Shield Material
Unshielded

Outer Jacket**Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (in.)
Industrial Grade PVC - Polyvinyl Chloride	.045

Outer Jacket over Armor**Outer Jacket Material over Armor (y/n):**

Yes

Outer Jacket Material Over Armor:

OJ Over Armor Material
PVC - Polyvinyl Chloride

Armor**Armor Type:**

Interlocked

Armor Material:

Aluminum

Diameter over Armor:

.440

Overall Cable

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Overall Cabling Separator Material: Polyester

Overall Nominal Diameter: 0.530 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)

Installation Temperature Range: -25°C To +75°C

Operating Temperature Range: -40°C To +75°C

Bulk Cable Weight: 102 lbs/1000 ft.

Max. Recommended Pulling Tension: 40 lbs.

Min. Bend Radius (Install)/Minor Axis: 6.500 in.

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

NEC/(UL) Specification: CM, UL444

CEC/C(UL) Specification: CMG, HL

Other Standards: 11801 Category 5

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 10/01/2005

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

Flame Test

UL Flame Test: UL1685 UL Loading

CSA Flame Test: FT4

Suitability

Sunlight Resistance: Yes

Oil Resistance: Yes

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)**Nom. Mutual Capacitance:**

Capacitance (pF/ft)

15

Maximum Capacitance Unbalance (pF/100 m): 66

Nominal Velocity of Propagation:

VP (%)

70

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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

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	2.0	65.3	65.3	63.3	63.3	20.0
4	4.0	56.3	56.3	52.3	52.3	23.0
8	5.7	51.8	51.8	46.1	46.1	24.5
10	6.4	50.3	50.3	43.9	43.9	25.0
16	8.1	47.3	47.3	39.1	39.1	25.0
20	9.2	45.8	45.8	35.2	35.2	25.0
25	10.3	44.3	44.3	34.1	34.1	24.3
31.25	11.6	42.9	42.9	31.3	31.3	23.6
62.5	16.8	38.4	38.4	21.6	21.6	21.5
100	21.7	35.3	35.3	17.1	17.1	20.1
155	27.7	32.5	32.5	4.7	4.7	19.0
200	32.0	30.8	30.8	3.0	3.0	19.0
250	36.4	29.3	29.3	>0	>0	18.0
300	40.5	28.2	28.2	>0	>0	18.0
310	41.3	27.9	27.9			18.0
350	44.3	27.2	27.2			17.0

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 12	105 ± 10	63.8	60.8
4	100 ± 12	100 ± 10	51.7	48.7
8	100 ± 12	100 ± 10	45.7	42.7
10	100 ± 12	100 ± 10	43.8	40.8
16	100 ± 12	100 ± 10	39.7	36.7
20	100 ± 12	100 ± 10	37.7	34.7
25	100 ± 15	100 ± 10	35.8	32.8
31.25	100 ± 15	100 ± 10	33.9	30.9
62.5	100 ± 15	100 ± 10	27.8	24.8
100	100 ± 15	100 ± 10	23.8	20.8
155	100 ± 18	100 ± 10	19.9	16.9
200	100 ± 20	100 ± 10	17.7	14.7
250	100 ± 20	100 ± 10	15.8	12.8
300	100 ± 20	100 ± 10	14.2	11.2
310	100 ± 20	100 ± 10	13.9	10.9
350	100 ± 22	100 ± 10	12.9	9.9

Notes (Overall)

Notes: US Patent #'s 5, 606, 151; 5, 734, 126 Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581. Cable passes -40C cold impact.

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Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
121700R J221000	1,000 FT	117.000 LB	BLUE, STRONG		1700R ALUM ARMOR PVC - Special
121700R J223000	1,000 FT	115.000 LB	BLUE, STRONG		1700R ALUM ARMOR PVC
121700R J225000	5,000 FT	595.000 LB	BLUE, STRONG		1700R ALUM ARMOR PVC
121700R 0021000	1,000 FT	117.000 LB	RED		1700R ALUM ARMOR PVC - SPECIAL
121700R 0103000	3,000 FT	345.000 LB	BLACK		1700R ALUM ARMOR PVC

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