



Product: [3105A](#)

RS485, 1 Pr #22 Str TC, PO Ins, OS+TC Brd, PVC Jkt, CM

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Product Description

RS-485, 1 Pair 22AWG (7x30) Tinned Copper, PO Insulation, Overall Beldfoil®+Tinned Copper Braid(65%) Shield, PVC Outer Jacket, CM

Technical Specifications

Product Overview

Suitable Applications:	harsh environment, IIoT, factory or process automation, video, audio, data communication, etc.
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
22	7x30	TC - Tinned Copper	0.03 in	1

Conductor Count:	2
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Insulation

Material	Material Trade Name	Nominal Diameter
PE - Polyethylene (Foam)	Datalene®	0.087 in

Color Chart

Number	Color
1	White/Blue Ringband Stripe and Blue/White Ringband Stripe

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Alum / Poly	Beldfoil®	100 %	TC - Tinned Copper	22	7x30
Braid	2	TC - Tinned Copper		65 %			

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.281 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
14.7 Ohm/1000ft	2.8 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
11 pF/ft	20.9 pF/ft

Impedance

Nominal Characteristic Impedance
120 Ohm

High Frequency (Nominal/Typical)

Nom. Insertion Loss
0.5 dB/100ft

Delay

Nominal Velocity of Propagation (VP) [%]
78 %

Current

Max. Recommended Current [A]
2.7 Amps per conductor @ 25°C

Voltage

UL Voltage Rating
300 V RMS (NEC Type PLTC)
300 V RMS (NEC Type CM)

Electrical Characteristics Notes:	Input Impedance/Unfitted Impedance .5 - 10 MHZ, 120 +-12 Ohms
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Temperature Range

Non-UL Temp Rating:	60°C
UL Temp Rating:	60°C
Operating Temp Range:	-20°C To +60°C

Mechanical Characteristics

Bulk Cable Weight:	43 lbs/1000ft
Max Recommended Pulling Tension:	200 lbs
Min Bend Radius/Minor Axis:	6.0 in

Standards

NEC/(UL) Specification:	CM, PLTC
CEC/C(UL) Specification:	CM
CPR Euroclass:	Eca

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-10-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Hazardous Locations:	Yes
Suitability - Indoor:	Yes
Suitability - Oil Resistance:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT1
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS (NEC Type PLTC)

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

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

Footnote: C - CRATE REEL PUT-UP.

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

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: 0.329 Revision Date: 04-28-2020

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