



Product: [123106A](#)

RS-485, 1 Pr, 22AWG, Str TC, PE Ins, with OS, 1C 22AWG Str, PVC Ins, OA TC Brd, PVC Jkt, AIA, PVC Jkt, CM, PLTC, Sun Res

Product Description

RS-485, 120 Ohm, 1 pair 22AWG (7x30) tinned copper Datalene® insulation, with Foil Shield, 1 Conductor 22AWG (7x30) Tinned Copper, PVC Insulated, Overall 65% Tinned Copper Braid, PVC jacket, Aluminum Interlock Armor, PVC Jacket, CM, PLTC, SUN RES

Technical Specifications

Product Overview

Suitable Applications:	exposure to rodent, crush, or cut through force, burial, serial communication (RS-485 standard) comprising of PLCs, VFDs, HMIs, motors, RTU, SCADA, etc. within noisy environments over long distance, outdoor such as solar, lighting, etc.
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Construction Details

Conductor

Element	Number of Element	Size	Stranding	Material
Pair(s)	1	22 AWG	7x30	TC - Tinned Copper
Conductor(s)	1	22 AWG	7x30	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Color Code	Notes
Pair(s)	PE - Polyethylene (Foam)	0.033 in (0.84 mm)	White/Orange Stripe & Orange/White Stripe	HDPE
Conductor(s)	PVC - Polyvinyl Chloride	0.017 in (0.43 mm)	Blue/White Stripe	

Inner Shield

Element	Shield Type	Material	Coverage	Notes
Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%	Single conductor is not under tape

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	22 AWG (7x30) TC
Braid	Tinned Copper (TC)	65%	

Inner Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.300 in (7.62 mm)

Armor

Armor Type & Material
AIA - Aluminum Interlock Armor

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.045 in (1.1 mm)	0.593 in (15.1 mm)

Overall Cable Diameter (Nominal):	0.593 in (15.1 mm)
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Pair(s)	14.7 Ohm/1000ft (48.2 Ohm/km)	11 pF/ft (36 pF/m)	120 Ohm	78%	2.7 Amps per Conductor at 25°C
Conductor(s)	14.7 Ohm/1000ft (48.2 Ohm/km)				

Nom. Outer Shield DCR: 2.8 Ohm/1000ft (9.2 Ohm/km)

High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss (Attenuation)
Pair(s)	1	0.5 dB/100ft

Voltage

UL Voltage Rating

300 V (CM, PLTC)

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-40°C to +60°C

Table Notes: -40C

Bend Radius

Stationary Min.	Installation Min.
7.1 in (180 mm)	7.1 in

Max. Pull Tension: 200 lbs (91 kg)

Bulk Cable Weight: 150 lbs/1000ft (220 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, 1202
NEC / UL Compliance:	Article 725, Article 800
CEC / C(UL) Compliance:	CMG HLBCD
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)

History

Update and Revision: Revision Number: 0.74 Revision Date: 05-05-2023

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