



Part Number: 2110A

FOUNDATION Fieldbus, (2 pr) 16 AWG (7x24) TC, XLP/FR-PVC, Foil Shld, 300V, CMG, PLTC-ER

# **Product Description**

Two 16 AWG pair stranded (7x24) tinned copper conductors, cross-linked polyolefin, overall Beldfoil® shield (100% coverage), flame retardant PVC jacket.

# **Product Specifications**

# **Technical Specifications**

## **Construction and Dimensions**

#### Conductor:

| AWG       | Stranding          | Material           | No. of Pairs |
|-----------|--------------------|--------------------|--------------|
| 16        | 7×24               | TC - Tinned Copper | 2            |
| Total Num | ber of Conductors: | 4                  |              |

### Insulation:

| Material                      |  |
|-------------------------------|--|
| XLP - Cross-linked Polyolefin |  |

#### Color Chart 1:

| Number | Color                    |
|--------|--------------------------|
| 1      | Blue & Orange Numbered 1 |
| 2      | Blue & Orange Numbered 2 |

### Stranding:

### Lay Length

0.091 mm

#### Innershield:

| Туре | Material                     | Material Trade Name | Coverage [%] | Drainwire AWG | Drainwire Construction n x D |
|------|------------------------------|---------------------|--------------|---------------|------------------------------|
| Tape | Aluminum Foil-Polyester Tape | Beldfoil®           | 100 %        | 18            | 7x26 mm                      |
|      | TC - Tinned Copper           |                     |              |               |                              |

#### Outershield 1:

| Тур  | e Material                      | Material Trade<br>Name | Coverage<br>[%] | Drainwire<br>Material | Drainwire<br>AWG | Drainwire Construction n x<br>D |
|------|---------------------------------|------------------------|-----------------|-----------------------|------------------|---------------------------------|
| Tape | Aluminum Foil-Polyester<br>Tape | Beldfoil®              | 100 %           | TC - Tinned<br>Copper | 16               | 7x24 mm                         |

## Outerjacket 1:

| Material                                    | Nominal Diameter | Ripcord |
|---|------------------|---------|
| FR PVC - Flame Retardant Polyvinyl Chloride | o.629 in         | Yes     |

# **Electrical Characteristics**

### **Conductor DCR:**

#### **Nominal Conductor DCR**

4.2 Ohm/1000ft

## Capacitance:

| Max. Capacitance Unbalance         | Nom. Ca  | pacitance Conductor to Shield                                       |
|------------------------------------|----------|---|
| 1.2 pF/ft                          | 22 pF/ft |   |
| Other Electrical Characteristic 1: |          | Max Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pS/ft |
| Other Electrical Characteristic 2: |          | 31.25 KBits/sec   |

# High Frequency (Nominal/Typical):

| Nom. Insertion Loss |  |  |
|---------------------|--|--|
| 0.065 db/100ft      |  |  |

### Delay:

| No | ominal Velocity of Propagation (VP) [%] |
|----|---|
| 64 | %                                       |

# High Freq:

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Max./Min. Input Impedance (unFitted) |
|-----------------|-----------------------------------|--------------------------------------|
|                 | 0.091 db/100ft                    | 100 Ohm                              |
| 0.03125 MHz     |                                   |                                      |
| 0.039 MHz       |                                   |                                      |
| 0.039 MHz       |                                   |                                      |

### **Current:**

| Element       | Max. Recommended Current [A] |
|---------------|------------------------------|
| Per Conductor | 11.6 Amps                    |

#### Inductance:

| Nominal Inductance |  |
|--------------------|--|
| 0.22 μH/ft         |  |

## Voltage:

| Description     | UL Voltage Rating | Voltage Rating [V] |
|-----------------|-------------------|--------------------|
| CSA CIC type TC | 300 V RMS         | 300 V RMS          |

## Use

| Suitability - Oil Resistance:      | Yes     |
|------------------------------------|---------|
| Suitability - Indoor:              | Yes     |
| Suitability - Outdoor:             | Yes     |
| Suitability - Sunlight Resistance: | Yes     |
| Max Recommended Pulling Tension:   | 223 lbs |

# Safety

| CSA Flammability:     | FT4                     |
|-----------------------|-------------------------|
| ISO/IEC Flammability: | 60332-3-24 (Category C) |
| UL Flammability:      | UL1685 FT4 Loading      |

# Temperature Range

| Installation Temp Rating: | -25°C  |  |
|---------------------------|--|--|
| Operating Temp Range:     | -25°C Cold Impact -40°C To +90°C -55°C Cold Bend |  |
| UL Temp Rating:           | go°C Wet/Dry                                     |  |

## **Mechanical Characteristics**

| Min Bend Radius/Minor Axis: | 6.5 in |
|-----------------------------|--------|
|-----------------------------|--------|

#### **Part Number**

### **Standards**

| CA Prop 65 (CJ for Wire & Cable): | CA Prop 65 (CJ for Wire & Cable) |  |
|-----------------------------------|----------------------------------|--|
| CSA AWM Specification:            | CSA Specification                |  |
| MII Order #39 (China RoHS):       | MII Order #39 (China RoHS)       |  |
| NEC/(UL) Specification:           | NEC/(UL) Specification           |  |
| Other Specification:              | Other Specification              |  |
| EU Directive Compliance:          | EU Directive 2003/11/EC (BFR)    |  |
| EU CE Mark:                       | EU CE Mark                       |  |

## **History**

### **Product Variants**

| Part Number   | Color       | Put-Up Type | Length  |
|---------------|-------------|-------------|---------|
| 2110A 0031000 | ORANGE      | Reel        | 1000 ft |
| 2110A 0035000 | ORANGE      | Reel        | 5000 ft |
| 2110A 0061000 | BLUE, LIGHT | Reel        | 1000 ft |
| 2110A 0065000 | BLUE, LIGHT | Reel        | 5000 ft |

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