METRIC MEASUREMENT VERSION



## 7918A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable



For more Information please call

1-800-Belden1



## **General Description:**

24 AWG solid bare copper conductors, twisted pairs, polyolefin insulation, industrial grade sunlight- and oil-resistant PVC jacket, rip cord. Sequential marking at two foot intervals.

#### **Usage (Overall)**

**Suitable Applications:** 

Industrial Ethernet, Harsh Environments, 200MHz Category 5e, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, CMX - Outdoor, RJ-45 Compatible

## **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
PO - Polyolefin

#### **Outer Shield**

**Outer Shield Material:** 

Outer Shield Material
Unshielded

#### **Outer Jacket**

**Outer Jacket Material:** 

Outer Jacket Material
Industrial Grade PVC - Polyvinyl Chloride

Outer Jacket Ripcord: Yes

#### **Overall Cable**

Overall Nominal Diameter: 5.842 mm

**Pair** 

## Pair Color Code Chart:

	Number	Color				
	1 White/Blue Stripe & Blue					
2 White/Orange Stripe & Ora						
	3 White/Green Stripe & Green					
	4	White/Brown Stripe & Brown				

## **Mechanical Characteristics (Overall)**

Installation Temperature Range:	-20°C To +75°C
Operating Temperature Range:	-40°C To +75°C
Bulk Cable Weight:	35.717 Kg/Km
Max. Recommended Pulling Tension:	155.687 N

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## 7918A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable

Min. Bend Radius/Minor Axis:	12.700 mm				
Applicable Specifications and Agency C	Compliance (Overall)				
Applicable Standards & Environmental Pro	grams				
NEC/(UL) Specification:	CMR, CMX-Outdoor				
CEC/C(UL) Specification:	CMG				
EU Directive 2011/65/EU (ROHS II):	Yes				
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 Yes				
CA Prop 65 (CJ for Wire & Cable):					
MII Order #39 (China RoHS):	Yes				
PMSHA Specification:	P-07-KA060003				
Other Specification:	NEMA WC-63.1 Category 5e, UL verified to Category 5e				
Flame Test					
UL Flame Test:	UL1666 Riser				
CSA Flame Test:	FT4				
Suitability					
Suitability - Outdoor:	Yes				
Sunlight Resistance:	Yes				
Oil Resistance:	Yes				
Plenum/Non-Plenum					
Plenum (Y/N):	No				

#### Ε

Capacitance (pF/m)

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

VP (%) 68

Maximum Delay:

Delay (ns/100 m) 510 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)

**Maximum Conductor DC Resistance:** 

DCR @ 20°C (Ohm/100 m)

Max. Operating Voltage - UL:

Voltage

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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)	Min. SRL (dB)
1	2.0	65.3	62.3	63.0	60.0	20.0	23
4	4.1	56.3	53.3	51.0	49.0	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	41.0	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	28.0	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	11.0	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	24.8
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: Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.

#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
MD1819 0061000	305 MT	10.886 KG	BLUE, LIGHT	С	4 PR #24 PP PVC
7918A 0061000	305 MT	11.793 KG	BLUE, LIGHT	С	4 PR #24 PP PVC
7918A 0101000	305 MT	11.793 KG	BLACK	С	4 PR #24 PP PVC
7918A 0102000	610 MT	22.680 KG	BLACK	С	4 PR #24 PP PVC

Notes:

C = CRATE REEL PUT-UP.

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