Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



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



For more Information please call

1-800-Belden1



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.

16

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
8	28	7x36	TC - Tinned Copper

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material
Datalene®	FPE - Foam Polyethylene

Outer Shield

Outer Shield Material:

1	Layer # Outer Shield Trade Name		Type	Outer Shield Material	Coverage (%)
ı	1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape w/Shorting Fold	100
1	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
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 0.330 in.

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		

Pair Lay Length & Direction:

Lay Length (in.)	Twists (twist/ft)
0.880	13.600

Mechanical Characteristics (Overall)

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Operating Temperature Range:	-30°C To +80°C	
UL Temperature Rating:	80°C (UL AWM Style 2919)	
Bulk Cable Weight:	58 lbs/1000 ft.	
Min. Bend Radius/Minor Axis:	3.300 in.	

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CL2		
AWM Specification:	UL Style 2919 (30 V 80°C)		
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:

Impedance (Ohm)
120

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
11

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
20

Nominal Velocity of Propagation:

VP (%) 78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 65

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 3.7

Max. Operating Voltage - UL:

Voltage 30 V RMS (UL AWM Style 2919); 150 V RMS

Max. Recommended Current:

Current 0.7 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
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: 1 Revision Date: 04-15-2008

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