

Part Number: 7932A

DataTuff® 5e, 2 Bonded-Pr #24 Sol BC, PO Ins, PVC Jkt, CMR SUN RES OIL RES

Request Sample

Product Description

Industrial Ethernet Cat 5e, 2 Bonded-Pair 24AWG (Solid) Bare Copper, PO Insulation, PVC Outer Jacket, CMR SUN RES OIL RES

Technical Specifications

Product Overview

Suitable Applications:	Industrial Ethernet Cable, Harsh Environments, 200MHz Category 5e, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, RJ-45 Compatible, M-12 Compatible

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
24	Solid	BC - Bare Copper	0.02 in	2

Conductor Count:	4
Total Number of Pairs:	2

Insulation

Material	Nominal Diameter	Nominal Wall Thickness
PO - Polyolefin	0.035 in	0.009 in

Bonded-Pair:	Yes

Color Chart

Number	Color
1	White/Orange Stripe & Orange
2	White/Green Stripe & Green

Outer Shield Material

Material
Unshielded

Outer Jacket Material

Material	Nominal Diameter	Ripcord
Industrial Grade PVC - Polyvinyl Chloride	0.207 in	Yes

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
26 Ohm/1000ft	3 %

Capacitance

Max. Capacitance Unbalance	Nom.Mutual Capacitance
90 pF/100m	15 pF/ft

Delay

Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]

510 ns/100m	25 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]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1 MHz	2 dB/100m	65.3 dB	65.3 dB	63.3 dB	63.3 dB	63.8 dB	60.8 dB	20 dB	100 ± 12 Ohm	95-110 Ohm
4 MHz	4 dB/100m	56.3 dB	56.3 dB	52.3 dB	52.3 dB	51.7 dB	48.7 dB	23.6 dB	100 ± 12 Ohm	95-110
8 MHz	5.7 dB/100m	51.8 dB	51.8 dB	46.1 dB	46.1 dB	45.7 dB	42.7 dB	25.4 dB	100 ± 12 Ohm	95-107
10 MHz	6.4 dB/100m	50.3 dB	50.3 dB	43.9 dB	43.9 dB	43.8 dB	40.8 dB	26 dB	100 ± 12 Ohm	95-107
16 MHz	8.1 dB/100m	47.3 dB	47.3 dB	39.1 dB	39.1 dB	39.7 dB	36.7 dB	26 dB	100 ± 12 Ohm	95-107
20 MHz	9.2 dB/100m	45.8 dB	45.8 dB	35.2 dB	35.2 dB	37.7 dB	34.7 dB	26 dB	100 ± 12 Ohm	95-107
25 MHz	10.3 dB/100m	44.3 dB	44.3 dB	34.1 dB	34.1 dB	35.8 dB	32.8 dB	25.5 dB	100 ± 15 Ohm	95-107
31.25 MHz	11.6 dB/100m	42.9 dB	42.9 dB	31.3 dB	31.3 dB	33.9 dB	30.9 dB	25 dB	100 ± 15 Ohm	95-107
62.5 MHz	16.8 dB/100m	38.4 dB	38.4 dB	21.6 dB	21.6 dB	27.8 dB	24.8 dB	23.5 dB	100 ± 15 Ohm	95-107
100 MHz	21.7 dB/100m	35.3 dB	35.3 dB	17.1 dB	17.1 dB	23.8 dB	20.8 dB	22.5 dB	100 ± 15 Ohm	
155 MHz	27.7 dB/100m	32.5 dB	32.5 dB	4.7 dB	4.7 dB	19.9 dB	16.9 dB	19 dB	100 ± 18 Ohm	
200 MHz	32 dB/100m	30.8 dB	30.8 dB	3 dB	3 dB	17.7 dB	14.7 dB	19 dB	100 ± 20 Ohm	
250 MHz	36.4 dB/100m	29.3 dB	29.3 dB	0 dB	0 dB	15.8 dB	12.8 dB	18 dB	100 ± 20 Ohm	
300 MHz	40.5 dB/100m	28.2 dB	28.2 dB	0 dB	0 dB	14.2 dB	11.2 dB	18 dB	100 ± 20 Ohm	
310 MHz	41.3 dB/100m	27.9 dB	27.9 dB			13.9 dB	10.9 dB	18 dB	100 ± 20 Ohm	
350 MHz	44.3 dB/100m	27.2 dB	27.2 dB			12.9 dB	9.9 dB	17 dB	100 ± 22 Ohm	

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Installation Temp Range:	-25°C To +75°C
UL Temp Rating:	60°C
Storage Temp Range:	-40°C To +85°C
Operating Temp Range:	-40°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	18 lbs/1000ft
Max Recommended Pulling Tension:	20 lbs
Min Bend Radius/Minor Axis:	0.25 in

Standards

NEC/(UL) Specification:	CMR, UL 444
CEC/C(UL) Specification:	CMR
ISO/IEC Compliance:	ISO/IEC 11801 Cat 5e
CPR Euroclass:	Eca
Data Category:	Category 5e
Telecommunications Standards:	TIA-568.C.2 Cat 5e
Other Specification:	EtherNet/IP™
Third Party Performance Verification:	UL Verifieid Cat 5e

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-04
CA Prop 65 (CJ for Wire & Cable):	Yes

MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Oil Resistance:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Riser
CSA Flammability:	FT4
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	UPC	Length	Footnote
7932A 0101000	Black	612825191612	1,000 ft	C
7932A 0021000	Red	612825191605	1,000 ft	C
7932A 1NH1000	Teal	612825191636	1,000 ft	C

Footnote:	C - CRATE REEL PUT-UP.
Patent:	https://www.belden.com/resources/patents

Product Notes

Notes:	US Patent #'s 5, 606, 151; 5, 734, 126. EtherNet IP is a trademark of ControlNet International, Ltd. under license by Open DeviceNet Vendor Association, Inc. Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.

History

Update and Revision:	Revision Number: 0.297 Revision Date: 10-03-2019

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