

Operating Temperature Range:

7933A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable

1-900-Belden Concerned Pears solid bare copper conductors, polyolefin insulation, overall Beldfoil® shield (100% coverage) with drain wire, 030° industrial grade sunlight- and ol-resistant PVC jacket, drain wire. Sequential marking at two foot intervals. Usage Overall Suitable Applications: Industrial Ethernet, Harsh Environments, 200Mtr Category Se, M-12 Compatible, 100BaaevG ANTAN, 156A TI, 200BaevG ANTAN, 156A		For more Information please call
24 AWG Bonded-Pairs solid bare copper conductors, polyolefin insulation, overall Beldfoli® shield (100% coverage) with drain wire, .030" industrial grade sunlight- and oil-resistant PVC jacket, drain wire. Sequential marking at two foot intervals. Usage (Overall) Industrial Ethernat, Harsh Environments, 200MHz Category 5a, M-12, Cmp3698/C AVYLM1 (156, TM, 162, TM, 167, NM, 162, AES), RS-100, Jacket, Marking, AES), RS-12, Cmp3698/C AVYLM1 (156, TM, 162, AES), RS-422, Noisy Environments, RJ-45 Compatible, EtherNet/IP Physical Characteristics (Overall) Conductor AWG: # Fairs AWG Stranding Conductor Material 2 24 Sold BC - Bare Copper Total Number of Conductors: 4 Insulation Material: Conductor AWG Stranding Conductor Material 2 Outer Shield Material Coverage (%) Outer Shield Material Outer Shield Material Outer Shield Material Voeverall Coble Outer Shield Material Voeveral Coble Outer Shield Material Voeveral Coble Voeral Coble		1-800-Belden1
coverage) with drain wire, 0.30° industrial grade sunlight- and oil-resistant PVC jacket, drain wire. Sequential marking at two foot intervals. Usage (Overall) Suitable Applications: Industrial Ethernet, Harsh Environments, 200MHz Category 5e, M-12 Compatible, 100Base TX, 100BaseVG ANYLAN, 155A TM, 622A TM, NTSC/PAL Component or Compositive Video, AES/EB, Ugital Audio, AES51, RS-422, Noisy Environments, RJ-45 Compatible, EtherNet/IP Physical Characteristics (Overall) Conductor AWG: F Pairs AWG Stranding Conductor Material 2 24 Solid BC - Bare Copper Total Number of Conductors: 4 Insulation Insulation Material: PO-Polyolefin Outer Shield Outer Shield Material: Outer Shield Material: Outer Shield Material: Outer Shield Trate Name Type Outer Shield Material 24 7x32 TC - Tinned Copper Outer Shield Drain Wire Coductor Material 24 7x32 TC - Tinned Copper Outer Shield Material: Outer Jacket Materia: Outer Jacket Materia: O	General Description:	
Suitable Applications: Industrial Ethernet, Harsh Environments, 200MHz Category 5e, M-12 Compatible, 100Base TX, 100Baser XX, 100Baser VX, NUTXAN, 155A TM, 622A TM, NTSCIPAL Component or Composite Video, AES/EDU Digital Audio, AES51, RS-422, Noisy Environments, RJ-45 Compatible, EtherNet/IP Physical Characteristics (Overall) Conductor Conductor AWG: If Pairs AWG Stranding Conductor Material 24 Solid Total Number of Conductors: 4 Insulation Insulation Insulation Material PO - Polyolefin Coverage (%) Outer Shield Monterial: Outer Shield Tape Auminum Foil-Polyester Tape 100 Outer Shield Information Material: Coverage (%) Bedrolifs Tape Auminum Foil-Polyester Tape 100 Outer Shield Information Material: Coverage (%) Bedrolifs Tape Auminum Foil-Polyester Tape 100 Outer Shield Information Batterial: Coverage (%) Outer Jacket Material: Coverage (%) Outer Jacket Material: Stranding Drain Wire Conductor Material Outer Jacket Material: Coverage (%) Outer Jacket Material: Stranding Drain Wire Augeria Outer Jacket Material: Coverage Cover Polymyrin Chindie Outer Jacket Material: Stranding Polymer Polymeria	coverage) with drain wire, .030" industrial grad	
Compatible, 100Base US ANVLAN, 155A TM, 622A TM, NTSC/PAL Component or Composite Video, AESS1, RS-422, Noisy Environments, RJ-45 Compatible, EtherNet/IP Physical Characteristics (Overall) Conductor AWC: # Pairs AWG Stranding Conductor Material 2	Usage (Overall)	
Conductor AWG: # Pairs AWG Stranding Conductor Material 2 24 Solid BC - Bare Copper Total Number of Conductors: 4 Insulation Insulation Insulation Material: Insulation Material: Insulation Material: Insulation Material: Outer Shield Outer Shield Material: Outer Shield Drain Wire Outer Shield Material Coverage (%) Beldfoli® Tape [Aluminum Foil-Polyester Tape 100 Outer Shield Drain Wire AWG: AWG Stranding Drain Wire Conductor Material 24 Tx32 TC - Tinned Copper Outer Jacket Outer Jacket Material: Outer Jacket Material: Euler Jacket Material: Outer Jacket Material: 5.969 mm Pair Pair Pair Pair Pair Color Code Chart: 5.969 mm Number Color 1 1 While/Grange Stripe & Orange 2 While/Grange Stripe & Orange 2 While/Grange Stripe & Orange 2 While/Grange Stripe & Orange	Suitable Applications:	Compatible, 100Base TX, 100BaseVG ANYLAN, 155A TM, 622A TM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51,
2 24 Solid BC - Bare Copper Total Number of Conductors: 4 Insulation Material: Insulation Material: Insulation Material: Insulation Material: Insulation Material: Outer Shield Material: Coverage (%) Beldfoll® Tape Aluminum Foil-Polyester Tape 100 Outer Shield Drain Wire AWG: Version Wire Conductor Material 24 7.4 7.4 T.2 T.2 T.2 Version Material: Industrial Grade PVC - Polyeinyl Chloride Outer Jacket Material Outer Jacket Material Outer Jacket Material Industrial Grade PVC - Polyinyl Chloride Sing mm Pair Polor Pair Color Code Chart: Sing mm Industrial Grade Stripe & Grange Industrie & Grange I White/Grange Stripe & Grange I White/Gra	Conductor	
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Overall Nominal Diameter: 5.969 mm Pair Pair Color Code Chart: Number Color 1 1 White/Orange Stripe & Orange 2 White/Green Stripe & Green	Outer Jacket Material: Outer Jacket Material	
Number Color 1 White/Orange Stripe & Orange 2 White/Green Stripe & Green Mechanical Characteristics (Overall)		5.969 mm
	Number Color 1 White/Orange Stripe & Orange	
	Mechanical Characteristics (Overall)	
Storage remperature kange: -40°C 10 +85°C	Storage Temperature Range:	-40°C To +85°C
Installation Temperature Range: -25°C To +75°C	Installation Temperature Range:	-25°C To +75°C

