

Product: [9902](#)

Transceiver 10BASE5, #20-5pr, FPO, Isolated Shields, PVC Jkt, CM
Product Description

IEEE 802.3 Ethernet Transceiver 10BASE5, 20 AWG stranded (7x28) tinned copper conductors, Datalene® insulation, twisted pairs, overall polyester isolation tape + Duofoil® + tinned copper braid shield (95% coverage), drain wire, light gray PVC jacket.

Technical Specifications
Physical Characteristics (Overall)
Conductor

AWG	Stranding	Material	No. of Pairs
20	7x28	TC - Tinned Copper	5

Conductor Count:

10

Insulation

Material	Material Trade Name	Nominal Wall Thickness
PE - Polyethylene (Foam)	Datalene®	0.02 in

Color Chart

Number	Color
1 (78 Ohm)	Gray & White
2 (78 Ohm)	Yellow & Orange
3 (78 Ohm)	Blue & Green
4 (78 Ohm)	Red & Brown
5 (Power)	Red & Black

Inner Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Alum / Poly	Beldfoil®	100%	TC - Tinned Copper	20	7x28

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly / Alum	Duofoil®	100%
Braid	2	Tinned Copper (TC)		95%

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness	Separator Material
PVC - Polyvinyl Chloride	0.495 in	0.04 in	Polyester Tape

Electrical Characteristics
Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
10.5 Ohm/1000ft	1.65 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
---	---

16.7 pF/ft

29.5 pF/ft

Impedance**Nominal Characteristic Impedance**

78 Ohm

Delay

Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
78 ns/100m	1.3 ns/ft	78%

Current**Max. Recommended Current [A]**

2.1 Amps per Conductor at 25°C

Voltage

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

Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	138 lbs/1000ft
Max. Pull Tension:	240 lbs
Min Bend Radius/Minor Axis:	5 in

Standards

NEC/(UL) Compliance:	CL2, CM
CEC/C(UL) Compliance:	CM
UL AWM Style Compliance:	2919 (30 V 80°C)
IEEE Compliance:	802.3 10Base5

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	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
MII Order #39 (China RoHS):	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
UL voltage rating:	30 V RMS (UL AWM Style 2919)

Plenum/Non-Plenum

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

Part Number

Variant:	
----------	--

Variants

Item #	Color	UPC
9902 E4X1000	Gray, Light Dec	612825260264
9902 E4X500	Gray, Light Dec	612825260271

Footnote:	C - CRATE REEL PUT-UP.
-----------	------------------------

Product Notes

Notes:	Polyester separator tape over cabled pairs
--------	--

History

Update and Revision:

Revision Number: 0.268 Revision Date: 06-24-2020

© 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 "AS IS" 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.