

7921A Paired - Category 5e DataTuff® Twisted Pair Cable

		<p>For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p>
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Description:

24 AWG Bonded-Pairs solid bare copper conductors, polyolefin insulation, overall Beldfoil® (100% coverage) plus tinned copper braid shield (70% coverage), drain wire, industrial grade sunlight- and oil-resistant PVC jacket. Seq. marking at 2 ft. intervals

SUITABLE APPLICATIONS:

Suitable Applications	Industrial Ethernet, Harsh Environments, Category 5e, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments, CMX - Outdoor, EtherNet/IP™
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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 Trade Name	Beldfoil®
Outer Shield Type	Braid/Tape

Outer Shield Material :

Layer Number	Material Trade Name	Type	Material	% Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	70

OUTER SHIELD DRAIN WIRE :

Outer Shield Drain Wire AWG	24
Outer Shield Drain Wire Stranding	Solid
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper

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Outer Shield Diameter	.239 in.
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OUTER JACKET:

Outer Jacket Material	Industrial Grade PVC - Polyvinyl Chloride
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OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.330 in.
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MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-40°C To +75°C
Installation Temperature Range	-25°C To +75°C
Bulk Cable Weight	50 lbs/1000 ft.
Max. Recommended Pulling Tension	75 lbs.
Min. Bend Radius (Install)	1.32 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CMR, CMX-OUTDOOR, UL444
CEC/C(UL) Specification	CMR
IEC Specification	IS11801 Category 5
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
TIA/EIA Specification	568B.2 Category 5e
Other Specification	NEMA WC-63.1 Category 5e, EtherNet/IP™ Compliant

FLAME TEST:

UL Flame Test	UL1661 Riser
CSA Flame Test	FT4

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	15 pF/ft
Maximum Capacitance Unbalance (pF/100 m)	150 pF/100 m
Nominal Velocity of Propagation	70 %
Maximum Delay (ns/100 m)	538 @ 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

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Maximum DCR Unbalance @ 20 Deg. C	3 %
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	2.0	65.3	62.3	63.0	60.0	20.0	20.0
4	4.1	56.3	53.3	51.0	49.0	23.6	23.6
8	5.8	51.8	48.8	46.0	43.0	25.4	25.4
10	6.5	50.3	47.3	43.0	41.0	26.0	26.0
16	8.2	47.3	44.3	39.0	36.0	26.0	26.0
20	9.3	45.8	42.8	36.5	33.5	26.0	26.0
25	10.4	44.3	41.3	33.9	30.9	25.5	25.5
31.25	11.7	42.9	39.9	31.0	28.0	25.0	25.0
62.5	17.0	38.4	35.4	22.0	19.0	23.5	23.5
100	22.0	35.3	32.3	14.0	11.0	22.5	22.5

Premise Cable Electricals Table 2 :

Frequency (MHz)	Input (Unfitted) Impedance (Ohms)	Fitted Impedance (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	95-110	63.8	60.8
4	100 ± 15	95-110	51.7	48.7
8	100 ± 15	95-107	45.7	42.7
10	100 ± 15	95-107	43.8	40.8
16	100 ± 15	95-107	39.7	36.7
20	100 ± 15	95-107	37.7	34.7
25	100 ± 15	95-107	35.8	32.8
31.25	100 ± 15	95-107	33.9	30.9
62.5	100 ± 15	95-107	27.8	24.8
100	100 ± 15	95-107	23.8	20.8

NOTES:

Notes	US Patent #'s 5, 606, 151; 5, 734, 126. EtherNet/IP is a trademark of ControlNet International, Ltd. under license by Open DeviceNet Vendor Association, Inc. Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.
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PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
7921A 0021000	4 PR #24 PP SH PVC	1000	55	RED	C
7921A 0061000	4 PR #24 PP SH PVC	1000	55	BLUE, LIGHT	C
7921A 0101000	4 PR #24 PP SH PVC	1000	55	BLACK	C
7921A 0102000	4 PR #24 PP SH PVC	2000	106	BLACK	C

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7921A 1NH1000	4 PR #24 PP SH PVC	1000	55	TEAL 1NH	C
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C = CRATE REEL PUT-UP.

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