# **Detailed Specifications & Technical Data**

#### **METRIC MEASUREMENT VERSION**



## 8138 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/485



For more Information please call

1-800-Belden1



### **General Description:**

28 AWG stranded (7x36) TC conductors, Datalene® insulation, overall Beldfoil® (100% coverage) + TC braid shield (65% coverage), 28 AWG stranded TC drain wire, PVC jacket.

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## **Physical Characteristics (Overall)**

### Conductor

#### AWG:

# Pairs	AWG	Stranding	<b>Conductor Material</b>
8	28	7x36	TC - Tinned Copper

Total Number of Conductors:

#### Insulation

#### **Insulation Material:**

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Datalene®	FPE - Foam Polyethylene	0.381

#### **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
28	7x36	TC - Tinned Copper

#### **Outer Jacket**

### **Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	0.991

#### **Overall Cable**

Overall Nominal Diameter: 8.382 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:	69.945 Kg/Km

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Min. Bend Radius/Minor Axis:	88.900 mm
Applicable Specifications and Agency	y Compliance (Overall)
Applicable Standards & Environmental P	Programs
NEC/(UL) Specification:	CL2
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

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Capacitance Conductor to Conductor:



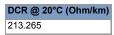
Nom. Capacitance Cond. to Other Conductor & Shield:



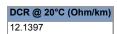
**Nominal Velocity of Propagation:** 



Nom. Conductor DC Resistance:



Nominal Outer Shield DC Resistance:



Max. Operating Voltage - UL:

Voltage	Description		
30 V RMS	UL AWM Style 2919		
150 V RMS	CL2		

Max. Recommended Current:

Current	
0.7 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.

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### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8138 060100	100 FT	5.600 LB	CHROME		8 PR #28 FHDPE SH PVC
8138 0601000	1,000 FT	51.000 LB	CHROME	С	8 PR #28 FHDPE SH PVC
8138 060500	500 FT	27.000 LB	CHROME	С	8 PR #28 FHDPE SH PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 10-01-2012

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