



**Product:** [7918A](#)

DataTuff® Cat 5e, 4 Pr #24 Sol BC, PO Ins, PVC Jkt, MSHA CMR

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### Product Description

Industrial Ethernet Cat 5e, 4 Pair 24AWG (Solid) Bare Copper, PO Insulation, PVC Outer Jacket, MSHA CMR

### Technical Specifications

#### Product Overview

Suitable Applications:	harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc.
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#### 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

##### Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.220 in (5.59 mm)	Yes

Overall Cable Diameter (Nominal):	0.220 in (5.59 mm)
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#### Electrical Characteristics

##### Electricals

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

##### Delay

Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
510 ns/100m	45 ns/100m	68%

##### 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	

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

UL Voltage Rating
300 V (CMR), 300 V (CMX-Outdoor)

#### Mechanical Characteristics

##### Temperature

UL Temperature	Operating	Installation	Storage
60°C	-40°C To +75°C	-20°C To +75°C	-20°C To +75°C

##### Bend Radius

Stationary Min.
0.5 in (13 mm)

Max. Pull Tension:	35 lbs (16 kg)
Bulk Cable Weight:	23 lbs/1000ft

#### Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1666 Riser, FT4, IEEE 1202 Vertical Tray Flame Test, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CMR, CMX-Outdoor, CMG
CEC / C(UL) Compliance:	CMX-Outdoor;CMG
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
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	P-07-KA060003-MSHA

#### Product Notes

Notes:	Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.
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#### History

Update and Revision:	Revision Number: 0.528 Revision Date: 09-05-2023
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#### Part Numbers

##### Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7918A 01010000	Black			612825191179	C
7918A 0101000	Black	Reel	1,000 ft	612825191162	C
7918A 0102000	Black	Reel	2,000 ft	612825191186	C
7918A 0061000	Blue	Reel	1,000 ft	612825191155	C

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