Detailed Specifications & Technical Data



3106A 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.

		coverage), drain wire, o'v resistant i vo jacket.				
Physical Characteristics (Ov	verall)					
Conductor						
AWG:						
	nding Conductor Material Dia. (mm)					
1 1 22 7x30	TC - Tinned Copper 0.762					
Total Number of Conductors:	3					
Insulation Insulation Material:						
Insulation Trade Name Insulation Material						
Datalene® FHDPE -	Foam High Density Polyethylene					
Outer Shield						
Outer Shield Material:						
Layer # Outer Shield Trade Name		Coverage (%)				
1 Beldfoil®	Tape Aluminum Foil-Polyester Tape					
2	Braid TC - Tinned Copper	65.000				
Outer Jacket Material PVC - Polyvinyl Chloride Overall Cable Overall Cabling Color Code Cha Number Color 1 White/Orange Stripe 2 Orange/White Stripe 3 Blue/White Stripe	art:					
Overall Nominal Diameter:	7.620 mm					
Pair Pair Lay Length & Direction: Lay Length (mm) 76.2						
Mechanical Characteristics	(Overall)					
Operating Temperature Range	e: -20°C To +6	50°C				
New III, Tennessee to an Definition	2000					

Bulk Cable Weight: 78.875 Kg/Km

Non-UL Temperature Rating:

Max. Recommended Pulling Tension: 289.133 N

60°C

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METRIC MEASUREMENT VERSION

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Min. Bend Radius/Minor Axis:	76.200 mm
Applicable Specifications and Agency Co	mpliance (Overall)
Applicable Standards & Environmental Progr	ams
NEC/(UL) Specification:	CM, PLTC
CEC/C(UL) Specification:	СМ
EU Directive 2011/65/EU (ROHS II):	Yes
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
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 (Y/N):	No
Surface Printing (Overall)	
Surface Printing:	BELDEN 3106A E34972 3C22 SHIELDED (UL) CM OR PLTC SUN RES OR C(UL) CM FT4
Electrical Characteristics (Overall)	
Nom. Characteristic Impedance:	
Description 120	
Nom. Inductance: Inductance (µH/m) 0.666043	
Nom. Capacitance Conductor to Conductor:	
Capacitance (pF/m) 36.091	
Nom. Capacitance Cond. to Other Conductor & Shi	eld:
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)	

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10.926

Nom. Attenuation:

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

 1
 1
 1.6405

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 YR46721.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3106A 0101000	1,000 FT	52.000 LB	BLACK	С	#22 FS PR,1#22PVCBRDPVC
3106A 010500	500 FT	27.000 LB	BLACK	С	#22 FS PR,1#22PVCBRDPVC
3106A 0105000	5,000 FT	255.000 LB	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.

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