

Part Number: 9903

Transceiver 10BASE5, #28-3pr, #24-1c, PO, Isolated Shields, PVC Jkt, CMG

Product Description

IEEE 802.3 Ethernet Transceiver 10BASE5, 28 and 24 AWG stranded tinned copper conductors, polypropylene insulation, twisted pairs, overall polyester isolation tape + Duofoil® + tinned copper braid shield (92% coverage), drain wire, light gray PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	IEEE 802.3 Transceiver Cable

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
28	7x36	TC - Tinned Copper	3
24	7x32	TC - Tinned Copper	1

Conductor Count:	8
Conductor Size:	28 AWG

Insulation

Element	Material	Nominal Wall Thickness
28	PP - Polypropylene	0.009 in
24	PP - Polypropylene	0.01 in

Color Chart

Number	Color
78 Ohm	Gray & White
78 Ohm	Yellow & Orange
78 Ohm	Blue & Green
Power	Black & Red

Inner 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

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Duofoil®	100 %
Braid	2	TC - Tinned Copper		90 %

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness	Separator Material
PVC - Polyvinyl Chloride	0.25 in	0.033 in	Polyester Tape

Electrical Characteristics

Conductor DCR

Element	Nominal Conductor DCR	Nominal Outer Shield DCR

28 AWG	65 Ohm/1000ft	2.9 Ohm/1000ft
24 AWG	24 Ohm/1000ft	

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
19.7 pF/ft	34.8 pF/ft

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
78 Ohm	± 5 Ohm

Delay

Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
66 ns/100m	1.54 ns/ft	66 %

Current

Max. Recommended Current [A]
Per conductor @ 25°C: .875 A

Voltage

UL Description	UL Voltage Rating
UL AWM Style 2919	30 V RMS (UL AWM Style 2919)
CMG	300 V RMS (CMG)

Temperature Range

UL Temp Rating:	80°C (UL AWM Style 2919)
Operating Temp Range:	-20°C To +80°C

Mechanical Characteristics

Bulk Cable Weight:	39 lbs/1000ft
Max Recommended Pulling Tension:	68 lbs
Min Bend Radius/Minor Axis:	2.5 in
Min Bend Radius/Installation:	20 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CMG
CEC/C(UL) Specification:	CMG
UL AWM Style:	2919 (30 V 80°C)
CPR Euroclass:	Eca
IEEE Specification:	802.3

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Flammability, LS0H, Toxicity Testing

CSA Flammability:	FT4
UL voltage rating:	30 V RMS (UL AWM Style 2919)

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	Footnote
9903 E4X1000	Gray, Light Dec	C
9903 E4X500	Gray, Light Dec	

Footnote:	C - CRATE REEL PUT-UP.

Product Notes

Notes:	Polyester separator tape over pairs

© 2019 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.