



Product: [123107A](#)

RS485, 2 Pr #22 Str TC, PE Ins, OS+TC Brd, PVC Jkt, AIA Armor, PVC Jkt, CM, PLTC

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### Product Description

RS-485, 2 Pair 22AWG (7x30) Tinned Copper, PE Insulation, Overall Beldfoil®+Tinned Copper Braid(65%) Shield, PVC Inner Jacket, Aluminum Interlock Armor, PVC Outer Jacket, CM, PLTC

### 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	No. of Elements	Size	Stranding	Material
Pair(s)	2	22 AWG	7x30	TC - Tinned Copper

##### Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code	Notes
Pair(s)	PE - Polyethylene (Foam)	0.025 in (0.64 mm)	0.079 in (2.0 mm)	White/Blue Stripe & Blue/White Stripe, White/Orange Stripe & Orange/White Stripe	HDPE

##### 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. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.053 in (1.3 mm)	0.350 in (8.89 mm)

##### Armor

Armor Type & Material	Armor Thickness	Armor Material Diameter
AIA - Aluminum Interlock Armor	0.025 in (0.64 mm)	0.560 in (14.2 mm)

##### Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.045 in (1.1 mm)	0.690 in (17.5 mm)

Overall Cable Diameter (Nominal):	0.690 in (17.5 mm)
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#### 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)	18.7 Ohm/1000ft	11 pF/ft (36 pF/m)	20.9 pF/ft	120 Ohm	78%	2.7 Amps per Conductor at 25°C

Nom. Outer Shield DCR:	2.95 Ohm/1000ft (9.68 Ohm/km)
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##### High Frequency (Nominal/Typical)

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

#### Voltage

UL Voltage Rating
300 V

## Mechanical Characteristics

#### Temperature

UL Temperature	Operating	Installation
60°C	-40°C to +60°C	-20°C To +60°C

Table Notes: -40C

#### Bend Radius

Stationary Min.	Installation Min.
8.5 in (220 mm)	8.5 in (220 mm)

Max. Pull Tension: 200 lbs (91 kg)

Bulk Cable Weight: 172 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL 1685 UL Loading, IEEE 1202
NEC / UL Compliance:	Article 725, Article 800, CM, PLTC
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)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

## History

Update and Revision: Revision Number: 0.401 Revision Date: 04-30-2024

## Part Numbers

#### Variants

Item #	Color	Putup Type	Length	UPC	Footnote
123107A 0105000	Black	Reel	5,000 ft	612825109631	C Z

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