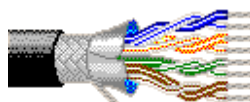


**3109A Multi-Conductor - EIA Industrial RS-485 PLTC/CM**



For more Information  
please call  
1-800-Belden1



**Description**

22 AWG stranded (7x30) tinned copper conductors, Datalene® insulation, twisted pairs, overall Beldfoil® shield (100% coverage) plus a tinned copper braid (90% coverage), drain wire, UV resistant PVC jacket.

**Physical Characteristics (Overall):**

**Conductor:**

AWG

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
4.000	22	7x30	TC - Tinned Copper	0.030

**Insulation:**

Insulation Material

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

**Outer Shield:**

Outer Shield Material

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	% Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	90

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 Cabling:**

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
4	White/Brown Stripe & Brown/White Stripe

Overall Nominal Diameter: .420 in.

**Mechanical Characteristics (Overall):**

Operating Temperature Range	-20°C To +60°C
Non-UL Temperature Rating	60°C
Bulk Cable Weight:	96.400 lbs/1000 ft.
Max. Recommended Pulling Tension:	100 lbs.
Min. Bend Radius (Install)/Minor Axis:	4.500 in.

**Applicable Specifications and Agency Compliance (Overall):**

**3109A Multi-Conductor - EIA Industrial RS-485 PLTC/CM**

**Applicable Standards:**

NEC/(UL) Specification	CM, PLTC OIL RES II
CEC/C(UL) Specification	CM
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy)	10/01/2005

**Flame Test:**

UL Flame Test	UL1685 UL Loading
CSA Flame Test	FT1

**Suitability:**

Sunlight Resistance	Passes UL 1581, 720 Hours
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**Plenum/Non-Plenum:**

Plenum (Y/N)	N
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**Electrical Characteristics (Overall):**

Nom. Capacitance Conductor to Conductor

Capacitance (pF/ft)
11.000

Nom. Capacitance Cond. to Other Conductor & Shield

Capacitance (pF/ft)
20.900

Nominal Velocity of Propagation

VP (%)
78

Nom. Conductor DC Resistance

DCR @ 20°C (Ohm/1000 ft)
14.700

Nominal Outer Shield DC Resistance

DCR @ 20°C (Ohm/1000 ft)
1.400

Nom. Attenuation

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Attenuation (dB/100 ft.)
	1.000			0.500

Max. Operating Voltage - UL

Voltage
300 V RMS

Max. Recommended Current

Current
2.7 Amps per conductor @ 25°C

Input/Unfitted Impedance

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
	1.000			120

**Notes (Overall):**

Notes Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order Part No. YR44768.

**PUT UPS AND COLORS:**

Item #	Putup	Ship Weight	Jacket Color	Notes	Item Desc
3109A 0101000	1,000 FT	107.000 LB	BLACK	C	4 PR #22 FHDPE SH PVC BLK
3109A 0102000	2,000 FT	218.000 LB	BLACK	C	4 PR #22 FHDPE SH PVC BLK

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**Notes:**

C = CRATE REEL PUT-UP.

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