



Product: [7927A](#) 

DataTuff® Cat 6, 4 Bonded-Pr #23 Sol BC, PO Ins, PVC Jkt, Oil- and Sun-Res CMR

 [Request Sample](#)

Product Description

Industrial Ethernet Cat 6, 4 Bonded-Pair 23AWG (Solid) Bare Copper, PO Insulation, PVC Outer Jacket, Oil- and Sun-Res CMR

Technical Specifications

Product Overview

Suitable Applications:	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 https://www.belden.com/resources/patents .

Construction Details

Conductor

AWG	Stranding	Material	Number of Pairs
23	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
--------------	-----

Outer Jacket Material

Separator Material	Material	Nom. Diameter	Ripcord
Center Member (Patented E-Spline®)	PVC - Polyvinyl Chloride	0.304 in	Yes

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. DCR Unbalance	Max. Capacitance Unbalance	Nom. Mutual Capacitance
8.2 Ohm/100m	3%	65.6 pF/ft	15.5 pF/ft

Delay

Max. Delay	Max. Delay Skew
538 ns/100m	38 ns/100m

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	1.9 dB/100m	82.3 dB	80.3 dB	80.5 dB	78.5 dB	73.8 dB	70.8 dB	20 dB	27 dB	100 ± 12 Ohm	100 ± 15 Ohm
4 MHz	3.6 dB/100m	73.3 dB	71.3 dB	69.7 dB	67.7 dB	61.8 dB	58.8 dB	23 dB	27 dB	100 ± 12 Ohm	100 ± 10.4
8 MHz	5.1 dB/100m	68.8 dB	66.8 dB	63.7 dB	61.7 dB	55.7 dB	52.7 dB	24.5 dB	27 dB	100 ± 12 Ohm	100 ± 8
10 MHz	5.7 dB/100m	67.3 dB	65.3 dB	61.6 dB	59.6 dB	53.8 dB	50.8 dB	25 dB	27 dB	100 ± 12 Ohm	100 ± 7.3
16 MHz	7.2 dB/100m	64.3 dB	62.3 dB	57 dB	55 dB	49.7 dB	46.7 dB	25 dB	27 dB	100 ± 12 Ohm	100 ± 5.7
20 MHz	8.1 dB/100m	62.8 dB	60.8 dB	54.7 dB	52.7 dB	47.8 dB	44.8 dB	25 dB	27 dB	100 ± 12 Ohm	100 ± 5
25 MHz	9.1 dB/100m	61.3 dB	59.3 dB	52.3 dB	50.3 dB	45.8 dB	42.8 dB	25 dB	27 dB	100 ± 15 Ohm	100 ± 5
31.25 MHz	10.2 dB/100m	59.9 dB	57.9 dB	49.7 dB	47.7 dB	43.9 dB	40.9 dB	25 dB	27 dB	100 ± 15 Ohm	100 ± 5
62.5 MHz	14.7 dB/100m	55.4 dB	53.4 dB	40.7 dB	38.7 dB	37.9 dB	34.9 dB	25 dB	27 dB	100 ± 15 Ohm	100 ± 5

