Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



3107A 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 (65% coverage), drain wire, UV resistant PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material | Dia. (in.) |
|---------|-----|-----------|---------------------------|------------|
| 2 | 22 | 7x30 | TC - Tinned Copper | .030 |

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 S | | |

Overall Nominal Diameter: 0.350 in.

Mechanical Characteristics (Overall)

| Operating Temperature Range: | -20°C To +60°C |
|--|-----------------|
| Non-UL Temperature Rating: | 60°C |
| Bulk Cable Weight: | 73 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 80 lbs. |
| Min. Bend Radius (Install)/Minor Axis: | 3.500 in. |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CM, PLTC OIL RES II

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| CEC/C(UL) Specification: | CM |
|---------------------------------------|-------------------|
| EU CE Mark: | 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 |
| MII Order #39 (China RoHS): | Yes |
| Flame Test | |
| UL Flame Test: | UL1685 UL Loading |
| CSA Flame Test: | FT1 |
| Suitability | |
| Sunlight Resistance: | Yes |
| Plenum/Non-Plenum | |
| Plenum (Y/N): | No |

Surface Printing (Overall)

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 120

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) 1.8

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)

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| | 1 | | |
|--|---|--|--|
| | | | |
| | | | |

Notes (Overall)

Notes: Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order YR46792.

Related Documents:

No related documents are available for this product

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|-------|-------|-----------------------|
| 3107A 0101000 | 1,000 FT | 62.000 LB | BLACK | С | 2 PR #22 FHDPE SH PVC |
| 3107A 0104000 | 4,000 FT | 256.000 LB | BLACK | С | 2 PR #22 FHDPE SH PVC |
| 3107A 0105000 | 5,000 FT | 330.000 LB | BLACK | CN | 2 PR #22 FHDPE SH PVC |

Notes:

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

Revision Number: 1 Revision Date: 03-17-2009

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