



Part Number: 2135A

Fieldbus, 36 Pr #16 Str TC, XLPO Ins, IS/OS, TPE Jkt, 600V TC-ER

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Product Description

Fieldbus, 36 Pair 16AWG (7x24H) Tinned Copper, XLPO Insulation, Individual & Overall Beldfoil® Shield, Orange TPE Outer Jacket, 600V TC-ER

Technical Specifications

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | No. of Pairs |
|-----|-----------|--------------------|--------------|
| 16 | 7x24 | TC - Tinned Copper | 36 |

Conductor Count: 72

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 |
| 13 | Blue and Orange Numbered 13 |
| 14 | Blue and Orange Numbered 14 |
| 15 | Blue and Orange Numbered 15 |
| 16 | Blue and Orange Numbered 16 |
| 17 | Blue and Orange Numbered 17 |
| 18 | Blue and Orange Numbered 18 |
| 19 | Blue and Orange Numbered 19 |
| 20 | Blue and Orange Numbered 20 |
| 21 | Blue and Orange Numbered 21 |
| 22 | Blue and Orange Numbered 22 |
| 23 | Blue and Orange Numbered 23 |
| 24 | Blue and Orange Numbered 24 |
| 25 | Blue and Orange Numbered 25 |
| 26 | Blue and Orange Numbered 26 |
| 27 | Blue and Orange Numbered 27 |
| 28 | Blue and Orange Numbered 28 |

| | |
|----|-----------------------------|
| 29 | Blue and Orange Numbered 29 |
| 30 | Blue and Orange Numbered 30 |
| 31 | Blue and Orange Numbered 31 |
| 32 | Blue and Orange Numbered 32 |
| 33 | Blue and Orange Numbered 33 |
| 34 | Blue and Orange Numbered 34 |
| 35 | Blue and Orange Numbered 35 |
| 36 | Blue and Orange Numbered 36 |

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 | 1.952 in | 0.12 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 | 600 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: | 1875 lbs/1000ft |
| Max Recommended Pulling Tension: | 3412 lbs |
| Min Bend Radius/Minor Axis: | 19.75 in |

Standards

| | |
|-------------------------|------------------|
| NEC/(UL) Specification: | TC-ER |
| 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: | UL1581 Vertical Tray |
| CSA Flammability: | FT4 |
| ISO/IEC Flammability: | 60332-3-24 (Category C) |
| UL voltage rating: | 600 V RMS |

Plenum/Non-Plenum

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

Part Number

Variants

| Item # | Color | UPC | Length |
|---------------|-------------|--------------|----------|
| 2135A 0061000 | Blue, Light | 612825130420 | 1,000 ft |
| 2135A 0031000 | Orange | 612825130413 | 1,000 ft |

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.202 Revision Date: 08-22-2019 |
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