



REPRESENTATIVE IMAGE

Product: [7934A](#)

DataTuff® Cat 5e, 4 Bonded-Pr #24 Sol BC, PO Ins, PE Jkt, OSP BURIAL

Request Sample

Product Description

Industrial Ethernet Cat 5e, 4 Bonded-Pair 24AWG (Solid) Bare Copper, PO Insulation, PE Outer Jacket, Polymer Gel Waterblocked OSP BURIAL

Technical Specifications

Product Overview

Suitable Applications:	burial, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc.
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/resources/patents .

Construction Details

Conductor

AWG	Stranding	Material	Number of Pairs
24	Solid	BC - Bare Copper	4

Insulation

Material	Nom. Insulation Diameter	Color Code
PO - Polyolefin	0.038	White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown
Bonded-Pair:	Yes	
Waterblocking:	Gel Filled	

Outer Jacket Material

Material	Nom. Diameter	Ripcord
PE - Polyethylene	0.23 in	No

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. DCR Unbalance	Max. Capacitance Unbalance	Nom. Mutual Capacitance
9.38 Ohm/1000ft	3%	150 pF/ft	15 pF/ft

Delay

Max. Delay	Max. Delay Skew	Nom. Velocity of Propagation (VP) [%]
538 ns/100m	45 ns/100m	70%

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. SRL (Structural Return Loss)	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1 MHz	2 dB/100m	65.3 dB	62.3 dB	63 dB	60 dB	63.8 dB	60.8 dB	20 dB	23 dB	100 ± 15 Ohm	102.5 ± 7.5 Ohm
4 MHz	4.1 dB/100m	56.3 dB	53.3 dB	51 dB	49 dB	51.7 dB	48.7 dB	23.6 dB	23 dB	100 ± 15 Ohm	102.5 ± 7.5
8 MHz	5.8 dB/100m	51.8 dB	48.8 dB	46 dB	43 dB	45.7 dB	42.7 dB	25.4 dB	24.5 dB	100 ± 15 Ohm	101 ± 6
10 MHz	6.5 dB/100m	50.3 dB	47.3 dB	43 dB	41 dB	43.8 dB	40.8 dB	26 dB	25 dB	100 ± 15 Ohm	101 ± 6
16 MHz	8.2 dB/100m	47.3 dB	44.3 dB	39 dB	36 dB	39.7 dB	36.7 dB	26 dB	25 dB	100 ± 15 Ohm	101 ± 6
20 MHz	9.3 dB/100m	45.8 dB	42.8 dB	36.5 dB	33.5 dB	37.7 dB	34.7 dB	26 dB	25 dB	100 ± 15 Ohm	101 ± 6
25 MHz	10.4 dB/100m	44.3 dB	41.3 dB	33.9 dB	30.9 dB	35.8 dB	32.8 dB	25.5 dB	24.3 dB	100 ± 15 Ohm	101 ± 6
31.25 MHz	11.7 dB/100m	42.9 dB	39.9 dB	31 dB	28 dB	33.9 dB	30.9 dB	25 dB	23.6 dB	100 ± 15 Ohm	101 ± 6

62.5 MHz	17 dB/100m	38.4 dB	35.4 dB	22 dB	19 dB	27.8 dB	24.8 dB	23.5 dB	21.5 dB	100 ± 15 Ohm	101 ± 6
100 MHz	22 dB/100m	35.3 dB	32.3 dB	14 dB	11 dB	23.8 dB	20.8 dB	22.5 dB	20.1 dB	100 ± 15 Ohm	
155 MHz	28.1 dB/100m	32.5 dB	29.5 dB	4.4 dB	1.4 dB	19.9 dB	16.9 dB	15.8 dB		100 ± 25 Ohm	
200 MHz	32 dB/100m	30.8 dB	27.8 dB	4 dB	1 dB	17.7 dB	14.7 dB	15 dB		100 ± 25 Ohm	

Voltage

Non-UL Voltage Rating
300 V

Mechanical Characteristics

Temperature

Operating	Installation	Storage
-40°C To +75°C	-25°C To +75°C	-40°C To +85°C

Bend Radius

Stationary Min.
1 in

Max. Pull Tension:	40 lbs
Bulk Cable Weight:	30 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Outdoor - Direct Burial, Outdoor, Non-Halogenated, Sunlight Resistance, Oil Resistance
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
CPR Euroclass:	Fca
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
7934A 0101000	Black	Reel	1,000 ft	612825191674

Product Notes

Notes:	EtherNet IP is a trademark of ControlNet International Ltd. under license by DeviceNet Vendor Association, Inc. Operating Temperature subject to length de-rating.
--------	--

History

Update and Revision:	Revision Number: 0.363 Revision Date: 09-30-2020
----------------------	--

© 2020 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.