



**Part Number: 3106A**

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

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## 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

Conductor Count:	3
Conductor Size:	22 AWG

#### Insulation

Material	Material Trade Name
FHDPE - Foamed 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/Polyester	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

### Construction and Dimensions

Print Legend:	BELDEN 3106A E34972 3C22 SHIELDED (UL) CM OR PLTC SUN RES OR C(UL) CM --- FT4
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### 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
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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:	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
CA Prop 65 (CJ for Wire & Cable):	Yes
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
UL voltage rating:	300 V RMS (NEC Type PLTC)

## Plenum/Non-Plenum

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

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### Variants

Item #	Color	Footnote
3106A.00152	Black	
3106A.001525	Black	
3106A.00305	Black	
3106A 0101000	Black	C
3106A 010500	Black	C
3106A 0105000	Black	C N

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

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