

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



For more Information
please call

1-800-Belden1



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:

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare Copper

Insulation

Insulation Material:

Insulation Material
PO - Polyolefin

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
LLPE - Linear Low Density Polyethylene

Outer Jacket Ripcord:

No

Overall Cabling

Overall Nominal Diameter:

0.230 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)

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 (Install)/Minor Axis: 1 in.

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

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

Other Standards:	11801 Category 5
EU CE Mark:	Yes
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:	568-B.2 Category 5e
Other Specification:	NEMA WC-63.1 Category 5e, UL verified to Category 5e, EtherNet/IP Compliant

Suitability

Suitability - Outdoor:	Yes
Suitability - Burial:	Yes
Sunlight Resistance:	Yes
Oil Resistance:	No
Non-halogenated:	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): 150

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 (%)

3

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

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
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: U. S. Patents 5606151 and 5734126. EtherNet IP is a trademark of ControlNet International Ltd. under license by DeviceNet Vendor Association, 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	25.000 LB	BLACK	C	4 PR #24 PP LLDPE

Notes:
C = CRATE REEL PUT-UP.

Revision Number: 0 Revision Date: 05-30-2008

© 2008 Belden, Inc
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for

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

determining the applicability of legislation and regulations based on their individual usage of the 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.