Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



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



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:

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®	Таре	Aluminum Foil-Polyester Tape	100.000
2		Braid	TC - Tinned Copper	65.000

Outer Shield Drain Wire AWG:

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

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

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.

Pair

Pair Lay Length & Direction:



Mechanical	Characteristics	(Overall)	1
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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:	CM, PLTC	
CEC/C(UL) Specification:	CM	
EU Directive 2011/65/EU (ROHS II):	Yes	
EU CE Mark:	Yes	

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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/Non-Plenum		
Plenum (Y/N):	No		

Surface Printing (Overall)

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

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) 2.800

Nom. Attenuation:

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

Max. Operating Voltage - UL:

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

Max. Recommended Current:

Current 2.7 Amps per conductor @ 25°C

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	С	2 PR #22 FHDPE SH PVC
3107A 0104000	4,000 FT	256.000 LB	BLACK	С	2 PR #22 FHDPE SH PVC
3107A 0105000	5,000 FT	330.000 LB	BLACK	CN	2 PR #22 FHDPE SH PVC

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

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