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

Size	Stranding	Material	No. of Pairs
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

Outer Shield

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

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.265 in (6.73 mm)

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

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km	330 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)	Max./Min. Fitted Impedance
1	2.0 dB/100m	65.3	62.3	63	60	63.8	60.8	20	23	100 ± 15 Ohm	100 ± 15 Ohm
4	4.1 dB/100m	56.3	53.3	51	49	51.7	48.7	23	23	100 ± 15 Ohm	100 ± 15 Ohm
8	5.8 dB/100m	51.8	48.8	46	43	45.7	42.7	24.5	24.5	100 ± 15 Ohm	100 ± 15 Ohm
10	6.5 dB/100m	50.3	47.3	43	41	43.8	40.8	25	25	100 ± 15 Ohm	100 ± 15 Ohm
16	8.2 dB/100m	47.3	44.3	39	36	39.7	36.7	25	25	100 ± 15 Ohm	100 ± 15 Ohm
20	9.3 dB/100m	45.8	42.8	36.5	33.5	37.7	34.7	25	25	100 ± 15 Ohm	100 ± 15 Ohm

25	10.4 dB/100m	44.3	41.3	33.9	30.9	35.8	32.8	24.3	24.3	100 ± 15 Ohm	100 ± 15 Ohm
31.25	11.7 dB/100m	42.9	39.9	31	28	33.9	30.9	23.6	23.6	100 ± 15 Ohm	100 ± 15 Ohm
62.5	17.0 dB/100m	38.4	35.4	22	19	27.8	24.8	21.5	21.5	100 ± 15 Ohm	100 ± 15 Ohm
100	22.0 dB/100m	35.3	32.3	14	11	23.8	20.8	20.1	20.1	100 ± 15 Ohm	100 ± 15 Ohm

Voltage

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

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.
1 in (25 mm)

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	30 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Aerial
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
CEC / C(UL) Compliance:	CMX-Outdoor
NEMA Compliance:	NEMA WC-63.1
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
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-KA060004-MSHA

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

History

Update and Revision:	Revision Number: 0.533 Revision Date: 09-05-2023

Part Numbers

Variants

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