

For more Information  
please call

1-800-Belden1



### General Description:

22 AWG stranded (7x30) tinned copper conductors, Datalene® insulation, twisted pairs, overall Beldfoil® shield (100% coverage) plus a tinned copper braid (65% coverage), drain wire, UV resistant PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
2	22	7x30	TC - Tinned Copper	.030

Total Number of Conductors: 4

#### Insulation

##### Insulation Material:

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

#### Outer Shield

##### Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000
2		Braid	TC - Tinned Copper	65.000

##### Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
22	7x30	TC - Tinned Copper

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	0.053

#### Overall Cable

##### Overall Cabling Color Code Chart:

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

Overall Nominal Diameter: 0.350 in.

### Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +60°C
Non-UL Temperature Rating:	60°C
Bulk Cable Weight:	73 lbs/1000 ft.
Max. Recommended Pulling Tension:	80 lbs.
Min. Bend Radius/Minor Axis:	3.500 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: PLTC

## 3107A Multi-Conductor - EIA Industrial RS-485 PLTC/CM

CEC/C(UL) Specification:	CM
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

**Flame Test**

UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT1

**Suitability**

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

**Plenum/Non-Plenum**

Plenum (Y/N):	No
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**Surface Printing (Overall)****Electrical Characteristics (Overall)****Nom. Characteristic Impedance:**

Impedance (Ohm)

120

**Nom. Capacitance Conductor to Conductor:**

Capacitance (pF/ft)

11.0

**Nom. Capacitance Cond. to Other Conductor & Shield:**

Capacitance (pF/ft)

20.9

**Nominal Velocity of Propagation:**

VP (%)

78

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)

14.7

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)

1.8

**Nom. Attenuation:**

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Attenuation (dB/100 ft.)
	1			.5

**Max. Operating Voltage - UL:**

Voltage

300 V RMS

**Max. Recommended Current:**

Current

2.7 Amps per conductor @ 25°C

**3107A Multi-Conductor - EIA Industrial RS-485 PLTC/CM****Other Electrical Characteristic 1:**

Input Impedance/Unfitted Impedance .5 - 10 MHZ, 120 +/-12 Ohms

**Notes (Overall)****Notes:** Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order YR46792.**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3107A 0101000	1,000 FT	62.000 LB	BLACK	C	2 PR #22 FHDPE SH PVC
3107A 0104000	4,000 FT	256.000 LB	BLACK	C	2 PR #22 FHDPE SH PVC
3107A 0105000	5,000 FT	330.000 LB	BLACK	C N	2 PR #22 FHDPE SH PVC

**Notes:**

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

**Test Reports****a) UL**

- i) UL Test Reports are available on-line through the UL Client Document Access web portal.
- ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

**b) CSA**

- i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.
- ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

\* other test data may be available if requested at time of order.

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