Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



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



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 (90% coverage), drain wire, UV resistant PVC jacket.

Physical Characteristics (Overall):

Conductor:

AWG

# Pairs AWG Strand		Stranding	Conductor Material	Dia. (in.)
2.000	22	7x30	TC - Tinned Copper	0.030

Insulation:

Insulation Material

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

Outer Shield:

Outer Shield Material

ı	Layer #	Outer Shield Trade Name		Outer Shield Material	% Coverage (%)
I	1	1 Beldfoil®		Aluminum Foil-Polyester Tape	100
ı	2	2		TC - Tinned Copper	90

Outer Shield Drain Wire AWG

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

Outer Shield Drain Wire Diameter .030

Outer Jacket:

Outer Jacket Material

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cabling:

Overall Cabling Color Code Chart

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

Overall Nominal Diameter: .356 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 (Install):	3.600 in.

Applicable Specifications and Agency Compliance (Overall):

Applicable Standards:

NEC/(UL) Specification CM, PLTC OIL RES II

Page 1 of 3 02-10-2008

Detailed Specifications & Technical Data ENGLISH MEASUREMENT VERSION



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CEC/C(UL) Specification	CM
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy)	10/01/2005
Flame Test: UL Flame Test	UL1685 UL Loading
CSA Flame Test	FT1
Suitability: Sunlight Resistance	Yes
Plenum/Non-Plenum: Plenum (Y/N)	N

Electrical Characteristics (Overall):

Nom. Characteristic Impedance

Impedance (Ohm) 120.000

Nom. Capacitance Conductor to Conductor

Capacitance (pF/ft) 11.000

Nom. Capacitance Cond. to Other Conductor & Shield

Capacitance (pF/ft) 20.900

Nominal Velocity of Propagation

VP (%)

Nom. Conductor DC Resistance

DCR @ 20°C (Ohm/1000 ft) 14.700

Nom. Attenuation

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

Max. Operating Voltage - UL

300 V RMS

Max. Recommended Current

Current 2.7 Amps per conductor @ 25°C

Nominal Outer Shield DC Resistance

DCR @ 20°C (Ohm/1000 ft)

Input/Unfitted Impedance

	Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
ĺ		1.000			

Notes (Overall):

Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order YR46792. Notes

PUT UPS AND COLORS:

Item #	Putup	Ship Weight	Jacket Color	Notes	Item Desc
3107A 0101000	1,000 FT	69.000 LB	BLACK	С	2 PR #22 FHDPE SH PVC BLK

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3107A 0104000	4,000 FT	300.000 LB	BLACK	С	2 PR #22 FHDPE SH PVC BLK
3107A 0105000	5,000 FT	385.000 LB	BLACK	CN	2 PR #22 FHDPE SH PVC BLK

Notes:

C = CRATE REEL PUT-UP.

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

Revision Number: 1 Revision Date: 05-14-2007

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Page 3 of 3 02-10-2008