## **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	<b>Conductor Material</b>	Dia. (mm)
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 Polyethylene

#### **Outer Shield**

### **Outer Shield Material:**

Layer # Outer Shield Trade Name		Type	Outer Shield Material	Coverage (%)
1	1 Beldfoil®		Aluminum Foil-Polyester Tape	100.000
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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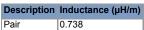
Applicable Specifications and Agency Compliance (Overall)					
Applicable Standards & Environmental Progra	ms				
NEC/(UL) Specification:	CM, PLTC Oil Res II				
NEC Articles:	725,800				
CEC/C(UL) Specification:	CM				
EU Directive 2011/65/EU (ROHS II):	Yes				
EU Directive 2000/53/EC (ELV):	Yes				
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				
Surface Printing (Overall)					
Surface Printing:	BELDEN 3108A E34972 3PR22 SHIELDED (UL) CM OR PLTC SUN RES OR C(UL) CM FT1				
Electrical Characteristics (Overall)					

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:



Nominal Velocity of Propagation:



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 48.2307

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 8.531

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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

## 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 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.

Revision Number: 2 Revision Date: 03-09-2017

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