100 MHz	18.9 dB/100m	52.3 dB	50.3 dB	33.4 dB	31.4 dB	33.8 dB	30.8 dB	25 dB	27 dB	100 ± 15 Ohm
155 MHz	23.9 dB/100m	49.5 dB	47.5 dB	25.5 dB	23.5 dB	30 dB	27 dB	22.8 dB	24.7 dB	100 ± 15 Ohm
200 MHz	27.5 dB/100m	47.8 dB	45.8 dB	20.3 dB	18.3 dB	27.8 dB	24.8 dB	21.7 dB	23.4 dB	100 ± 15 Ohm
250 MHz	31.2 dB/100m	46.3 dB	44.3 dB	15.2 dB	13.2 dB	25.8 dB	22.8 dB	20.5 dB	22.2 dB	100 ± 20 Ohm
300 MHz	34.5 dB/100m	43.2 dB	41.2 dB	10.6 dB	8.6 dB	24.3 dB	21.3 dB	20.2 dB	21.2 dB	100 ± 20 Ohm
310 MHz	35.2 dB/100m	42.9 dB	40.9 dB	9.8 dB	7.8 dB	24 dB	21 dB	20.1 dB	21.1 dB	100 ± 20 Ohm
350 MHz	37.7 dB/100m	42.2 dB	40.2 dB	6.5 dB	4.5 dB	22.9 dB	19.9 dB	19.8 dB	20.4 dB	100 ± 22 Ohm
400 MHz	40.6 dB/100m	41.3 dB	39.3 dB	2.6 dB	0.6 dB	21.8 dB	18.8 dB	19.5 dB	19.7 dB	100 ± 22 Ohm
450 MHz	43.5 dB/100m	40.5 dB	38.5 dB	2.1 dB	0.1 dB	20.7 dB	17.7 dB	18.9 dB	19.1 dB	100 ± 22 Ohm
460 MHz	44 dB/100m	40.4 dB	38.4 dB	0 dB	0 dB	20.5 dB	17.5 dB	18.8 dB	19 dB	100 ± 22 Ohm
500 MHz	46.2 dB/100m	39.8 dB	37.8 dB			19.8 dB	16.8 dB	18.4 dB	18.5 dB	100 ± 22 Ohm
550 MHz	48.8 dB/100m	39.2 dB	37.2 dB			19 dB	16 dB	18 dB	18 dB	100 ± 22 Ohm
600 MHz	51.4 dB/100m	38.6 dB	36.6 dB			18.2 dB	15.2 dB	17.6 dB	17.6 dB	100 ± 22 Ohm

Voltage

UL Voltage Rating

300 V (CMR)

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.

0.25 in

Max. Pull Tension:	45 lbs
Bulk Cable Weight:	33.5 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Riser, Indoor, Sunlight Resistance, Oil Resistance
Flammability / Fire Resistance:	UL1666 Riser, FT4, FT4, IEC 60332-1-2
NEC / UL Compliance:	800, CMR
CEC / C(UL) Compliance:	CMR
NEMA Compliance:	NEMA WC-63.1
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 6
CPR Euroclass:	Eca
European Directive Compliance:	EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
7927A 0101000	Black	Reel	1,000 ft	612825191445
7927A 0102000	Black	Reel	2,000 ft	612825191452
7927A 0105000	Black	Reel	5,000 ft	612825191469

Product Notes

Notes:	Third party verified to TIA/EIA-568-B.2, Category 6. Operating temperature subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.
--------	--

History

Update and Revision:	Revision Number: 0.354 Revision Date: 07-28-2020
----------------------	--

© 2020 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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Multi-Conductor Cables](#) category:

Click to view products by [Belden](#) manufacturer:

Other Similar products are found below :

[89182-010-1000](#) [89705-008-500](#) [6000FE-877-1000](#) [CS2885-000](#) [M27500-20SP2S23](#) [6300FE-877-U1000](#) [6309UE-877-1000](#) [M3905-BK005](#)
[6502FE 8771000](#) [6541PA-008-U1000](#) [CV6807-000](#) [CW9530-000](#) [CX6543-000](#) [CXA-0066-20-4-9CS2973](#) [CXA-0078-16-1-9CS2405](#) [CXA-](#)
[0078-22-4-9CS2405](#) [CXA-0078-24-4-9CS2405](#) [CXA-0140-16-6/9-9CS2405](#) [CY0660-000](#) [720451-000](#) [752687-000](#) [768146-000](#) [773159-000](#)
[82841-877-5000](#) [83318E-009-500](#) [8348-060-500](#) [83559-002-1000](#) [83653-002-5000](#) [83659-002-1000](#) [83709-002-1000](#) [8404-060-500](#) [8469](#)
[060100](#) [858171-000](#) [8628-060-500](#) [868361-001](#) [8730-060-1000](#) [8737-060-U1000](#) [8747-060-100](#) [8747-060-1000](#) [8769-060-1000](#) [8775-060-](#)
[500](#) [8780-060-1000](#) [8782-001-U1000](#) [88444-002-1000](#) [9159-060-500](#) [939870-000](#) [9423 060U500](#) [9444 060U1000](#) [9497 0001000](#) [9515-060-](#)
[1000](#)