



**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 <a href="https://www.belden.com/patents">https://www.belden.com/patents</a> .

**Construction Details**

Conductor

Element	Size	Stranding	Material	No. of Pairs	No. of Elements
Pair(s)	24 AWG	Solid	BC - Bare Copper	4	4

Insulation

Material	Color Code
PO - Polyolefin	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	Nom. Diameter	Ripcord
PE - Polyethylene	0.230 in (5.84 mm)	No
Overall Cable Diameter (Nominal):	0.230 in (5.84 mm)	

**Electrical Characteristics**

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km (28.6 Ohm/1000ft)	150 pF/ft

Delay

Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
538 ns/100m	45 ns/100m	70%

**High Frequency**

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) [dB]	Max./Min. Input Impedance (unFitted) [Ohm]	Max./Min. Fitted Impedance [Ohm]
1	2.0 dB/100m	65.3	62.3	63	60	63.8	60.8	20	23	100 ± 15	102.5 ± 7.5
4	4.1 dB/100m	56.3	53.3	51	49	51.7	48.7	23.6	23	100 ± 15	102.5 ± 7.5
8	5.8 dB/100m	51.8	48.8	46	43	45.7	42.7	25.4	24.5	100 ± 15	101 ± 6
10	6.5 dB/100m	50.3	47.3	43	41	43.8	40.8	26	25	100 ± 15	101 ± 6
16	8.2 dB/100m	47.3	44.3	39	36	39.7	36.7	26	25	100 ± 15	101 ± 6
20	9.3 dB/100m	45.8	42.8	36.5	33.5	37.7	34.7	26	25	100 ± 15	101 ± 6
25	10.4 dB/100m	44.3	41.3	33.9	30.9	35.8	32.8	25.5	24.3	100 ± 15	101 ± 6

31.25	11.7 dB/100m	42.9	39.9	31	28	33.9	30.9	25	23.6	100 ± 15	101 ± 6
62.5	17.0 dB/100m	38.4	35.4	22	19	27.8	24.8	23.5	21.5	100 ± 15	101 ± 6
100	22.0 dB/100m	35.3	32.3	14	11	23.8	20.8	22.5	20.1	100 ± 15	
155	28.1 dB/100m	32.5	29.5	4.4	1.4	19.9	16.9	15.8		100 ± 25	
200	32 dB/100m	30.8	27.8	4	1	17.7	14.7	15		100 ± 25	

Voltage

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 (25 mm)

Max. Pull Tension:	40 lbs (18 kg)
Bulk Cable Weight:	22 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Outdoor, Outdoor, Non-Halogenated, Sunlight Resistance, Oil Resistance
CPR Compliance:	CPR Euroclass: Fca
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
Third Party Performance Verification:	Category 5e
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
APAC Compliance:	China RoHS II (GB/T 26572-2011)

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.
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History

Update and Revision:	Revision Number: 0.540 Revision Date: 04-29-2024
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Part Numbers

Variants

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

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