



Product: [7919A](#)

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

Request Sample

Product Description

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

Technical Specifications

Product Overview

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

Construction Details

Conductor

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

Insulation

Material	Thickness [in.]	Color Code
Polyolefin	0.01	White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown

Bonded-Pair: No

Outer Shield Material

Type	Material	Coverage
Tape	Alum / Poly	100%

Outer Jacket Material

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.265 in	No

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. DCR Unbalance	Max. Capacitance Unbalance	Nom. Mutual Capacitance	Nom. Velocity of Prop.
9.38 Ohm/1000ft	3%	330 pF/ft	15 pF/ft	70%

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	100 ± 15 Ohm
4 MHz	4.1 dB/100m	56.3 dB	53.3 dB	51 dB	49 dB	51.7 dB	48.7 dB	23 dB	23 dB	100 ± 15 Ohm	100 ± 15 Ohm
8 MHz	5.8 dB/100m	51.8 dB	48.8 dB	46 dB	43 dB	45.7 dB	42.7 dB	24.5 dB	24.5 dB	100 ± 15 Ohm	100 ± 15 Ohm
10 MHz	6.5 dB/100m	50.3 dB	47.3 dB	43 dB	41 dB	43.8 dB	40.8 dB	25 dB	25 dB	100 ± 15 Ohm	100 ± 15 Ohm
16 MHz	8.2 dB/100m	47.3 dB	44.3 dB	39 dB	36 dB	39.7 dB	36.7 dB	25 dB	25 dB	100 ± 15 Ohm	100 ± 15 Ohm
20 MHz	9.3 dB/100m	45.8 dB	42.8 dB	36.5 dB	33.5 dB	37.7 dB	34.7 dB	25 dB	25 dB	100 ± 15 Ohm	100 ± 15 Ohm

25 MHz	10.4 dB/100m	44.3 dB	41.3 dB	33.9 dB	30.9 dB	35.8 dB	32.8 dB	24.3 dB	24.3 dB	100 ± 15 Ohm	100 ± 15 Ohm
31.25 MHz	11.7 dB/100m	42.9 dB	39.9 dB	31 dB	28 dB	33.9 dB	30.9 dB	23.6 dB	23.6 dB	100 ± 15 Ohm	100 ± 15 Ohm
62.5 MHz	17 dB/100m	38.4 dB	35.4 dB	22 dB	19 dB	27.8 dB	24.8 dB	21.5 dB	21.5 dB	100 ± 15 Ohm	100 ± 15 Ohm
100 MHz	22 dB/100m	35.3 dB	32.3 dB	14 dB	11 dB	23.8 dB	20.8 dB	20.1 dB	20.1 dB	100 ± 15 Ohm	100 ± 15 Ohm

Voltage

UL Voltage Rating
300 V RMS

Mechanical Characteristics

Temperature

UL Rating	Operating	Installation
60°C	-40°C To +75°C	-25°C To +75°C

Bend Radius

Stationary Min.
1 in

Max. Pull Tension:	25 lbs
Bulk Cable Weight:	30 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Flammability / Fire Resistance:	UL1666 Riser, FT4, 1202, IEC 60332-1-2
NEC / UL Compliance:	CMR, CMX-Outdoor, UL 444
CEC / C(UL) Compliance:	CMR
Data Category:	Category 5e
TIA/EIA Compliance:	NEMA WC-63.1 Category 5e
CPR Euroclass:	Eca
European Directive Compliance:	EU CE Mark, EU Directive 2011/65/EU (ROHS II)
Other Standard Compliance(s):	UL Verified Category 5e

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
7919A 01010000	Black			612825191216
7919A 0101000	Black	Reel	1,000 ft	612825191209
7919A 0102000	Black	Reel	2,000 ft	612825191223
7919A 0105000	Black	Reel	5,000 ft	612825191230
7919A 0061000	Blue	Reel	1,000 ft	612825191193

Product Notes

Notes:	Operating temperatures are subject to length de-rating. Cable passes -40°C Cold Bend per UL 1581. T568A Plug Compatible Part Number: R301603 T568B Plug Compatible Part Number: R301604
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History

Update and Revision:	Revision Number: 0.327 Revision Date: 06-24-2020
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