



**Product: 8148** ☑

RS232/485 Low Cap, #28-18pr, FPE, O/A Foil+Braid, PVC Jkt, CL2, 120Ω

# **Product Description**

Computer EIA RS-232/485 Cable, 18-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

#### **Construction Details**

#### Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	18	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, Red/Brown Stripe & Brown/Red Stripe, Red/Brown Stripe & Blue/Black Stripe, Black/Orange Stripe & Orange/Black Stripe, Black/Green Stripe & Green/Black Stripe, Stripe & Green/Black Stripe, Stripe & Green/Stripe & Green/Stri	

## Outer Shield

Shield	I 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	0.045 in (1.1 mm)	0.467 in (11.9 mm)
Ī	Overall Cable Diameter (	Nominal): 0.467	' in (11.9 mm)

# **Electrical Characteristics**

# Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	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%	0.6 Amps per Conductor at 25°C

## Voltage

UL Voltage Rating
30 V (UL AWM 2919)

## **Mechanical Characteristics**

### Temperature

UL Temperature	Operating	
80°C (UL AWM 2919)	-30°C to +80°C	

Bulk Cable Weight: 85 lbs/1000ft (130 kg/km)

#### **Standards and Compliance**

Flammability / Reaction to Fire:	UL1685 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**

No	tes:	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: 0.331 Revision Date: 02-03-2025

#### **Part Numbers**

#### Variants

Item #	Color	Putup Type	Length	UPC	Footnote
8148 060500	Chrome	Reel	500 ft	612825195498	С
8148 0601000	Chrome	Reel	1,000 ft	612825195481	С

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