Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



3106A 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

# Conductors	# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
1	1.000	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

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

Outer Shield Drain Wire AWG

AWG Stran		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		
1	White/Orange Stripe		
2	Orange/White Stripe		
3	Blue/White Stripe		

Overall Nominal Diameter: .300 in.

Pair:

Pair Lay Length & Direction

Lay Length (in.) 3.000

Mechanical Characteristics (Overall):

Operating Temperature Range	-20°C To +60°C
Non-UL Temperature Rating	60°C
Bulk Cable Weight:	48 lbs/1000 ft.
Max. Recommended Pulling Tension:	65 lbs.

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Min. Bend Radius (Install): 3 in.

Applicable Specifications and Agency Compliance (Overall):

Applicable Standards:

CM, PLTC OIL RES II NEC/(UL) Specification CM CEC/C(UL) Specification Yes EU CE Mark (Y/N) Yes EU RoHS Compliant (Y/N) 10/01/2005 EU RoHS Compliance Date (mm/dd/yyyy) Flame Test: **UL Flame Test** UL1685 UL Loading **CSA Flame Test** FT1

Suitability:

Passes UL 1581, 720 Hours Sunlight Resistance

Ν

Plenum/Non-Plenum:

Plenum (Y/N)

Electrical Characteristics (Overall):

Nom. Inductance

Inductance (µH/ft) 0.203

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

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.)

Max. Operating Voltage - UL

Voltage 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) 2.800

Input/Unfitted Impedance

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
	1.000			120

Notes (Overall):

Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order YR46721. Notes

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PUT UPS AND COLORS:

Item #	Putup	Ship Weight	Jacket Color	Notes	Item Desc
3106A 0101000	1,000 FT	51.000 LB	BLACK	С	#22 FS PR,1#22PVCBRDPVC BLK
3106A 010500	500 FT	27.000 LB	BLACK	С	#22FSPR,1#22PVCBRDPVC BLK
3106A 0105000	5,000 FT	260.000 LB	BLACK	CN	#22 FS PR,1#22PVCBRDPVC 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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