# **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



# 8108 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
8	24	7x32	TC - Tinned Copper

**Total Number of Conductors:** 

16

#### 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 Ty		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:

	Outer Jacket Material	Nom. Wall Thickness (mm)
ľ	PVC - Polyvinyl Chloride	0.889

### **Overall Cable**

**Overall Nominal Diameter:** 

9.398 mm

#### Pair

#### Pair Color Code Chart:

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

# **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +80°C	
UL Temperature Rating:	80°C (UL AWM Style 2919)	
Bulk Cable Weight:	99.709 Kg/Km	
Max. Recommended Pulling Tension:	415.907 N	
Min. Bend Radius/Minor Axis:	95.250 mm	

## **Applicable Specifications and Agency Compliance (Overall)**

## **Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	СМ

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	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		

#### **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:



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) 8.8587

Max. Operating Voltage - UL:

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

Max. Recommended Current:

Current 1.1 Amps per conductor @ 25°C

#### 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
8108 060100	100 FT	7.600 LB	CHROME		8 PR #24 FHDPE SH PVC
8108 0601000	1,000 FT	72.000 LB	CHROME	С	8 PR #24 FHDPE SH PVC
8108 060500	500 FT	37.500 LB	CHROME	С	8 PR #24 FHDPE SH PVC

C = CRATE REEL PUT-UP.

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

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