-40°C To +75°C

Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

7933A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable

Bulk Cable Weight:	44.646 Kg/Km
Max. Recommended Pulling Tension:	88.964 N
Min. Bend Radius/Minor Axis:	12.700 mm
Applicable Specifications and Agency Con	
Applicable Standards & Environmental Progra	
NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
EU Directive 2011/65/EU (ROHS II):	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
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Other Specification:	NEMA WC-63.1 Category 5e, UL verified to Category 5e, EtherNet/IP Compliant
Applicable Patents: Country www.belden.com/p	
Flame Test	
UL Flame Test:	UL1666 Riser
CSA Flame Test:	FT4
IEEE Flame Test:	1202
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/m) 49.215	
Maximum Capacitance Unbalance (pF/100 m):	150
Nominal Velocity of Propagation: VP (%) 70	
Maximum Delay: Delay (ns/100 m) 538 @ 100MHz Max. Delay Skow:	
Max. Delay Skew: Delay Skew (ns/100 m) 45	
Maximum Conductor DC Resistance:	



METRIC MEASUREMENT VERSION

7933A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable

DCR @ 20°C (Ohm/100 m) 9.38

0.00

Max. Operating Voltage - UL:

Voltage

300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

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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	23.6	23.0
8	5.8	51.8	48.8	46.0	43.0	25.4	24.5
10	6.5	50.3	47.3	43.0	41.0	26.0	25.0
16	8.2	47.3	44.3	39.0	36.0	26.0	25.0
20	9.3	45.8	42.8	36.5	33.5	26.0	25.0
25	10.4	44.3	41.3	33.9	30.9	25.5	24.3
31.25	11.7	42.9	39.9	31.0	28.0	25.0	23.6
62.5	17.0	38.4	35.4	22.0	19.0	23.5	21.5
100	22.0	35.3	32.3	14.0	11.0	22.5	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:

• •		•		· · · ·
1	100 ± 15	102.5 ± 7.5	63.8	60.8
4	100 ± 15	102.5 ± 7.5	51.7	48.7
8	100 ± 15	101 ± 6	45.7	42.7
10	100 ± 15	101 ± 6	43.8	40.8
16	100 ± 15	101 ± 6	39.7	36.7
20	100 ± 15	101 ± 6	37.7	34.7
25	100 ± 15	101 ± 6	35.8	32.8
31.25	100 ± 15	101 ± 6	33.9	30.9
62.5	100 ± 15	101 ± 6	27.8	24.8
100	100 ± 15	101 ± 6	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: EtherNet IP is a trademark of ControlNet International Ltd. under license by DeviceNet Vendor Assoication, Inc. Operating Temperature subject to length de-rating.

Notes (Cont'd.):

Cable passes -40C Cold Bend per UL 1581. T568A Plug Compatible Part Number: R301603 T568B Plug Compatible Part Number: R301604

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7933A 0101000	1,000 FT	33.000 LB	BLACK	С	2 PR #24 PP FS FRPVC
7933A 0102000	2,000 FT	66.000 LB	BLACK	С	2 PR #24 PP FS FRPVC
7933A 1NH1000	1,000 FT	33.000 LB	TEAL 1NH	С	2 PR #24 PP FS FRPVC

Notes:

C = CRATE REEL PUT-UP.



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