



Product: [8138](#) 

RS232/485 Low Cap, #28-8pr, FPO, O/A Foil+Braid, PVC Jkt, CL2, 120Ω

Product Description

Computer EIA RS-232/485 Cable, 28 AWG stranded (7x36) tinned copper conductors, Datalene® insulation, overall Beldfoil® (100% coverage) + tinned copper braid shield (65% coverage), 28 AWG stranded tinned copper drain wire, PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	rs-232 extended distance applications; rs-485 applications; computer communications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, ...); line level audio; panel wiring
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
28	7x36	TC - Tinned Copper	8

Conductor Count:	16
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Insulation

Material	Material Trade Name	Nominal Wall Thickness
PE - Polyethylene (Foam)	Datalene®	0.015 in

Color 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

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Alum / Poly	Beldfoil® (Z-Fold®)	100 %	TC - Tinned Copper	28	7x36
Braid	2	TC - Tinned Copper		65 %			

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.33 in	0.039 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
65 Ohm/1000ft	3.7 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
11 pF/ft	20 pF/ft

Impedance

Nominal Characteristic Impedance
120 Ohm

Delay

Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
78 ns/100m	78 %

Current

Max. Recommended Current [A]
0.7 Amps per conductor @ 25°C A

Voltage

UL Description	UL Voltage Rating
UL AWM Style 2919	30 V RMS (UL AWM Style 2919)
CL2	150 V RMS (CL2)

Temperature Range

UL Temp Rating:	80°C (UL AWM Style 2919)
Operating Temp Range:	-30°C To +80°C

Mechanical Characteristics

Bulk Cable Weight:	47 lbs/1000ft
Min Bend Radius/Minor Axis:	3.5 in

Standards

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

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 UL Loading
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	30 V RMS (UL AWM Style 2919)

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Putup Type	Length	UPC
8138 060100	Chrome	Reel	100 ft	612825195405
8138 060500	Chrome	Reel	500 ft	612825195429
8138 0601000	Chrome	Reel	1,000 ft	612825195412

Footnote:	C - CRATE REEL PUT-UP.
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Product Notes

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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History

Update and Revision:	Revision Number: 0.257 Revision Date: 04-28-2020
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