## **Detailed Specifications & Technical Data**



### METRIC MEASUREMENT VERSION



### 3108A 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. (mn	n)					
3 22 7x30 TC - Tinned Copper 0.762						
Total Number of Conductors:	6					
Insulation Insulation Material:						
Insulation Trade Name Insulation Material						
Datalene® FHDPE - Foam High Density Po	blyethylene					
Outer Shield Outer Shield Material:						
Layer # Outer Shield Trade Name Type Outer Shield	I Material Coverage (%)					
1 Beldfoil® Tape Aluminum Fo						
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/Blue Stripe & Blue/White Stripe						
2 White/Orange Stripe & Orange/White Stripe						
3 White/Green Stripe & Green/White Stripe						
Overall Nominal Diameter:	9.500 mm					
Mechanical Characteristics (Overall)						
Operating Temperature Range:	-20°C To +60°C					
Non-UL Temperature Rating:	60°C					
Bulk Cable Weight:	126.497 Kg/Km					
Max. Recommended Pulling Tension:	400.338 N					
Min. Bend Radius/Minor Axis:	95.250 mm					

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NEC/(UL) Specification:	ms CM, PLTC Oil Res II
NEC Articles:	725,800
CEC/C(UL) Specification:	СМ
EU Directive 2011/65/EU (ROHS II):	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	
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No
urface Printing (Overall)	
Surface Printing:	BELDEN 3108A E34972 3PR22 SHIELDED (UL) CM OR PLTC SUN RES OR
	C(UL) CM FT1
lectrical Characteristics (Overall)	
Nom. Characteristic Impedance: Impedance (Ohm)	
120	
Nom. Inductance:	
Description Inductance (µH/m)	
Pair 0.738	
Nom. Capacitance Conductor to Conductor:	
Capacitance (pF/m) 36.091	
Nom. Capacitance Cond. to Other Conductor & Shie	ld:
Capacitance (pF/m)	
68.5729	
Nominal Velocity of Propagation:	
VP (%) 78	
Nom. Conductor DC Resistance:	
Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/km)	
Nom. Conductor DC Resistance:	

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Nom. Attenuation:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Attenuation (dB/100m)		
	1			1.6405		
Max. Operating Voltage - UL:						
Voltage						
300 V RMS	1					
Max. Recommended Current:						
Current						
2.7 Amps pe	er conductor @	25°C				
Other Ele	ectrical Cha	racteristic 1:	I	nput Impedance/Unfitt		

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 YR45287.

#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3108A 0101000	1,000 FT	70.000 LB	BLACK	С	3 PR #22 FHDPE SH PVC
3108A 0102000	2,000 FT	134.000 LB	BLACK	С	3 PR #22 FHDPE SH PVC
3108A 0105000	5,000 FT	355.000 LB	BLACK		3 PR #22 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

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