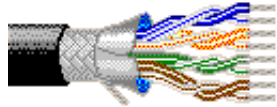


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3109A



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-Belden1



[Click here for Certificate](#)

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|-------|-------|-----------------------|
| 3109A 0101000 | 1,000 FT | 90.000 LB | BLACK | C | 4 PR #22 FHDPE SH PVC |
| 3109A 0102000 | 2,000 FT | 180.000 LB | BLACK | C | 4 PR #22 FHDPE SH PVC |
| 3109A 0105000 | 5,000 FT | 475.000 LB | BLACK | | 4 PR #22 FHDPE SH PVC |

Notes:

C = CRATE REEL PUT-UP.

Physical Characteristics (Overall)

Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material | Dia. (in.) |
|---------|-----|-----------|--------------------|------------|
| 4 | 22 | 7x30 | TC - Tinned Copper | .030 |

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 |

Overall Nominal Diameter: 0.448 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/Minor Axis: | 5.500 in. |

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 |
| 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

MIL 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. Inductance:

| Description | Inductance ($\mu\text{H}/\text{ft}$) |
|-------------|--|
| Pair | 0.225 |

Nom. Capacitance Conductor to Conductor:

| Capacitance (pF/ft) |
|---------------------|
| 11.0 |

Nom. Capacitance Cond. to Other Conductor & Shield:

| Capacitance (pF/ft) |
|---------------------|
| 20.9 |

Nominal Velocity of Propagation:

| VP (%) |
|--------|
| 78 |

Nom. Conductor DC Resistance:

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
| 14.7 |

Nominal Outer Shield DC Resistance:

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
| 1.4 |

Nom. Attenuation:

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|-------------|-------------------|------------------|--------------------------|
| | 1 | | | .5 |

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 | | | 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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