Detailed Specifications & Technical Data

METRIC 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 (65% coverage), drain wire, UV resistant PVC jacket.

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Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
1	1	22	7x30	TC - Tinned Copper	0.762

Total Number of Conductors:

Insulation

Insulation Material:

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

Outer Shield

Outer Shield Material:

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

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 Cable

Overall Cabling Color Code Chart:

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

Overall Nominal Diameter: 7.620 mm

Pair

Pair Lay Length & Direction:

Lay Length (mm) 76.2

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +60°C
Non-UL Temperature Rating:	60°C
Bulk Cable Weight:	71.434 Ka/Km

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	Max. Recommended Pulling Tension:	289.133 N					
	Min. Bend Radius/Minor Axis:	76.200 mm					
Ap	Applicable Specifications and Agency Compliance (Overall)						
Αp	plicable Standards & Environmental Prograr	ns					
	CEC/C(UL) Specification:	CM					
	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					
Fla	ame Test						
	UL Flame Test:	UL1685 UL Loading					
	CSA Flame Test:	FT1					
Plenum/Non-Plenum							
	Plenum (Y/N):	No					

Surface Printing (Overall)

Electrical Characteristics (Overall)

Nom. Inductance:

Inductance (µH/m) 0.666043

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 36.091

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 68.5729

Nominal Velocity of Propagation:

VP (%) 78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 48.2307

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 9.1868

Nom. Attenuation:

Description Freq. (MHz) Start Freq. (MHz) Stop Freq. (MHz) Attenuation (dB/100m) 1.6405

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current 2.7 Amps per conductor @ 25°C

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Input/Unfitted Impedance:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
	1			120

Notes (Overall)

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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3106A 0101000	305 MT	21.319 KG	BLACK	С	#22 FS PR,1#22PVCBRDPVC
3106A 010500	152 MT	11.340 KG	BLACK	С	#22 FS PR,1#22PVCBRDPVC
3106A 0105000	1,524 MT	104.327 KG	BLACK	CN	#22 FS PR,1#22PVCBRDPVC

Notes:

C = CRATE REEL PUT-UP.

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

Revision Number: 1 Revision Date: 12-05-2008

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