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# Part Number: 2113A

## Fieldbus, 12 Pr #16 Str TC, XLPO Ins, IS/OS, TPE Jkt, CMG

Request Sample

### Product Description

Fieldbus, 12 Pair 16AWG (7x24H) Tinned Copper, XLPO Insulation, Individual & Overall Beldfoil® Shield, Orange TPE Outer Jacket, CMG

### Technical Specifications

#### Physical Characteristics (Overall)

**Conductor**

| AWG | Stranding | Material | No. of Pairs |
|---|---|---|---|
| 16 | 7x24 | TC - Tinned Copper | 12 |

| | |
|---|---|
| Conductor Count: | 24 |

**Insulation**

| Material | Nominal Wall Thickness |
|---|---|
| XLP - Cross Linked Polyolefin | 0.038 in |

**Color Chart**

| Number | Color |
|---|---|
| 1 | Blue and Orange Numbered 1 |
| 2 | Blue and Orange Numbered 2 |
| 3 | Blue and Orange Numbered 3 |
| 4 | Blue and Orange Numbered 4 |
| 5 | Blue and Orange Numbered 5 |
| 6 | Blue and Orange Numbered 6 |
| 7 | Blue and Orange Numbered 7 |
| 8 | Blue and Orange Numbered 8 |
| 9 | Blue and Orange Numbered 9 |
| 10 | Blue and Orange Numbered 10 |
| 11 | Blue and Orange Numbered 11 |
| 12 | Blue and Orange Numbered 12 |

**Inner Shield Material**

| 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 | 18 | 7x26 |

**Outer Shield Material**

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

**Outer Jacket Material**

| Material | Nominal Diameter | Nominal Wall Thickness | Ripcord |
|---|---|---|---|
| TPE - Thermoplastic Elastomer | 1.186 in | 0.085 in | Yes |

#### Electrical Characteristics

**Conductor DCR**

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

**Capacitance**

| Max. Capacitance Unbalance | Nom. Capacitance Conductor to Conductor |
|---|---|
| 1.2 pF/ft | 22 pF/ft |

**Inductance**

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

**Impedance**

| Nominal Characteristic Impedance |
|---|
| 100 Ohm |

**High Frequency (Nominal/Typical)**

| Frequency [MHz] | Nom. Insertion Loss |
|---|---|
| 0.039 MHz | 0.065 dB/100ft |

**Delay**

| Nominal Velocity of Propagation (VP) [%] |
|---|
| 64 % |

**High Freq**

| Max. Insertion Loss (Attenuation) | Max./Min. Input Impedance (unFitted) |
|---|---|
| 0.091 dB/100ft | 100 Ohm |

**Current**

| Element | Max. Recommended Current [A] |
|---|---|
| Per Conductor | 7.2 Amps per Conductor |

**Voltage**

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

| | |
|---|---|
| Electrical Characteristics Notes: | Max Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pS/ft |
| Other Electrical Characteristic 2: | 31.25 KBits/sec |

## Temperature Range

| | |
|---|---|
| Installation Temp Rating: | -25°C |
| UL Temp Rating: | 90°C |
| Operating Temp Range: | -40°C To 90°C |

## Mechanical Characteristics

| | |
|---|---|
| Oil Resistance: | Yes |
| Bulk Cable Weight: | 666 lbs/1000ft |
| Max Recommended Pulling Tension: | 1161 lbs |
| Min Bend Radius/Minor Axis: | 12 in |

## Standards

| | |
|---|---|
| NEC Articles: | 800 |
| NEC/(UL) Specification: | CMG, ITC, PLTC-ER |
| CEC/C(UL) Specification: | CIC, TC |
| CSA AWM Specification: | AWM I A/B II A/B |

## Applicable Environmental and Other Programs

| | |
|---|---|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |

| | |
|---|---|
| EU CE Mark: | Yes |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

## Suitability

| | |
|---|---|
| Suitability - Burial: | Yes |
| Suitability - Indoor: | Yes |
| Suitability - Oil Resistance: | Yes |
| Suitability - Outdoor: | Yes |
| Suitability - Sunlight Resistance: | Yes |

## Flammability, LS0H, Toxicity Testing

| | |
|---|---|
| UL Flammability: | UL1685 UL Loading |
| CSA Flammability: | FT4 |
| ISO/IEC Flammability: | 60332-3-24 (Category C) |
| UL voltage rating: | 300 V RMS |

## Plenum/Non-Plenum

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

## Part Number

**Variants**

| Item # | Color | UPC | Length |
|---|---|---|---|
| 2113A 0061000 | Blue, Light | 612825129356 | 1,000 ft |
| 2113A 0065000 | Blue, Light | 612825129363 | 5,000 ft |
| 2113A 0031000 | Orange | 612825129332 | 1,000 ft |
| 2113A 0035000 | Orange | 612825129349 | 5,000 ft |

## History

| | |
|---|---|
| Update and Revision: | Revision Number: 0.247 Revision Date: 08-22-2019 |

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