



Product: [3107A](#) 

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

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Product Description

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

Technical Specifications

Product Overview

Suitable Applications:	harsh environment, IIoT, factory or process automation, video, audio, data communication, 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%	

Outer Jacket

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

Overall Cable Diameter (Nominal):	0.350 in (8.89 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)	18.2 Ohm/1000ft	11 pF/ft (36 pF/m)	20.9 pF/ft (68.6 pF/m)	120 Ohm	78%	4.8 Amps per Conductor at 30°C

Nom Outer Shield DCR@Cond DCR1-cnvt:	3.663 Ohm/1000ft (12.02 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 (CM, PLTC)

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
4.2 in (110 mm)	4.2 in (110 mm)

Max. Pull Tension:	80 lbs (36 kg)
Bulk Cable Weight:	58 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL 1685 UL Loading, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 725, Article 800, CM, PLTC
CEC / C(UL) Compliance:	CM
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)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	DMX-512

Product Notes

Notes:	Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order YR46792.
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History

Update and Revision:	Revision Number: 0.597 Revision Date: 09-07-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN	Footnote
3107A.00305	Black	Reel	305 m	8719605005953	
3107A 0101000	Black	Reel	1,000 ft	612825141686	C
3107A.001220	Black	Reel	1,220 m	8719605005939	
3107A.001525	Black	Reel	1,525 m	8719605005946	
3107A 0105000	Black	Reel	5,000 ft	612825141709	C N
3107A.01305	Green	Reel	305 m	8719605005960	

Footnote:	C - CRATE REEL PUT-UP., N - FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.
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