



**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
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16.7 pF/ft	29.5 pF/ft
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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, LSOH, Toxicity Testing

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

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

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

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

Notes:	Polyester separator tape over cabled pairs
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History

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