

1345F Multi-Conductor - High-Flex DeviceBus® for ODVA DeviceNet™



For more Information
please call

1-800-Belden1



General Description:

15 and 18 AWG stranded tinned copper conductors, PVC insulation (power), FPE insulation (data), individually foil shielded (100% coverage) plus an overall tinned copper braid (65% coverage), sunlight/oil-resistant TPE jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 1 | 15 | 65x33 | TC - Tinned Copper |
| 1 | 18 | 65x36 | TC - Tinned Copper |

Total Number of Conductors: 4

Insulation

Insulation Material:

| Insulation Material | AWG |
|--------------------------|-----|
| PVC - Polyvinyl Chloride | 15 |
| FPE - Foam Polyethylene | 18 |

Inner Shield

Inner Shield Material:

| Layer # | Type | Inner Shield Material | Coverage (%) |
|-------------|------|------------------------------|--------------|
| 15 AWG Pair | Tape | Aluminum Foil-Polyester Tape | 100 |
| 18 AWG Pair | Tape | Aluminum Foil-Polyester Tape | 100 |

Outer Shield

Outer Shield Material:

| Type | Outer Shield Material | Coverage (%) |
|-------|-----------------------|--------------|
| Braid | TC - Tinned Copper | 65 |

Outer Shield Drain Wire AWG:

| AWG | Stranding | Drain Wire Conductor Material |
|-----|-----------|-------------------------------|
| 18 | 65x36 | TC - Tinned Copper |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material | Nom. Wall Thickness (mm) |
|-------------------------------|--------------------------|
| TPE - Thermoplastic Elastomer | 1.524 |

Overall Cable

Overall Nominal Diameter: 12.192 mm

Pair

Pair Color Code Chart:

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

Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +75°C

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| | |
|-----------------------------------|---------------------------|
| UL Temperature Rating: | 75°C (UL AWM Style 20201) |
| Bulk Cable Weight: | 197.931 Kg/Km |
| Max. Recommended Pulling Tension: | 911.881 N |
| Min. Bend Radius/Minor Axis: | 116.840 mm |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| | |
|---------------------------------------|-----------------------------|
| NEC/(UL) Specification: | CMG, PLTC-ER |
| CEC/C(UL) Specification: | CMG |
| AWM Specification: | UL Style 20201 (600 V 75°C) |
| CSA Specification: | I/II A |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU CE Mark: | Yes |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 04/01/2005 |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |
| Other Specification: | ODVA Class 2 Thick |

Flame Test

| | |
|-----------------|--------------------|
| UL Flame Test: | UL1685 FT4 Loading |
| CSA Flame Test: | FT4 |

Suitability

| | |
|----------------------|-----|
| Sunlight Resistance: | Yes |
| Oil Resistance: | Yes |

Plenum/Non-Plenum

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

Electrical Characteristics (Overall)

Unaveraged Impedance:

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Impedance (Ohm) |
|------------------|-------------|-------------------|------------------|-----------------|
| 18 AWG Pair Only | | | | 120 |

Nom. Inductance:

| Description | Inductance (µH/m) |
|------------------|-------------------|
| 15 AWG Pair Only | 0.570894 |

Nom. Capacitance Conductor to Conductor:

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Capacitance (pF/m) |
|------------------|-------------|-------------------|------------------|--------------------|
| 18 AWG Pair Only | 1 | | | 39.372 |

Nominal Velocity of Propagation:

| Description | VP (%) |
|------------------|--------|
| 18 AWG Pair Only | 75 |

Maximum Delay:

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Delay (ns/m) |
|------------------|-------------|-------------------|------------------|--------------|
| 18 AWG Pair Only | | | | 4.46216 |

Nom. Conductor DC Resistance:

METRIC MEASUREMENT VERSION

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| Description | DCR @ 20°C (Ohm/km) |
|-------------|---------------------|
| 15 AWG | 11.8116 |
| 18 AWG | 22.6389 |

Nominal Outer Shield DC Resistance:

| DCR @ 20°C (Ohm/km) |
|---------------------|
| 5.9058 |

Max. Attenuation:

| () | Description | Freq. (MHz) |
|---------|------------------|-------------|
| 0.42653 | 18 AWG Pair Only | .125 |
| 0.85306 | | .500 |
| 1.3124 | | 1.00 |

Max. Operating Voltage - UL:

| Voltage | Description |
|-----------|-------------|
| 300 V RMS | C(UL) AWM |

Max. Recommended Current:

| Description | Current |
|-------------|----------|
| 15 AWG | 8.0 Amps |
| 18 AWG | 5.0 Amps |

Notes (Overall)

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.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|----------|-------|---------------------|
| 1345F T5U1000 | 1,000 FT | 133.000 LB | GRAY T5U | C | 2 #15, 2 #18 SH TPE |

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 08-01-2012

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