



**Product:** [7903A](#) 

DataTuff® Cat 5e, 4 Pr #22 Sol BC, PO Ins, OS, PVC Jkt, PLTC CMR, FT4

## Product Description

Industrial Ethernet Cat 5e, 4 Pair 22AWG (Solid) Bare Copper, PO Insulation, Overall Beldfoil® Shield, PVC Outer Jacket, PLTC CMR, FT4

## Technical Specifications

### Product Overview

Suitable Applications:	power-limited tray, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc.
Patent:	This product has one or more applicable patents. More information on patents can be found at <a href="https://www.belden.com/patents">https://www.belden.com/patents</a> .

### Construction Details

#### Conductor

Element	Size	Stranding	Material	No. of Pairs
Pair(s)	22 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

Bonded-Pair:	Yes
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#### Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	22 AWG (7x30) TC

#### Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.335 in (8.51 mm)	No

Overall Cable Diameter (Nominal):	0.335 in (8.51 mm)
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### Electrical Characteristics

#### Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance
56.5 Ohm/km (17.2 Ohm/1000ft)	17 pF/ft (56 pF/m)	330 pF/100m

#### Delay

Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
510 ns/100m	25 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]	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	100 ± 15	100 ± 15
4	4.1 dB/100m	56.3	53.3	51	49	51.7	48.7	23	100 ± 15	100 ± 15
8	5.8 dB/100m	51.8	48.8	46	43	45.7	42.7	24.5	100 ± 15	100 ± 15
10	6.5 dB/100m	50.3	47.3	43	41	43.8	40.8	25	100 ± 15	100 ± 15
16	8.2 dB/100m	47.3	44.3	39	36	39.7	36.7	25	100 ± 15	100 ± 15

20	9.3 dB/100m	45.8	42.8	36.5	33.5	37.7	34.7	25	100 ± 15	100 ± 15
25	10.4 dB/100m	44.3	41.3	33.9	30.9	35.8	32.8	24.3	100 ± 15	100 ± 15
31.25	11.7 dB/100m	42.9	39.9	31	28	33.9	30.9	23.6	100 ± 15	100 ± 15
62.5	17.0 dB/100m	38.4	35.4	22	19	27.8	24.8	21.5	100 ± 15	100 ± 15
100	22.0 dB/100m	35.3	32.3	14	11	23.8	20.8	20.1	100 ± 15	
155	28.1 dB/100m	32.5	29.5	4.4	1.4	19.9	16.9	18.8	100 ± 25	
200	32 dB/100m	30.8	27.8	4	1	17.7	14.7	18.0	100 ± 25	
250	36.9 dB/100m	29.3	26.3			15.8	12.8	18	100 ± 25	
300	41.0 dB/100m	28.2	25.1			14.2	11.2	17.3	100 ± 25	
310	41.8 dB/100m	27.9	24.9			13.9	10.9	16.8	100 ± 25	
350	44.9 dB/100m	27.2	24.1			12.9	9.9	16.3	100 ± 25	

Voltage

UL Voltage Rating
300 V RMS (PLTC, CMR, CMX Outdoor), 600 V (AWM)

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.
3.38 in (85.9 mm)

Max. Pull Tension:	40 lbs (18 kg)
Bulk Cable Weight:	43 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1666 Riser
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	CMR, PLTC
AWM Compliance:	AWM 21047
CEC / C(UL) Compliance:	CMR
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
ISO/IEC Compliance:	ISO/IEC 11801 Cat 5e
UK Regulation Compliance:	UKCA Mark

Product Notes

Notes:	Operating temperatures are subject to length de-rating
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History

Update and Revision:	Revision Number: 0.359 Revision Date: 09-07-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
7903A 0103000				612825421924
7903A 0101000	Black	Reel	1,000 ft	612825421917
7903A 0105000	Black	Reel	5,000 ft	612825421931

regulations based on their individual usage of the product.