



Product: <u>1359A</u> ☑

Fieldbus, 50 Pr #18 Str TC, PO Ins, IS/OS, PVC Jkt, CMG

Product Description

Fieldbus, 50 Pair 18AWG (7x26) Tinned Copper, PO Insulation, Individual & Overall Beldfoil® Shield, Orange PVC Outer Jacket, CMG

Technical Specifications

Product Overview

Suitable Applications: harsh environment digital and serial two-way communication, oil and gas extraction and refining sites, petrochemical, Profibus process automation or Foundation FieldBus process automation, extreme temperature environments, exposure to humidity/moisture, dust, and oil, remote locations long distance applications, etc.

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | | Material | No. of Pairs |
|---------|------------------------|------|---------------|--------------|
| 18 | 7x26 | TC - | Tinned Copper | 50 |
| Condu | Conductor Count: | | 100 | |
| Total I | Total Number of Pairs: | | 50 | |

Insulation

| Material | Nominal Wall Thickness |
|--------------------|------------------------|
| PP - Polypropylene | 0.021 in |

Color Chart

| Number | Color |
|--------|---------------------------|
| 1 | Blue, Orange and Numbered |
| 2 | |
| 3 | |
| 4 | |
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| 50 | |
| | |

Inner Shield Material

| Type | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|------|-------------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | Bi-Laminate (Alum+Poly) | Beldfoil® | 100% | TC - Tinned Copper | 20 | 7x28 |

Outer Shield Material

| | Type | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|---|------|-------------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| ľ | Таре | Bi-Laminate (Alum+Poly) | Beldfoil® | 100% | TC - Tinned Copper | 18 | 7x26 |

Outer Jacket Material

| Material | Nominal Diameter | Nominal Wall Thickness | Ripcord |
|--------------------------|------------------|------------------------|---------|
| PVC - Polyvinyl Chloride | 1.662 in | 0.085 in | Yes |

Construction and Dimensions

Stranding



Electrical Characteristics

Conductor DCR

| Individual Pair Nominal Shield DCR | Nominal Conductor DCR | Nominal Outer Shield DCR |
|------------------------------------|-----------------------|--------------------------|
| 7.5 Ohm/1000ft | 5.86 Ohm/1000ft | 4.9 Ohm/1000ft |

Capacitance

| Max. Capacitance Unbalance | Nom. Capacitance Conductor to Shield | Nom.Mutual Capacitance |
|----------------------------|--------------------------------------|------------------------|
| 1.2 pF/ft | 45 pF/ft | 24 pF/ft |

Inductance

Nominal Inductance

Impedance

Nominal Characteristic Impedance

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 0.039 MHz | 0.08 dB/100ft |

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 | 5.2 Amps per Conductor |

Voltage

UL Voltage Rating 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

| UL Temp Rating: | 90°C |
|-----------------------|---------------|
| Operating Temp Range: | -40°C to 90°C |

Mechanical Characteristics

| Bulk Cable Weight: | 1200 lbs/1000ft |
|-----------------------------|-----------------|
| Max. Pull Tension: | 2892 lbs |
| Min Bend Radius/Minor Axis: | 15.5 in |

Standards

| NEC Articles: | Article 725 |
|----------------------|-------------|
| NEC/(UL) Compliance: | PLTC |

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: | /es | | |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) | | |
| EU CE Mark: | Yes | | |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2010-02-19 | | |
| MII Order #39 (China RoHS): | Yes | | |

Suitability

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

Flammability, LS0H, Toxicity Testing

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

Plenum/Non-Plenum

| Plenum (Y/N): |
|---------------|
|---------------|

Part Number

Variants

| Item # | Color | Putup Type | Length | UPC |
|---------------|--------|------------|----------|--------------|
| 1359A 0031000 | Orange | Reel | 1,000 ft | 612825112624 |
| Footnote: | | C - CRA | TE REEL | PUT-UP. |

History

| Update and Revision: | Revision Number: 0.354 Revision Date: 09-30-2020 |
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