



**Part Number:** 2111A

FOUNDATION Fieldbus, (5 pr) 16 AWG (7x24) TC, XLP/FR-PVC, Foil Shld, 300V, CMG, PLTC-ER

## Product Description

Five 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                                 | 7x24      | TC - Tinned Copper | 5            |
| <b>Total Number of Conductors:</b> |           |                    | 10           |

#### Insulation:

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

#### Color Chart 1:

| Number | Color                    |
|--------|--------------------------|
| 1      | Blue & Orange Numbered 1 |
| 2      | Blue & Orange Numbered 2 |
| 3      | Blue & Orange Numbered 3 |
| 4      | Blue & Orange Numbered 4 |
| 5      | Blue & Orange Numbered 5 |

### Stranding:

| Lay Length |
|------------|
| 0.091 mm   |

### Innershield:

| Type | 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:

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

### Outerjacket 1:

| Material                                    | Nominal Diameter | Ripcord |
|---|------------------|---------|
| FR PVC - Flame Retardant Polyvinyl Chloride | 0.789 in         | Yes     |

## Electrical Characteristics

### Conductor DCR:

| Nominal Conductor DCR |
|-----------------------|
| 4.2 Ohm/1000ft        |

### Capacitance:

| Max. Capacitance Unbalance         | Nom. Capacitance 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:

| Nominal 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 | 10.1 Amps                    |

#### Inductance:

| Nominal Inductance |
|--------------------|
| 0.22 $\mu$ H/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:   | 504 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:           | 90°C Wet/Dry                                     |

#### Mechanical Characteristics

|                             |      |
|-----------------------------|------|
| Min Bend Radius/Minor Axis: | 8 in |
|-----------------------------|------|

## Part Number

|               |    |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

## 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  |
|---------------|-------------|-------------|---------|
| 2111A 0031000 | ORANGE      | Reel        | 1000 ft |
| 2111A 0035000 | ORANGE      | Reel        | 5000 ft |
| 2111A 0061000 | BLUE, LIGHT | Reel        | 1000 ft |
| 2111A 0065000 | BLUE, LIGHT | Reel        | 5000 ft |

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