



Product: <u>1338A</u> ☑

Fieldbus, 2 Pr #18 Str TC, PO Ins, IS/OS, PVC Jkt, 600V TC-ER

Request Sample

Product Description

Fieldbus, 2 Pair 18AWG (7x26) Tinned Copper, PO Insulation, Individual & Overall Beldfoil® Shield, Orange PVC Outer Jacket, 600V TC-ER

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 |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable Applications. | process automation, extreme temperature environments, exposure to humidity/moisture, dust, and oil, remote locations long distance applications, etc. |

Physical Characteristics (Overall)

Conductor

| Element | AWG | Stranding | Material | No. of Conductors | No. of Pairs |
|--------------|-------|-----------|--------------------|-------------------|--------------|
| Pair(s) | 18 | 7x26 | TC - Tinned Copper | | 2 |
| Ground Wire | 18 | 7x26 | TC - Tinned Copper | 1 | |
| Conductor Co | ount: | | 5 | | |

Insulation

| Element | Material |
|-------------|--------------------------|
| | PVC - Polyvinyl Chloride |
| Ground Wire | PP - Polypropylene |

Color Chart

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

Color Chart 2



Inner Shield

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

Outer Shield

| 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 Jacket

| Material | Nominal Diameter |
|--------------------------|------------------|
| PVC - Polyvinyl Chloride | 0.51 in |

Electrical Characteristics

Conductor DCR

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

Capacitance

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

Inductance

Nominal Inductance 0.22 µH/ft

Impedance

Nominal Characteristic Impedance

High Frequency (Nominal/Typical)

Nom. Insertion Loss 0.08 dB/100ft

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Max./Min. Input Impedance (unFitted) |
|-----------------|-----------------------------------|--------------------------------------|
| 0.031 MHz | 0.091 dB/100ft | 100 Ohm |

Current

| Element | Max. Recommended Current [A] |
|---------------|------------------------------|
| Per Conductor | 5.2 Amps per Conductor |

Voltage

UL Voltage Rating 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

| UL Temp Rating: | 75°C |
|------------------------------|----------------|
| Operating Temperature Range: | -30°C to +75°C |

Mechanical Characteristics

| Max. Pull Tension: | 112 lbs |
|------------------------------|---------|
| Min. Bend Radius/Minor Axis: | 5.1 in |

Standards

| NEC Articles: | Article 336 |
|----------------------|-------------|
| NEC/(UL) Compliance: | TC-ER |

Applicable Environmental and Other Programs

| EU Directive 2000/53/EC (ELV): | Yes |
|----------------------------------------------|-------------------------------|
| EU Directive 2011/65/EU (RoHS 2): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| 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 |
|--------------------|-------------------|
| UL voltage rating: | 600 V RMS |

Plenum/Non-Plenum

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

Related Part Numbers

Variants

| Item # | Color | Put-Up Type | Length | UPC |
|---------------|--------|-------------|----------|--------------|
| 1338A 0037500 | Orange | Reel | 7,500 ft | 612825112273 |

History

| Update and Revision: | Revision Number: 0.451 Revision Date: 05-05-2023 |
|----------------------|--------------------------------------------------|

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