



**Product:** [8138](#)

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

### Product Description

Computer EIA RS-232/485 Cable, 8-Pair, 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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#### Construction Details

##### Conductor

Element	Number of Element	Size	Stranding	Material
Pair(s)	8	28 AWG	7x36	TC - Tinned Copper

##### Insulation

Element	Material	Nom. Thickness	Color Code
Pair(s)	PE - Polyethylene (Foam)	0.0145 in (0.368 mm)	White/Blue Stripe & Blue/White Stripe, White/Orange Stripe & Orange/White Stripe, White/Green Stripe & Green/White Stripe, White/Brown Stripe & Brown/White Stripe, White/Gray Stripe & Gray/White Stripe, Red/Blue Stripe & Blue/Red Stripe, Red/Orange Stripe & Orange/Red Stripe, Red/Green Stripe & Green/Red Stripe

##### Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	28 AWG (7x36) TC
Braid	Tinned Copper (TC)	65%	

##### Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.039 in (0.99 mm)	0.330 in (8.38 mm)

Overall Cable Diameter (Nominal): 0.330 in (8.38 mm)

#### Electrical Characteristics

##### Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Pair(s)	65 Ohm/1000ft (210 Ohm/km)	11 pF/ft (36 pF/m)	20 pF/ft (66 pF/m)	120 Ohm	78%	0.7 Amps per Conductor at 25°C

##### Voltage

<b>UL Voltage Rating</b>
30 V (UL AWM 2919)

#### Mechanical Characteristics

##### Temperature

<b>UL Temperature</b>	<b>Operating</b>
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80°C (UL AWM 2919) -30°C to +80°C

Bulk Cable Weight: 47 lbs/1000ft (70 kg/km)

## Standards and Compliance

Flammability / Reaction to Fire:	UL 1685 UL Loading, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	CL2
AWM Compliance:	AWM 2919
European Directive Compliance:	EU CE Mark, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

## 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.

## History

Update and Revision: Revision Number: 0.324 Revision Date: 05-05-2023

## Part Numbers

### 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

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