

Product: 3105A

RS-485, 1 Pr, 22AWG, Str TC, PE Ins, OS+TC Brd, PVC Jkt, CM, PLTC, Sun Res, Oil Resistant

Request Sample

Product Description

RS-485, 120 Ohm, 1 pair 22AWG (7x30) tinned copper Datalene® insulaton, Overall Foil + 65% Tinned Copper Braid, PVC jacket, CM, PLTC, SUN RES and oil-resistant

Technical Specifications

Product Overview

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

Construction Details

Conductor

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

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code	Notes
Pair(s)	PE - Polyethylene (Foam)	0.029 in (0.74 mm)	0.087 in (2.2 mm)	White/Blue Stripe & Blue/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	0.041 in (1.0 mm)	0.281 in (7.14 mm)

Overall Cable Diameter (Nominal):	0.281 in (7.14 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)	14.7 Ohm/1000ft (48.2 Ohm/km)	11 pF/ft (36 pF/m)	20.9 pF/ft	120 Ohm	78%	2.7 Amps per Conductor at 25ºC
Conductor(s)						

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	-20°C to +60°C

Bend Radius

Stationary Min.	Installation Min.
6.0 in (150 mm)	6.0 in

Max. Pull Tension:	200 lbs (91 kg)
Bulk Cable Weight:	43 lbs/1000ft (64 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, FT1, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: 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)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order Part No. YR44345.

History

Update and Revision:	Revision Number: 0.402 Revision Date: 12-15-2021

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN
3105A 01010000	Black			612825386551
3105A.00152	Black	Reel	152 m	8719605005816
3105A.00305	Black	Reel	305 m	8719605005830
3105A 010500	Black	Reel	500 ft	612825141600
3105A.00610	Black	Reel	610 m	8719605005854
3105A 0101000	Black	Reel	1,000 ft	612825141594
3105A.001000	Black	Reel	1,000 m	8719605005809
3105A.001525	Black	Reel	1,525 m	8719605005823
3105A.003050	Black	Reel	3,050 m	8719605005847
3105A 0105000	Black	Reel	5,000 ft	612825141617

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