



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.

### Physical Characteristics (Overall)

#### Conductor

AWG:

| # Conductors | # Pairs | AWG | Stranding | Conductor Material | Dia. (in.) |
|--------------|---------|-----|-----------|--------------------|------------|
| 1            | 1       | 22  | 7x30      | TC - Tinned Copper | .030       |

Total Number of Conductors: 3

#### 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 Jacket

Outer Jacket Material:

| Outer Jacket Material    |
|--------------------------|
| PVC - Polyvinyl Chloride |

#### Overall Cable

Overall Cabling Color Code Chart:

| Number | Color               |
|--------|---------------------|
| 1      | White/Orange Stripe |
| 2      | Orange/White Stripe |
| 3      | Blue/White Stripe   |

Overall Nominal Diameter: 0.300 in.

#### Pair

Pair Lay Length & Direction:

| Lay Length (in.) |
|------------------|
| 3.000            |

### Mechanical Characteristics (Overall)

|                                   |                 |
|-----------------------------------|-----------------|
| Operating Temperature Range:      | -20°C To +60°C  |
| Non-UL Temperature Rating:        | 60°C            |
| Bulk Cable Weight:                | 53 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 65 lbs.         |
| Min. Bend Radius/Minor Axis:      | 3 in.           |

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

|                                    |          |
|------------------------------------|----------|
| NEC(UL) Specification:             | CM, PLTC |
| CEC/C(UL) Specification:           | CM       |
| EU Directive 2011/65/EU (ROHS II): | Yes      |

## 3106A Multi-Conductor - EIA Industrial RS-485 PLTC/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 &amp; Cable): Yes

MIL Order #39 (China RoHS): Yes

## Flame Test

UL Flame Test: UL1685 UL Loading

CSA Flame Test: FT1

## Suitability

Sunlight Resistance: Yes

Oil Resistance: Yes - Oil Res II

## Plenum/Non-Plenum

Plenum (Y/N): No

## Surface Printing (Overall)

## Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Description

120

Nom. Inductance:

Inductance (µH/ft)

.203

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

11.0

Nom. Capacitance Cond. to Other Conductor &amp; 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)

2.8

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 (NEC Type PLTC)

300 V RMS (NEC Type CM)

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 YR46721.

## Put Ups and Colors:

| Item #        | Putup    | Ship Weight | Color | Notes | Item Desc               |
|---------------|----------|-------------|-------|-------|-------------------------|
| 3106A 0101000 | 1,000 FT | 52.000 LB   | BLACK | C     | #22 FS PR,1#22PVCBRDPVC |



3106A Multi-Conductor - EIA Industrial RS-485 PLTC/CM

|               |          |            |       |     |                         |
|---------------|----------|------------|-------|-----|-------------------------|
| 3106A 010500  | 500 FT   | 27.000 LB  | BLACK | C   | #22 FS PR,1#22PVCBRDPVC |
| 3106A 0105000 | 5,000 FT | 255.000 LB | BLACK | C N | #22 FS PR,1#22PVCBRDPVC |

**Notes:**  
C = CRATE REEL PUT-UP.  
N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

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