



Part Number: 3106A

RS-485, (1 pr) 22 AWG (7x30) TC & (1) 22 AWG (7x30) TC, FHDPE/PVC, Foil+TC Braid Shld, CM, PLTC

Product Description

One 22 AWG pair stranded (7x30) tinned copper conductors & one 22 AWG stranded (7x30) tinned copper conductor, Datalene® (FHDPE) insulation, twisted pairs, overall Beldfoil® shield (100% coverage) plus a tinned copper braid (65% coverage), PVC jacket.

Technical Specifications

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

Total Number of Conductors: 3

Insulation

Material	Material Trade Name
FHDPE - Foam High Density Polyethylene	Datalene®

Color Chart

Number	Color
1	White/Orange Stripe
2	Orange/White Stripe
3	Blue/White Stripe

Outer Shield Material

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

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.3 in

Electrical Characteristics

Capacitance

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

Construction and Dimensions

Stranding

Lay Length
3 in

Print Legend: BELDEN 3106A E34972 3C22 SHIELDED (UL) CM OR PLTC SUN RES OR C(UL) CM --- FT4

Conductor DCR

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

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Impedance Description
120 Ohms	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

Inductance

Nominal Inductance
0.203 µH/ft

Voltage

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

Applicable Standards & Environmental Programs

CEC/C(UL) Specification:	CM
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
CPR Euroclass:	Eca
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Standards

NEC/(UL) Specification:	CM, PLTC
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Flame Test

CSA Flammability:	FT1
UL Flammability:	UL1685 UL Loading

Safety

UL Voltage Rating:	300 V RMS (NEC Type PLTC)
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Suitability

Suitability - Oil Resistance:	Yes
Suitability - Sunlight Resistance:	Yes

Mechanical Characteristics

Operating Temp Range:	-20°C To +60°C
Bulk Cable Weight:	48(lbs/1000ft)
Max Recommended Pulling Tension:	65(lbs)
Min Bend Radius/Minor Axis:	3(in)

Temperature Range

Non-UL Temp Rating:	60°C
UL Temp Rating:	60°C

Plenum/Non-Plenum

Plenum (Y/N):	No
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History

Variants

Item #	Color
3106A.00152	BLACK
3106A.001525	BLACK
3106A.00305	BLACK
3106A 0101000	BLACK
3106A 010500	BLACK
3106A 0105000	BLACK

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