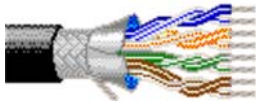




# Product Details

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## 3109A



### Multi-Conductor - EIA Industrial RS-485 PLTC/CM

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.

For more  
information  
please call

1-800-  
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## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3109A 0101000	305 MT	40.824 KG	BLACK	C	4 PR #22 FHDPE SH PVC
3109A 0102000	610 MT	81.647 KG	BLACK	C	4 PR #22 FHDPE SH PVC
3109A 0105000	1,524 MT	215.457 KG	BLACK		4 PR #22 FHDPE SH PVC

### Notes:

C = CRATE REEL PUT-UP.

## Physical Characteristics (Overall)

### Conductor

#### AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
4	22	7x30	TC - Tinned Copper	0.762

Total Number of Conductors: 8

### 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	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
4	White/Brown Stripe & Brown/White Stripe

<b>Overall Nominal Diameter:</b>	11.379 mm
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## Mechanical Characteristics (Overall)

<b>Operating Temperature Range:</b>	-20°C To +60°C
<b>Non-UL Temperature Rating:</b>	60°C
<b>Bulk Cable Weight:</b>	143.462 Kg/Km
<b>Max. Recommended Pulling Tension:</b>	444.820 N
<b>Min. Bend Radius/Minor Axis:</b>	139.700 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

<b>NEC/(UL) Specification:</b>	CM, PLTC OIL RES II
<b>CEC/C(UL) Specification:</b>	CM
<b>EU Directive 2011/65/EU (ROHS II):</b>	Yes
<b>EU Directive 2000/53/EC (ELV):</b>	Yes
<b>EU Directive 2002/95/EC (RoHS):</b>	Yes
<b>EU RoHS Compliance Date (mm/dd/yyyy):</b>	10/01/2005
<b>EU Directive 2002/96/EC (WEEE):</b>	Yes
<b>EU Directive 2003/11/EC (BFR):</b>	Yes
<b>CA Prop 65 (CJ for Wire &amp; Cable):</b>	Yes
<b>MII Order #39 (China RoHS):</b>	Yes

### Flame Test

<b>UL Flame Test:</b>	UL1685 UL Loading
<b>CSA Flame Test:</b>	FT1

### Suitability

<b>Sunlight Resistance:</b>	Passes UL 1581, 720 Hours
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### Plenum/Non-Plenum

<b>Plenum (Y/N):</b>	No
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## Surface Printing (Overall)

### Electrical Characteristics (Overall)

#### Nom. Capacitance Conductor to Conductor:

<b>Capacitance (pF/m)</b>	36.091
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#### Nom. Capacitance Cond. to Other Conductor & Shield:

<b>Capacitance (pF/m)</b>	68.5729
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#### Nominal Velocity of Propagation:

<b>VP (%)</b>	78
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#### Nom. Conductor DC Resistance:

<b>DCR @ 20°C (Ohm/km)</b>	48.2307
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#### Nominal Outer Shield DC Resistance:

<b>DCR @ 20°C (Ohm/km)</b>	4.5934
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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:

<b>Voltage</b>	300 V RMS
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#### Max. Recommended Current:

<b>Current</b>	2.7 Amps per conductor @ 25°C
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**Input/Unfitted Impedance:**

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
	1			120

**Notes (Overall)**

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

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