# **Detailed Specifications & Technical Data**



## 9903 Multi-Conductor - 10Base 5 Transceiver



For more Information please call

1-800-Belden1



#### **General Description:**

28 and 24 AWG stranded TC conductors, non-plenum, Polypropylene insulation, twisted pairs, overall polyester isolation tape + Duofoil® + TC braid shield (92% coverage), drain wire, light gray PVC jacket.

Usage (Overall)	
Suitable Applications:	IEEE 802.3 Transceiver Cable
Physical Characteristics (Overall)	
Conductor	
AWG:	
# Pairs AWG Stranding Conductor Material	
3 28 7x36 TC - Tinned Copper	
1 24 7x32 TC - Tinned Copper	
Total Number of Conductors:	8
Insulation	
Insulation Material:	
Insulation Material Wall Thickness (in.) AWG	
PP - Polypropylene   0.009   28     PP - Polypropylene   0.010   24	
PP - Polypropylene 0.010 24	
Inner Shield	
Inner Shield Material:	
Inner Shield Trade Name Type Inner Shield Material Beldfoil® (Z-Fold®) Tape   Aluminum Foil-Polyeste	Coverage (%) er Tape   100
Inner Shield Drain Wire AWG:	
AWG 24	
Inner Shield Drain Wire Stranding:	7x32
Inner Shield Drain Wire Conductor Material:	TC - Tinned Copper
Outer Shield	
Outer Shield Material: Layer # Outer Shield Trade Name Type Outer Shield	Material Coverage (%)
	il-Polyester Tape-Aluminum Foil 100
2 Braid TC - Tinned C	
Outer Jacket Outer Jacket Material:	
Outer Jacket Material Nom. Wall Thickness (in.)	
PVC - Polyvinyl Chloride 0.033	
Overall Cable	
Overall Cabling Separator Material:	Polyester Tape
Overall Nominal Diameter:	0.250 in.
	0.200 m.
Pair Pair Color Code Chart:	
Number Color	
78 Ohm Gray & White	
78 Ohm Yellow & Orange	
78 Ohm Blue & Green	
Power Pair Black & Red	
Mechanical Characteristics (Overall)	
Operating Temperature Range:	-20°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2919)

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Bulk Cable Weight:	39 lbs/1000 ft.
Max. Recommended Pulling Tension:	68 lbs.
Min. Bend Radius/Minor Axis:	2.500 in.
pplicable Specifications and Agency Compliance	(Overall)
Applicable Standards & Environmental Programs	
NEC/(UL) Specification:	CMG
CEC/C(UL) Specification:	CMG
AWM Specification:	UL Style 2919 (30 V 80°C)
IEEE Specification:	IEEE802.3
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Flame Test	
CSA Flame Test:	FT4
Plenum/Non-Plenum	
Plenum (Y/N):	No
Nom. Capacitance Conductor to Conductor:   Capacitance (pF/ft)   19.7   Nom. Capacitance Cond. to Other Conductor & Shield:   Capacitance (pF/ft)   34.8   Nominal Velocity of Propagation:   VP (%)	
66 Nominal Delay: Delay (ns/ft) 1.54 Nom. Conductor DC Resistance:	
Nominal Delay: Delay (ns/ft) 1.54	
Nominal Delay:   Delay (ns/ft)   1.54   Nom. Conductor DC Resistance:   Description DCR @ 20°C (Ohm/1000 ft)   28 AWG 65   24 AWG 24   Nominal Outer Shield DC Resistance:   DCR @ 20°C (Ohm/1000 ft)   2.9   Max. Operating Voltage - UL:   Voltage Description	

.875 Amps per conductor at 25°C (28 AWG); 1.5 Amps per conductor at 25°C (24 AWG)

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9903 E4X1000	1,000 FT	43.000 LB	GRAY, LIGHT DEC	С	1#24,3#28 SHPR PP SH PVC
9903 E4X500	500 FT	21.500 LB	GRAY, LIGHT DEC		1#24,3#28 SHPR PP SH PVC

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Notes: C = CRATE REEL PUT-UP.

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