Detailed Specifications & Technical Data

METRIC 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 (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
3	24	7x32	TC - Tinned Copper

Total Number of Conductors: 6

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Datalene®	FPE - Foam Polyethylene	0.330

Outer Shield

Outer Shield Material:

Layer # Outer Shield Trade Name		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 Conductor Material
24	7x32	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Oı	uter Jacket Material	Nom. Wall Thickness (mm)
Р١	/C - Polyvinyl Chloride	0.889

Overall Cable

Overall Nominal Diameter: 7.188 mm

Pair

Pair Color Code Chart:

Number	Color
1	White/Blue & Blue/White
2	White/Orange & Orange/White
3	White/Green & Green/White

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +80°C	
UL Temperature Rating:	80°C (UL AWM Style 2919)	
Bulk Cable Weight:	58.040 Kg/Km	
Max. Recommended Pulling Tension:	171.256 N	
Min. Bend Radius/Minor Axis:	76.200 mm	

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App	Applicable Specifications and Agency Compliance (Overall)				
Ар	Applicable Standards & Environmental Programs				
	NEC/(UL) Specification:	CM			
	CEC/C(UL) Specification:	CM			
	AWM Specification:	UL Style 2919 (30 V 80°C)			
	EU Directive 2011/65/EU (ROHS II):	Yes			
	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			
Fla	me Test				
	UL Flame Test:	UL1685 UL Loading			
Ple	num/Non-Plenum				
	Plenum (Y/N):	No			
	Plenum Number:	88103			

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:



Nominal Velocity of Propagation:



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 78.744

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 12.4678

Max. Operating Voltage - UL:

30 V RMS (UL AWM Style 2919) 300 V RMS

Max. Recommended Current:

Current
1.5 Amps per conductor @ 25°C

Notes (Overall)

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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	30 MT	2.087 KG	CHROME		3 PR #24 FHDPE SH PVC
8103 0601000	305 MT	19.051 KG	CHROME	С	3 PR #24 FHDPE SH PVC
8103 06010000	3,048 MT	195.046 KG	CHROME	CY	3 PR #24 FHDPE SH PVC
8103 060500	152 MT	9.525 KG	CHROME	С	3 PR #24 FHDPE SH PVC
8103 0605000	1,524 MT	95.255 KG	CHROME	С	3 PR #24 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

Y = 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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