



Part Number: 7939A

DataTuff® Cat 5e, (4 pr) 24 AWG (7x32) BC, PO/PVC, Foil Shld, CMR, CMX



Product Description

Four Cat 5e 24 AWG Bonded Pairs stranded (7x32) bare copper conductors, polyolefin insulation, Beldfoil® shield (100% coverage), industrial grade oil- and UV-resistant PVC jacket.

Technical Specifications

Product Overview

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

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	7x32	BC - Bare Copper	4

Conductor Count:	8
Total Number of Pairs:	4
AWG Size:	24

Insulation

Material
PO - Polyolefin

Color Chart

Number	Color
1	White/Blue Stripe and Blue
2	White/Orange Stripe and Orange
3	White/Green Stripe and Green
4	White/Brown Stripe and Brown

Outer Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Aluminum Foil-Polyester Tape	Beldfoil®	100 %	TC - Tinned Copper	24	7x32 mm

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness	Ripcord	Separator Material
Industrial Grade PVC - Polyvinyl Chloride	0.295 in	0.03 in	No	Polyester

Electrical Characteristics

Conductor DCR

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

Capacitance

Max. Capacitance Unbalance	Nom.Mutual Capacitance
330 pF/ft	15 pF/ft

Delay

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

510 ns/100m	45 ns/100m	69 %	12 ns/ft
-------------	------------	------	----------

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)
1 MHz	2.5 dB/100m	65.3 dB	62.3 dB	62.8 dB	59.8 dB	63.8 dB	60.8 dB	20 dB	23 dB	100 ± 15 Ohm
4 MHz	4.9 dB/100m	56.3 dB	53.3 dB	51.4 dB	48.4 dB	51.7 dB	48.7 dB	23 dB	23 dB	100 ± 15 Ohm
8 MHz	6.9 dB/100m	51.8 dB	48.8 dB	44.9 dB	41.9 dB	45.7 dB	42.7 dB	24.5 dB	24.5 dB	100 ± 15 Ohm
10 MHz	7.8 dB/100m	50.3 dB	47.3 dB	42.5 dB	39.5 dB	43.8 dB	40.8 dB	25 dB	25 dB	100 ± 15 Ohm
16 MHz	9.9 dB/100m	47.3 dB	44.3 dB	37.4 dB	34.4 dB	39.7 dB	36.7 dB	25 dB	25 dB	100 ± 15 Ohm
20 MHz	11.1 dB/100m	45.8 dB	42.8 dB	34.7 dB	31.7 dB	37.7 dB	34.7 dB	25 dB	25 dB	100 ± 15 Ohm
25 MHz	12.5 dB/100m	44.3 dB	41.3 dB	21.8 dB	28.8 dB	35.8 dB	32.8 dB	24.3 dB	24.3 dB	100 ± 15 Ohm
31.25 MHz	14.1 dB/100m	42.9 dB	39.9 dB	28.8 dB	25.8 dB	33.9 dB	30.9 dB	23.6 dB	23.6 dB	100 ± 15 Ohm
62.5 MHz	20.4 dB/100m	38.4 dB	35.4 dB	18 dB	15 dB	27.8 dB	24.8 dB	21.5 dB	21.5 dB	100 ± 15 Ohm
100 MHz	26.4 dB/100m	35.3 dB	32.3 dB	8.9 dB	5.9 dB	23.8 dB	20.8 dB	20.1 dB	20.1 dB	100 ± 15 Ohm

Voltage

UL Voltage Rating
300V RMS

Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	35 lbs/1000ft
Max Recommended Pulling Tension:	40 lbs
Min Bend Radius/Minor Axis:	0.6 in

Standards

NEC/(UL) Specification:	CMR. CMX-OUTDOOR, UL 444
CEC/C(UL) Specification:	CMG
ISO/IEC Compliance:	ISO/IEC 11801 Cat 5e Patch
CPR Euroclass:	Eca
Data Category:	Category 5e
ANSI Compliance:	ICEA 661
Telecommunications Standards:	TIA-568.C.2 Category 5e Patch, NEMA WC-63.1

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

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Riser
CSA Flammability:	FT4

Part Number

Plenum (Y/N):	No
---------------	----

Variants

Item #	Color	Footnote
7939A 0101000	BLACK	C
7939A 0102000	BLACK	C
7939A 0061000	BLUE	C
7939A 0081000	GRAY	C
7939A 0021000	RED	C
7939A 1NH1000	TEAL	C

Footnote:	C - CRATE REEL PUT-UP.
Patent:	http://www.belden.com/p

Product Notes

Notes:	Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.
--------	--------------------------------------------------------------------------------------------------

© 2018 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 EU RoHS(Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be instock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.