# **Detailed Specifications & Technical Data**



ENGLISH MEASUREMENT VERSION

## 7919A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable



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For more Information please call

1-800-Belden1



Description	
Description: 24 AWG solid bare copper conductors, t	twisted pairs, polyolefin insulation, overall Beldfoil shield (100%
coverage), 24 AWG stranded TC drain v cord. Sequential marking at two foot inte	wire, industrial grade sunlight- and oil-resistant PVC jacket, rip ervals
Usage (Overall)	
Suitable Applications:	Industrial Ethernet Cable, Harsh Environments, 100MHz Category 5e, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, RS-422, CMX - Outdoor, RJ-45 Compatible, Noisy Environments
Physical Characteristics (Overall)	
Conductor AWG:	
# Pairs AWG Stranding Conductor Material	
4 24 Solid BC - Bare Copper	
Insulation	
Insulation Material:	
Insulation Material Wall Thickness (in.)   PO - Polyolefin .010	
Outer Shield	
Outer Shield Material:	
Outer Shield Trade Name Type Outer Shield N Beldfoil® Tape Aluminum Foil-I	
Outer Shield Drain Wire AWG:	
AWG Stranding Drain Wire Conductor Material	(
24 7x32 TC - Tinned Copper	]
Outer Jacket	
Outer Jacket Material: Outer Jacket Material	
Industrial Grade PVC - Polyvinyl Chloride	
Outer Jacket Ripcord:	No
Overall Cabling	
Overall Nominal Diameter:	0.265 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)	

-25°C To +75°C

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	7919A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cab
Operating Temperature Range:	-40°C To +75°C
Bulk Cable Weight:	30 lbs/1000 ft.
Max. Recommended Pulling Tension:	25 lbs.
Min. Bend Radius (Install)/Minor Axis:	1 in.
Applicable Specifications and Agency Co	mpliance (Overall)
Applicable Standards & Environmental Progr	ams
NEC/(UL) Specification:	CMR, CMX-Outdoor, UL444
CEC/C(UL) Specification:	CMR
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):	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
PMSHA Specification:	P-07-KA060004
Telecommunications Standards:	568-B.2 Category 5e
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
Electrical Characteristics (Overall)	
Nom. Mutual Capacitance: Capacitance (pF/ft)	
15	
Nominal Velocity of Propagation:	
VP (%)	
70	
Maximum Capacitance Unbalance (pF/100 m):	330
Maximum Delay:	
Delay (ns/100 m) 538 @ 100MHz	
Max. Delay Skew:	
Delay Skew (ns/100 m) 45	
Maximum Conductor DC Resistance: DCR @ 20°C (Ohm/100 m) 9.38	



#### ENGLISH MEASUREMENT VERSION

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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)	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

#### 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

#### Notes (Overall)

Notes: Operating temperatures are subject to length de-rating. Cable passes -40°C Cold Bend per UL 1581.

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

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7919A 0061000	1,000 FT	35.000 LB	BLUE, LIGHT	С	4 PR #24 PP FS PVC
7919A 0101000	1,000 FT	35.000 LB	BLACK	С	4 PR #24 PP FS PVC
7919A 0102000	2,000 FT	68.000 LB	BLACK	С	4 PR #24 PP FS PVC

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 6 Revision Date: 05-14-2007

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