Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



7934A Multi-Conductor - DataTuff® Waterblocked Enhanced Category 5e



For more Information please call

1-800-Belden1



General Description:

24 AWG Bonded-Pairs solid bare copper conductors, polyolefin insulation, polymer gel waterblocked, sun res LLPE jacket. Sequential marking at two foot intervals.

Usage (Overall)

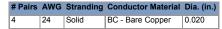
Suitable Applications:

Industrial Ethernet, Harsh Environments, 200MHz Category 5e, Gigabit Ethernet, 100Base TX, 100BaseVG ANYLAN, 155A TM, 622A TM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, RJ-45 Compatible, Burial, Halogen Free

Physical Characteristics (Overall)

Conductor

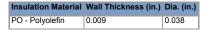
AWG:



Total Number of Conductors:

Insulation

Insulation Material:



Outer Shield

Outer Shield Material:

Outer Shield Material Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)		
LLPE - Linear Low Density Polyethylene	0.020		

Outer Jacket Ripcord:

0.230 in.

8

Overall Cable Overall Nominal Diameter:

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)

Storage Temperature Range:	-40°C To +85°C
Installation Temperature Range:	-25°C To +75°C
Operating Temperature Range:	-40°C To +75°C
Bulk Cable Weight:	30 lbs/1000 ft.
Max. Recommended Pulling Tension:	40 lbs.
Min. Bend Radius/Minor Axis:	1 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

EU Directive 2011/65/EU (ROHS II):	Yes		
Other Standards:	ISO/IEC 11801 ed 2.1 (2008) Class D		
EU CE Mark:	Yes		

Page 1 of 3 01-09-2015

Detailed Specifications & Technical Data





7934A Multi-Conductor - DataTuff® Waterblocked Enhanced Category 5e

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	08/02/2005
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
Telecommunications Standards:	Category 5e - TIA 568.C.2
Other Specification:	NEMA WC-63.1 Category 5e, UL verified to Category 5e, EtherNet/IP Compliant
Applicable Patents:	
Country	
www.belden.com/p	
Suitability	
Suitability - Outdoor:	Yes
Suitability - Burial:	Yes - Telcordia, IEC, ICEA
Sunlight Resistance:	Yes
Oil Resistance:	Yes
Non-halogenated:	Yes

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Plenum/Non-Plenum
Plenum (Y/N):

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m): 150

Nominal Velocity of Propagation:

VP (%) 70

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

Max. Operating Voltage - UL:

Voltage 300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

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	2.000	65.3	62.3	63.0	60.0	20.000	23.0
4	4.100	56.3	53.3	51.0	49.0	23.600	23.0
8	5.800	51.8	48.8	46.0	43.0	25.400	24.5
10	6.500	50.3	47.3	43.0	41.0	26.000	25.0
16	8.200	47.3	44.3	39.0	36.0	26.000	25.0
20	9.300	45.8	42.8	36.5	33.5	26.000	25.0
25	10.400	44.3	41.3	33.9	30.9	25.500	24.3
31.25	11.700	42.9	39.9	31.0	28.0	25.000	23.6
62.5	17.000	38.4	35.4	22.0	19.0	23.500	21.5
100	22.000	35.3	32.3	14.0	11.0	22.500	20.1

No

Page 2 of 3 01-09-2015

Detailed Specifications & Technical Data





7934A Multi-Conductor - DataTuff® Waterblocked Enhanced Category 5e

155	28.100	32.5	29.5	4.4	1.4	15.800	
200	32.000	30.8	27.8	4.0	1.0	15.000	

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
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. Waterblocking Material: Polymer Gel.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7934A 0101000	1,000 FT	24.000 LB	BLACK	С	4 PR #24 PP LLDPE

Notes: C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 03-11-2014

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product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

Page 3 of 3