



Product: [7937A](#) 

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

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Product Description

Industrial Ethernet Cat 5e, 4 Bonded-Pair 24AWG (Solid) Bare Copper, PO Insulation, Overall Beldfoil® Shield, PO Inner Jacket, PO 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/patents .

Construction Details

Conductor

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

Inner Jacket

Material	Nom. Diameter
PO - Polyolefin	0.230 in (5.84 mm)

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC

Waterblocking: Gel Filled

Outer Jacket

Material	Nom. Diameter	Ripcord
PO - Polyolefin	0.276 in (7.01 mm)	No

Overall Cable Diameter (Nominal): 0.276 in (7.01 mm)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km (28.6 Ohm/1000ft)	330 pF/ft

Delay

Max. Delay Skew	Nom. Velocity of Prop.
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	100 ± 15
4	4.1 dB/100m	56.3	53.3	51	49	51.7	48.7	23	23	100 ± 15	100 ± 15
8	5.8 dB/100m	51.8	48.8	46	43	45.7	42.7	24.5	24.5	100 ± 15	100 ± 15
10	6.5 dB/100m	50.3	47.3	43	41	43.8	40.8	25	25	100 ± 15	100 ± 15
16	8.2 dB/100m	47.3	44.3	39	36	39.7	36.7	25	25	100 ± 15	100 ± 15
20	9.3 dB/100m	45.8	42.8	36.5	33.5	37.7	34.7	25	25	100 ± 15	100 ± 15
25	10.4 dB/100m	44.3	41.3	33.9	30.9	35.8	32.8	24.3	24.3	100 ± 15	100 ± 15
31.25	11.7 dB/100m	42.9	39.9	31	28	33.9	30.9	23.6	23.6	100 ± 15	100 ± 15
62.5	17.0 dB/100m	38.4	35.4	22	19	27.8	24.8	21.5	21.5	100 ± 15	100 ± 15
100	22.0 dB/100m	35.3	32.3	14	11	23.8	20.8	20.1	20.1	100 ± 15	

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.
2.75 in (69.9 mm)

Max. Pull Tension:	40 lbs (18 kg)
Bulk Cable Weight:	33 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Outdoor, Outdoor, Non-Halogenated, Sunlight Resistance, Oil Resistance
CPR Compliance:	CPR Euroclass: Fca
NEMA Compliance:	NEMA WC-63.1
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 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:	Operating temperatures are subject to length de-rating. Cable passes -40°C Cold Bend per UL 1581. Sequential marking at two foot intervals. Fully Water Blocked with polymer gel waterblocking material. Suitable for burial or use in outdoor wet locations. Not recommended for Direct Burial applications without additional crush and impact protection. Additional crush and impact protection would include cable armoring, installation in conduit or installation with over top barriers per Belden Technical Bulletin T/8-6. Cable not guaranteed to meet TIA 568.2 specification for delay above lengths of 90m.
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History

Update and Revision:	Revision Number: 0.683 Revision Date: 09-07-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
7937A 0101000	Black	Reel	1,000 ft	612825191728

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