



Product: [1345F](#)

Fieldbus, 2 C #15+18 Str TC, PVC-NYL&FEP Ins, IS+OA TC Brd, TPE Jkt, High Flex

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Product Description

Fieldbus, 2 Conductor 15+18AWG (65x33+65x36) Tinned Copper, PVC-NYL&FEP Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, Orange TPE Outer Jacket, High Flex

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 |
| 15 | 65x33 | TC - Tinned Copper | 1 |
| 18 | 65x36 | TC - Tinned Copper | 1 |
| Conductor Count: 4 | | | |

| Insulation | | |
|------------|--------------------------|------------------------|
| Element | Material | Nominal Wall Thickness |
| 15 AWG | PVC - Polyvinyl Chloride | 0.021 in |
| 18 AWG | PE - Polyethylene (Foam) | 0.053 in |

| Color Chart | |
|-------------|--------------|
| Number | Color |
| 1 (15 AWG) | Red & Black |
| 2 (18 AWG) | Blue & White |

| Inner Shield | | | |
|--------------|-------------|-------------------------|--------------|
| Type | Layer | Material | Coverage [%] |
| Tape | 15 AWG Pair | Bi-Laminate (Alum+Poly) | 100% |

| Outer Shield | | | | | |
|--------------|--------------------|--------------|--------------------|---------------|------------------------------|
| Type | Material | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
| Braid | Tinned Copper (TC) | 65% | TC - Tinned Copper | 18 | 65x36 |

| Outer Jacket | | | |
|-------------------------------|------------------|------------------------|--|
| Material | Nominal Diameter | Nominal Wall Thickness | |
| TPE - Thermoplastic Elastomer | 0.480 in | 0.060 in | |

Electrical Characteristics

| Conductor DCR | | |
|---------------|-----------------------|--------------------------|
| Element | Nominal Conductor DCR | Nominal Outer Shield DCR |
| 15 AWG | 3.6 Ohm/1000ft | 1.8 Ohm/1000ft |
| 18 AWG | 6.9 Ohm/1000ft | |

Capacitance

| Element | Nom. Capacitance Conductor to Conductor |
|------------------|---|
| 18 AWG Pair Only | |
| | 12.0 pF/ft |

Inductance

| Element | Nominal Inductance |
|------------------|--------------------|
| 15 AWG Pair Only | 0.174 µH/ft |

Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 100 Ohm |
| 120 Ohm |

Delay

| Max. Delay | Max. Delay Description | Nominal Delay | Nominal Velocity of Propagation (VP) [%] | Nominal Velocity of Propagation (VP) Description |
|------------|------------------------|---------------|--|--|
| 1.36 ns/ft | 18 AWG Pair Only | | | 18 AWG Pair Only |
| | | 1.36 ns/ft | 75% | |

High Frequency

| Element | Frequency [MHz] | Max./Min. Input Impedance (unFitted) |
|------------------|-----------------|--------------------------------------|
| 18 AWG Pair Only | 0.125 MHz | 120 Ohm |
| | 0.5 MHz | |
| | 1 MHz | |

Current

| Element | Max. Recommended Current [A] |
|---------|------------------------------|
| 15 AWG | 8 Amps per Conductor |
| 18 AWG | 5 Amps per Conductor |

Voltage

| UL Description | UL Voltage Rating |
|----------------|-------------------|
| CMG, PLTC-ER | 300 V |
| UL AWM 20201 | 600 V |

Temperature Range

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

Mechanical Characteristics

| | |
|------------------------------|----------------|
| Oil Resistance: | Yes |
| Bulk Cable Weight: | 133 lbs/1000ft |
| Max. Pull Tension: | 205 lbs |
| Min. Bend Radius/Minor Axis: | 4.6 in |

Standards

| | |
|--------------------------|--------------------------|
| NEC Articles: | Article 725, Article 800 |
| NEC/(UL) Compliance: | CMG, PLTC-ER |
| CEC/C(UL) Compliance: | CMG |
| UL AWM Style Compliance: | AWM 20201 |
| CSA AWM Compliance: | AWM I/II A |
| CPR Euroclass: | Eca |

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

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|--------------------|
| UL Flammability: | UL1685 FT4 Loading |
| IEC Flammability: | IEC 60332-1-2 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

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

Related Part Numbers

Variants

| Item # | Color | Put-Up Type | Length | UPC |
|---------------|----------|-------------|----------|--------------|
| 1345F T5U1000 | Gray T5U | Reel | 1,000 ft | 612825112327 |

| | |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

Product Notes

| | |
|--------|---|
| Notes: | High-Flex. Thick. Meter marks on jacket to aid users in installation. ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark. Jacket printed ""1PR16"" instead of ""1PR15"" due to UL requirements for CMG Listing. |
|--------|---|

History

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| Update and Revision: | Revision Number: 0.547 Revision Date: 04-30-2024 |
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