

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/Gray Stripe & Gray/Red Stripe, Black/Blue Stripe & Blue/Black Stripe, Black/Orange Stripe & Orange/Black Stripe, Black/Green Stripe & Green/Black Stripe, Black/Brown Stripe & Brown/Black Stripe, Black/Gray Stripe & Gray/Black Stripe, Yellow/Blue Stripe & Blue/Yellow Stripe, Yellow/Orange Stripe & Orange/Yellow Stripe, Yellow/Green Stripe & Green/Yellow 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	0.045 in (1.1 mm)	0.467 in (11.9 mm)

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 25ºC

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

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: 0.330 Revision Date: 12-22-2023

Part Numbers

Variants

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

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