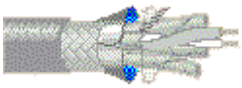
Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

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 (mm)	AWG
PP - Polypropylene	0.229	28
PP - Polypropylene	0.254	24

Inner Shield

Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil® (Z-Fold®)	Tape	Aluminum Foil-Polyester 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 (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	92

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	0.838

Overall Cable

Overall Cabling Separator Material: Polyester Tape

Overall Nominal Diameter: 6.350 mm

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)
Bulk Cable Weight:	58.040 Kg/Km
Max. Recommended Pulling Tension:	302.478 N
Min. Bend Radius/Minor Axis:	63.500 mm

Applicable 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

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)	Tolerance (Ohms)
78	± 5

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
64.6357

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)
114.179

Nominal Velocity of Propagation:

VP (%)
66

Nominal Delay:

Delay (ns/m)
5.05274

Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/km)

28 AWG	213.265
24 AWG	78.744

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
9.5149

Max. Operating Voltage - UL:

Voltage	Description
30 V RMS	UL AWM Style 2919
300 V RMS	CMG

Max. Recommended Current:

Current
.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	305 MT	19.505 KG	GRAY, LIGHT DEC	C	1#24,3#28 SHPR PP SH PVC
9903 E4X500	152 MT	9.752 KG	GRAY, LIGHT DEC		1#24,3#28 SHPR PP SH PVC

Notes:
C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 11-07-2012

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