



Part Number: 2130A

FOUNDATION Fieldbus, (8 pr) 16 AWG (7x24) TC,

XLP/TPE, Foil Shld, 600V, TC

# **Product Description**

Eight 16 AWG pairs stranded (7x24) tinned copper, cross-linked polyolefin insulation, overall Beldfoil® shield (100% coverage), thermoplastic elastomer (TPE) jacket.

# **Product Specifications**

# **Technical Specifications**

## **Construction and Dimensions**

#### Conductor:

| AWG       | Stranding          | Material           | No. of Pairs |
|-----------|--------------------|--------------------|--------------|
| 16        | 7×24               | TC - Tinned Copper | 8            |
| Total Num | ber of Conductors: | 16                 |              |

### Insulation:

| Material              |          |  |  |
|-----------------------|----------|--|--|
| XLP - Cross-linked Po | lyolefin |  |  |

#### 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 |
| 6      | Blue & Orange Numbered 6 |
| 7      | Blue & Orange Numbered 7 |
| 8      | Blue & Orange Numbered 8 |

# 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:

| Туре | 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 | 0.982 in         | Yes     |

# **Electrical Characteristics**

### **Conductor DCR:**

| Nominal Condu  | ctor 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:

| Nomina | al 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 μH/ft         |  |

## Voltage:

| Description     | UL Voltage Rating | Voltage Rating [V] |  |
|-----------------|-------------------|--------------------|--|
| CSA CIC type TC | 600 V RMS         | 600 V RMS          |  |

## Use

| Suitability - Oil Resistance:      | Yes     |
|------------------------------------|---------|
| Suitability - Indoor:              | Yes     |
| Suitability - Outdoor:             | Yes     |
| Suitability - Sunlight Resistance: | Yes     |
| Max Recommended Pulling Tension:   | 786 lbs |

# Safety

| CSA Flammability:     | FT4                     |  |
|-----------------------|-------------------------|--|
| ISO/IEC Flammability: | 60332-3-24 (Category C) |  |
| UL Flammability:      | UL1581 Vertical Tray    |  |

#### **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: | 10 in |
|-----------------------------|-------|
|-----------------------------|-------|

### **Part Number**

| lenum (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  |
|---------------|-------------|-------------|---------|
| 2130A 0031000 | ORANGE      | Reel        | 1000 ft |
| 2130A 0035000 | ORANGE      | Reel        | 5000 ft |
| 2130A 0061000 | BLUE, LIGHT | Reel        | 1000 ft |
| 2130A 0065000 | BLUE, LIGHT | Reel        | 5000 ft |

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