Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



8106 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		
6	24	7x32	TC - Tinned Copper		

Total Number of Conductors: 12

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		Туре	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: 8.661 mm

Pair

Pair Color Code Chart:

Number	Color	
1	White/Blue & Blue/White	
2	White/Orange & Orange/White	
3	White/Green & Green/White White/Brown & Brown/White	
4		
5	White/Gray & Gray/White	
6	Red/Blue & Blue/Red	

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +80°C	
UL Temperature Rating:	80°C (UL AWM Style 2919)	
Bulk Cable Weight:	80.363 Kg/Km	
Max. Recommended Pulling Tension:	318.046 N	

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Min. Bend Radius/Minor Axis: 88.900 mm

Applicable Specifications and Agency Compliance (Overall)

App

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			
Flame Test				
UL Flame Test:	UL1685 UL Loading			
Plenum/Non-Plenum				
Plenum (Y/N):	No			

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Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

Plenum Number:

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 41.0125

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 72.182

Nominal Velocity of Propagation:

VP (%) 78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 78.744

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 11.4835

Max. Operating Voltage - UL:

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

Max. Recommended Current:

1.5 Amps per conductor @ 25°C

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Notes (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
8106 060100	100 FT	6.300 LB	CHROME		6 PR #24 FHDPE SH PVC
8106 0601000	1,000 FT	58.000 LB	CHROME	С	6 PR #24 FHDPE SH PVC
8106 060500	500 FT	30.500 LB	CHROME	С	6 PR #24 FHDPE SH PVC
8106 0605000	5,000 FT	315.000 LB	CHROME		6 PR #24 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 08-15-2012

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