**METRIC MEASUREMENT VERSION** 



# 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:

ı	# Pairs AWG			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: 5.842 mm

#### **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:	44.646 Kg/Km
Max. Recommended Pulling Tension:	177.928 N
Min. Bend Radius (Install)/Minor Axis:	25.400 mm

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Applicable Specifications and Agency Compliance (Overall)							
A	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					
	Other Specification:	NEMA WC-63.1 Category 5e, UL verified to Category 5e, EtherNet/IP Compliant					
Sı	itability						
	Suitability - Outdoor:	Yes					
	Suitability - Burial:	Yes - Telcordia, IEC, ICEA					
	Sunlight Resistance:	Yes - UL					
	Oil Resistance:	Yes - UL					
	Non-halogenated:	Yes					

No

150

# **Electrical Characteristics (Overall)**

Nom. Mutual Capacitance:



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

Maximum Capacitance Unbalance (pF/100 m):

**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 (%) 3

# **Electrical Characteristics-Premise (Overall)**

Premise Cable Electrical Table 1:

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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 Assoication, Inc. Operating Temperature subject to length de-rating

Notes (Cont'd.):

Cable passes -40C Cold Bend per UL 1581. Waterblocking Material: Polymer

#### **Related Documents:**

No related documents are available for this product

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7934A 0101000	305 MT	10.886 KG	BLACK	С	4 PR #24 PP LLDPE

C = CRATE REEL PUT-UP.

Revision Number: 0 Revision Date: 02-03-2009

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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.

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