



Product: [8138FO](#)

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

Product Description

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

Technical Specifications

Product Overview

Suitable Applications:	rs-232 extended distance applications; rs-423 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

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

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Bi-Laminate (Alum+Poly)	Beldfoil® (Z-Fold®)	100%	TC - Tinned Copper	28	7x36

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.31 in	0.04 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
65 Ohm/1000ft	17.7 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 at 25°C

Voltage

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

Temperature Range

Operating Temperature Range:	-30°C To +80°C
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Mechanical Characteristics

Bulk Cable Weight:	37 lbs/1000ft
Min. Bend Radius/Minor Axis:	3.25 in

Standards

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

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 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 UL Loading
UL voltage rating:	30 V RMS (UL AWM Style 2919)

Plenum/Non-Plenum

Plenum (Y/N):	No
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Related Part Numbers

Variants

Item #	Color	UPC
8138FO 0601000	Chrome	612825195436

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: 0.341 Revision Date: 02-03-2025
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