



**Product:** [3106A](#)

RS485, 1 Pr #22 Str TC, PO Ins, IS and 1 C #22 Str TC, PVC, OA TC Brd, PVC Jkt, CM

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## Product Description

RS-485, 1 Pair 22AWG (7x30) Tinned Copper, PO Insulation, Individual Beldfoil®, 1 conductor 22AWG (7x30) Tinned Copper, PVC Insulation, Overall 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 Conductors	No. of Pairs
22	7x30	TC - Tinned Copper	0.03 in		1
				1	

Conductor Count:	3
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#### Insulation

Material	Material Trade Name
PE - Polyethylene (Foam)	Datalene®

#### Color Chart

Number	Color
1	White/Orange Ringband Stripe
2	Orange/White Ringband Stripe
3	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	0.3 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

## Inductance

### Nominal Inductance

0.203 µH/ft

## Impedance

Nominal Characteristic Impedance	Nominal Characteristic Impedance Description
120 Ohm	120

## 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

## 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:	48 lbs/1000ft
Max Recommended Pulling Tension:	65 lbs
Min Bend Radius/Minor Axis:	3 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 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 - 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)
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## Plenum/Non-Plenum

Plenum (Y/N):	No
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## Part Number

### Variants

Item #	Color	Putup Type	Length	UPC/EAN
3106A.00152	Black	Reel	152 m	8719605005892
3106A.00305	Black	Reel	305 m	8719605005915
3106A 010500	Black	Reel	500 ft	612825141662
3106A 0101000	Black	Reel	1,000 ft	612825141655
3106A.001525	Black	Reel	1,525 m	8719605005908
3106A 0105000	Black	Reel	5,000 ft	612825141679

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 YR46721.
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## History

Update and Revision:	Revision Number: 0.325 Revision Date: 04-28-2020
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