# **Detailed Specifications & Technical Data**



ENGLISH MEASUREMENT VERSION

## 8103 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

For more Information please call

1-800-Belden1



### **General Description:**

24 AWG stranded (7x32) TC conductors, Datalene® insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (65% coverage), 24 AWG stranded TC drain wire, PVC jacket.

Physical Characteristics (Ov	rerall)
Conductor	
AWG: # Pairs AWG Stranding Condu	uctor Material
	inned Copper
Total Number of Conductors:	6
Insulation	
Insulation Material:	
Insulation Trade Name         Insulation           Datalene®         FPE - Formation	on Material     Wall Thickness (in.)       oam Polyethylene     0.013
Outer Shield Outer Shield Material:	
Layer # Outer Shield Trade Nan	me Type Outer Shield Material Coverage (%)
1 Beldfoil®	Tape Aluminum Foil-Polyester Tape w/Shorting Fold 100
2	Braid TC - Tinned Copper 65
Outer Shield Drain Wire AWG:	
AWG         Stranding         Drain Wire Col           24         7x32         TC - Tinned Col	
Outer Jacket	
Outer Jacket Material:	
Outer Jacket Material         Nom. W           PVC - Polyvinyl Chloride         0.035	Vall Thickness (in.)
Overall Cable	
<b>Overall Nominal Diameter:</b>	0.283 in.
Pair Pair Color Code Chart:	
Number Color	
White/Blue & Blue/White     White/Orange & Orange	
2 White/Orange & Orange 3 White/Green & Green/W	
Mechanical Characteristics (	
Operating Temperature Range:	-30°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2919)
Bulk Cable Weight:	39 lbs/1000 ft.
Max. Recommended Pulling Ten	nsion: 38.500 lbs.
Min. Bend Radius/Minor Axis:	3 in.
	nd Agency Compliance (Overall)
Applicable Standards & Environ	-
NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2919 (30 V 80°C)
EU Directive 2011/65/EU (ROHS	
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes

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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				
UL Flame Test:	UL1685 UL Loading			
Plenum/Non-Plenum				
Plenum (Y/N):	No			
Plenum Number:	88103			
Electrical Characteristics (Overall)				
Nom. Characteristic Impedance:				
Impedance (Ohm) 100				
Nom. Capacitance Conductor to Conductor:				
Capacitance (pF/ft) 12.5				
Nom. Capacitance Cond. to Other Conductor & Shield:				
Capacitance (pF/ft) 22				
Nominal Velocity of Propagation: VP (%) 78				
Nom. Conductor DC Resistance:				
DCR @ 20°C (Ohm/1000 ft) 24				
Nominal Outer Shield DC Resistance: DCR @ 20°C (Ohm/1000 ft)				
3.8				
Max. Operating Voltage - UL: Voltage 30 V RMS (UL AWM Style 2919)				
300 V RMS				
Max. Recommended Current: Current				
1.5 Amps per conductor @ 25°C				
lotes (Overall)				

Notes: Datalene® insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8103 060100	100 FT	4.600 LB	CHROME		3 PR #24 FHDPE SH PVC
8103 0601000	1,000 FT	42.000 LB	CHROME	С	3 PR #24 FHDPE SH PVC
8103 06010000	10,000 FT	430.000 LB	CHROME	CY	3 PR #24 FHDPE SH PVC
8103 060500	500 FT	21.000 LB	CHROME	С	3 PR #24 FHDPE SH PVC
8103 0605000	5,000 FT	210.000 LB	CHROME	С	3 PR #24 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

9 FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN.MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

Revision Number: 2 Revision Date: 08-31-2012

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