



**Product:** <u>7918A</u> ☑

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

# Request Sample

## **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.

## **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. Diame	eter Ripcord
PVC - Polyvinyl Chloride	0.220 in (5.59	mm) Yes
Overall Cable Diameter	(Nominal):	0.220 in (5.59 r

## **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.
--------	--

## **History**

Update and Revision:	Revision Number: 0.531 Revision Date: 04-29-2024

## **Part Numbers**

## Variants

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

## © 2024 Belden, Inc

## All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Belden Wire & Cable:

7918A 0102000 7918A 0061000 7918A 0101000