



**Part Number: 3107A**

RS-485, (2 pr) 22 AWG (7x30) TC, FHDPE,PVC, Foil+TC Braid Shld, CM, PLTC

## Product Description

Two 22 AWG pairs stranded (7x30) tinned copper conductors, 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 Pairs
22	7x30	TC - Tinned Copper	0.03 in	2

Conductor Count:	4
Total Number of Pairs:	2

#### Insulation

Material	Material Trade Name	Nominal Wall Thickness
FHDPE - Foamed High Density Polyethylene	Datalene®	0.0245 in

#### Color Chart

Number	Color
1	White/Blue Stripe & Blue/White Stripe
2	White/Orange Stripe & Orange/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	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.35 in	0.053 in

### Construction and Dimensions

#### Stranding

Lay Length
3.75 in

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
14.7 Ohm/1000ft	2.95 Ohm/1000ft

#### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
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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)

**Temperature Range**

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

**Mechanical Characteristics**

Oil Resistance:	Yes
Bulk Cable Weight:	73 lbs/1000ft
Max Recommended Pulling Tension:	80 lbs
Min Bend Radius/Minor Axis:	3.5 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 2003/96/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
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

**Suitability**

Suitability - Oil Resistance:	Yes - Oil Res II
Suitability - Sunlight Resistance:	Yes

## Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT1

## Part Number

Plenum (Y/N):	No
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## Variants

Item #	Color
3107A.001220	BLACK
3107A.001525	BLACK
3107A.00305	BLACK
3107A 0101000	BLACK
3107A 0104000	BLACK
3107A 0105000	BLACK
3107A.01305	GREEN

## Product Notes

Notes:	Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order YR46792.
Footnote:	CRATE REEL PUT-UP.
Footnote:	FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

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