Belden

Product: 3106A

RS-485, 1 Pr, 22AWG, Str TC, PE Ins, with OS, 1C 22AWG Str, PVC Ins, OA 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, with Foil Shield, 1 Conductor 22AWG (7x30) Tinned Copper, PVC Insulated, Overall 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	No. of Elements	Size	Stranding	Material
Pair(s)	1	22 AWG	7x30	TC - Tinned Copper
Conductor(s)	1	22 AWG	7x30	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code	Notes
Pair(s)	PE - Polyethylene (Foam)	0.033 in (0.84 mm)	0.095 in (2.4 mm)	White/Orange Stripe & Orange/White Stripe	HDPE
Conductor(s)	PVC - Polyvinyl Chloride	0.017 in (0.43 mm)	0.062 in (1.6 mm)	Blue/White Stripe	

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	0.047 in (1.2 mm)	0.310 in (7.87 mm)

Overall Cable Diameter (Nominal):	0.310 in (7.87 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Inductance	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	0.203 µH/ft (0.666 µH/m)	78%	6 Amps per Conductor at 30ºC
Conductor(s)	18.2 Ohm/1000ft (59.7 Ohm/km)						6 Amps per Conductor at 30ºC

Nom Outer Shield DCR@Cond DCR1-cnv:	4.544 Ohm/1000ft (14.91 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.
3.6 in (91 mm)	3.6 in (91 mm)

Max. Pull Tension:	75.26 lbs (34.14 kg)
Bulk Cable Weight:	48 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

Product Notes

Notes:	Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order YR46721.

History

Update and Revision:	Revision Number: 0.594 Revision Date: 09-07-2025

Part Numbers

Variants

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

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

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