

**3107T Multi-Conductor - EIA Industrial RS-485 PLTC/CMG**

For more Information  
please call  
1-800-Belden1



**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 LSZH jacket.

**Physical Characteristics (Overall):**

**Conductor:**  
AWG

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
2	22	7x30	TC - Tinned Copper	0.030

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
LSZH- Low Smoke Zero Halogen

**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: 0.49 in.

**Pair:**

Pair Lay Length & Direction

Lay Length (in.)
3.750

**Mechanical Characteristics (Overall):**

Operating Temperature Range	-20°C To +60°C
Bulk Cable Weight:	134 lbs/1000 ft.
Max. Recommended Pulling Tension:	80 lbs.
Min. Bend Radius/Minor Axis:	5 in.

**Applicable Specifications and Agency Compliance (Overall):**

Applicable Standards & Environmental Programs: .....

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NEC/(UL) Specification	CMG, PLTC
CEC/C(UL) Specification	CMG
EU Directive 2011/65/EU (ROHS II)	Yes
IEEE Specification	45
EU CE Mark	Yes
EU Directive 2000/53/EC (ELV)	Yes
EU Directive 2002/95/EC (RoHS)	Yes
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
<b>Flame Test:</b>	
UL Flame Test	UL1685 FT4 Loading
C(UL) Flame Test	FT4
IEC Flame Test	60332-3-22 (Category A)
<b>Suitability:</b>	
Sunlight Resistance	Yes
<b>Plenum/Non-Plenum:</b>	
Plenum (Y/N)	No

**Electrical Characteristics (Overall):**

Nom. Characteristic Impedance

<b>Impedance (Ohm)</b>
120

Nom. Capacitance Conductor to Conductor

<b>Capacitance (pF/ft)</b>
11.000

Nom. Capacitance Cond. to Other Conductor & Shield

<b>Capacitance (pF/ft)</b>
20.900

Nominal Velocity of Propagation

<b>VP (%)</b>
78.000

Nom. Conductor DC Resistance

<b>DCR @ 20°C (Ohm/1000 ft)</b>
14.700

Nominal Outer Shield DC Resistance

<b>DCR @ 20°C (Ohm/1000 ft)</b>
2.800

Nom. Attenuation

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Attenuation (dB/100 ft.)
	1.000			0.500

Max. Operating Voltage - UL

<b>Voltage</b>
300 V RMS (NEC Type PLTC)
300 V RMS (NEC Type CM)

Max. Recommended Current

<b>Current</b>
2.7 Amps per conductor @ 25°C

Other Electrical Characteristic 1

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

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