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:

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

Outer Shield

Outer Shield Material:

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

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 120

Nom. Inductance:

Description Inductance (µH/m) 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)

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 4.9215

Nom. Attenuation:

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

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

C = CRATE REEL PUT-UP.

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