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.

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Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
3	22	7x30	TC - Tinned Copper	0.762

Total Number of Conductors:

Insulation

Insulation Material:

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	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

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

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

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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)	
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 & 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) 8.531	
Nom. Attenuation:	
Description Freq. (MHz) Start Freq. (MHz) Stop Freq. (MHz) Att	enuation (dB/100m) 1405
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:

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No put ups and colors are available for this product

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