



**7918A Paired - Category 5e DataTuff® Twisted Pair Cable**

 	<p><b>Metric Version</b> For more information please call <b>1-800-Belden1</b></p> <p><u>See Put-ups and Colors</u></p> <p><b>Color Code Chart : No. 8 for DataTwist Cables (Modified Western Electric).pdf</b></p>
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**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.

**SUITABLE APPLICATIONS:**

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 Video, RS-422, CMX - Outdoor, RJ-45 Compatible
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**PHYSICAL CHARACTERISTICS:**

**CONDUCTOR:**

Number of Pairs	4
Total Number of Conductors	8
AWG	24
Stranding	Solid
Conductor Material	BC - Bare Copper

**INSULATION:**

Insulation Material	PO - Polyolefin
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Pair Color Code Chart :

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

**OUTER SHIELD:**

Outer Shield Material	Unshielded
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**OUTER JACKET:**

Outer Jacket Material	Industrial Grade PVC - Polyvinyl Chloride
Outer Jacket Ripcord	Yes



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### OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	5.842 mm
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### MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-40°C To +75°C
Installation Temperature Range	-20°C To +75°C
Bulk Cable Weight	35.717 Kg/Km
Max. Recommended Pulling Tension	155.687 N
Min. Bend Radius (Install)	12.7 mm

### APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

#### APPLICABLE STANDARDS:

NEC/(UL) Specification	CMR, CMX-Outdoor, UL444
CEC/C(UL) Specification	CMG FT-4
IEC Specification	11801 Category 5
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
TIA/EIA Specification	568-B.2 Cat 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
IEEE Flame Test	IEEE 1202 per IEEE 383

#### SUITABILITY:

Suitability - Outdoor	Yes
Sunlight Resistance	Yes
Oil Resistance	Yes

#### PLENUM/NON-PLENUM:

Plenum (Y/N)	N
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#### ELECTRICAL CHARACTERISTICS:

Nom. Mutual Capacitance @ 1 KHz	49.215 pF/m
Maximum Capacitance Unbalance (pF/100 m)	330 pF/100 m
Nominal Velocity of Propagation	68 %
Maximum Delay (ns/100 m)	510 @ 100MHz ns/100 m
Maximum Delay Skew (ns/100m)	45 ns/100 m
Maximum Conductor DC Resistance @ 20 Deg. C	9.38 Ohms/100 m
Maximum DCR Unbalance @ 20 Deg. C	3 %



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Max. Operating Voltage - UL 300 V RMS

**ELECTRICAL CHARACTERISTICS - PREMISE:**

Premise Cable Electricals Table 1 :

Frequency (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min. Return Loss (dB)	Min. Structural Return Loss (dB)
1	2	65.3	62.3	63.0	60.0	20	23
4	4.1	56.3	53.3	51.0	49.0	23	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	25.0
16	8.2	47.3	44.3	39.0	36.0	25	25.0
20	9.3	45.8	42.8	36.5	33.5	25	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	38.4	35.4	22.0	19.0	21.5	21.5
100	22	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	30.8	27.8	4.0	1.0	15	

Premise Cable Electricals Table 2 :

Frequency (MHz)	Input (Unfitted) Impedance (Ohms)	Fitted Impedance (Ohms)	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:**

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

**PUT-UPS AND COLORS:**

Item	Description	Put-Up (M)	Ship Weight (kgs.)	Jacket Color	Notes
7918A 0061000	4 PR #24 PP PVC	304.8	12.712	BLUE, LIGHT	C
7918A 0101000	4 PR #24 PP PVC	304.8	12.712	BLACK	C



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7918A 0102000	4 PR #24 PP PVC	609.6	23.608	BLACK	C
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C = CRATE REEL PUT-UP.

Revision Number: 5      Revision Date: 02-08-2006

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