



Product: [7936A](#)

DataTuff® 5e, 4 Bonded-Pr #24 Sol BC, PO Ins, OS, LSZH Jkt, CMG CM

[Request Sample](#)

Product Description

Industrial Ethernet Cat 5e, 4 Bonded-Pair 24AWG (Solid) Bare Copper, PO Insulation, Overall Beldfoil® Shield, LSZH Outer Jacket, CMG CM

Technical Specifications

Product Overview

Suitable Applications:	noisy environment, shipboard, transportation, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc.
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Construction Details

Conductor

Size	Stranding	Material	Number of Pairs
24	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
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Outer Shield

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

Outer Jacket

Material	Nom. Diameter
PO - Polyolefin	0.265 in (6.73 mm)

Overall Cable Diameter (Nominal):	0.265 in (6.73 mm)
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Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km (28.6 Ohm/1000ft)	160 pF/100m

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 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 dB/100m	38.4	35.4	22	19	27.8	24.8	21.5	21.5	100 ± 15	100 ± 15
100	22 dB/100m	35.3	32.3	14	11	23.8	20.8	20.1	20.1	100 ± 15	
200	32.4 dB/100m		27.8		1		14.7		15	100 ± 25	

Voltage

UL Voltage Rating
300 V (CM), 300 V (CMG)

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
60°C	-10°C To +75°C	+5°C To +75°C	-10°C To +75°C

Bend Radius

Stationary Min.
0.5 in (13 mm)

Max. Pull Tension:	40 lbs (18 kg)
Bulk Cable Weight:	34 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Indoor, Outdoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	CM
CEC / C(UL) Compliance:	CMG
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
Third Party Performance Verification:	UL Verified to Category 5e
ISO/IEC Compliance:	ISO/IEC 11801 Cat 5e
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)

Product Notes

Notes:	US Patent #'s 5, 606, 151; 5, 734, 126. Operating temperatures are subject to length de-rating. Cable passes -10C Cold Bend per UL 1581.
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History

Update and Revision:	Revision Number: 0.451 Revision Date: 04-08-2022
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
7936A 0101000	Black	Reel	1,000 ft	612825191704
7936A 0102000	Black	Reel	2,000 ft	612825191711

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