



**Product:** [8142FO](#)

RS232/485 Low Cap, #28-12.5pr, 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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### Construction Details

#### Conductor

Element	Number of Element	Size	Stranding	Material
Pair(s)	12	28 AWG	7x36	TC - Tinned Copper
Conductor(s)	1	28 AWG	7x36	TC - Tinned Copper

#### Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	PE - Polyethylene (Foam)	0.032 in (0.81 mm)	0.077 in (2.0 mm)	White/Blue & Blue/White, White/Orange & Orange/White, White/Green & Green/White, White/Brown & Brown/White, White/Gray & Gray/White, Red/Blue & Blue/Red, Red/Orange & Orange/Red, Red/Green & Green/Red, Red/Brown & Brown/Red, Red/Gray & Gray/Red, Black/Blue & Blue/Black, Black/Orange & Orange/Black, Gray
Conductor(s)		0.014 in (0.36 mm)	0.044 in (1.1 mm)	Gray

#### Outer Shield

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

#### Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.035 in (0.89 mm)	0.385 in	Yes

Overall Cable Diameter (Nominal): 0.385 in

### 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)	73.5 Ohm/1000ft	11 pF/ft (36 pF/m)	20 pF/ft (66 pF/m)	120 Ohm	78%	0.5 Amps per Conductor at 30°C
Conductor(s)	72.1 Ohm/1000ft (237 Ohm/km)					1.6 Amps per Conductor at 30°C

#### Voltage

UL Voltage Rating
30 V (AWM 2919), 300 V (CL2)

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-20°C to +60°C

Bend Radius

Stationary Min.	Installation Min.
3.85 in (97.8 mm)	3.85 in

Max. Pull Tension:	54.6 lbs (24.8 kg)
Bulk Cable Weight:	47 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Indoor
Flammability / Reaction to Fire:	UL1685 UL Loading
NEC / UL Compliance:	Article 725, CL2
AWM Compliance:	AWM 2919
European Directive Compliance:	EU CE Mark, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
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.
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History

Update and Revision:	Revision Number: 0.345 Revision Date: 05-05-2023
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Part Numbers

Variants

Item #	Color	UPC
8142FO 0601000	Chrome	612825195467
8142FO 060500	Chrome	612825195474

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