



Product: [1229502](#)

VFD 300% Gnd, 3C+G #12 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/#12 TC Drain, PVC Jkt, AIA Armor, Blk PVC Jkt, 600V MC 90C Dry/Wet

Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 12AWG (65x30) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/12AWG Tinned Copper Drain, PVC Inner Jacket, Aluminum Interlock Armor, Black PVC Outer Jacket, 600V MC 90C Dry/Wet SUN RES DIR BUR CT USE Oil Resistant

Technical Specifications

Product Overview

| | |
|------------------------|--|
| Suitable Applications: | Variable Frequency Drives (VFD); AC Motor and Drive Systems; Exposure to rodents, crush or impact forces |
|------------------------|--|

Construction Details

Conductor

| Element | No. of Elements | Size | Stranding | Material |
|--------------|-----------------|--------|-----------|--------------------|
| Conductor(s) | 3 | 12 AWG | 65x30 | TC - Tinned Copper |
| Ground | 1 | 12 AWG | 65x30 | TC - Tinned Copper |

Insulation

| Element | Material | Nom. Thickness | Nom. Insulation Diameter | Color Code |
|--------------|--|-------------------|--------------------------|---------------------|
| Conductor(s) | XLPE - Cross-Linked Polyethylene (Thermoset) | 0.046 in (1.2 mm) | 0.187 in (4.75 mm) | Black and Numbered |
| Ground | PVC - Polyvinyl Chloride | 0.046 in (1.2 mm) | 0.187 in (4.75 mm) | Green/Yellow Stripe |

Outer Shield

| Shield Type | Material | Coverage |
|-------------|-------------------------------|----------|
| Tape | Tri-Laminate (Alum+Poly+Alum) | 100% |
| Braid | Tinned Copper (TC) | 85% |

Inner Jacket

| Material | Nom. Thickness | Nom. Diameter |
|--------------------------|-------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.073 in (1.9 mm) | 0.630 in (16.0 mm) |

Armor

| Armor Type & Material |
|--------------------------------|
| AIA - Aluminum Interlock Armor |

Outer Jacket

| Material | Nom. Thickness | Nom. Diameter | Ripcord |
|--------------------------|-------------------|--------------------|---------|
| PVC - Polyvinyl Chloride | 0.050 in (1.3 mm) | 0.960 in (24.4 mm) | Yes |

| | |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.960 in (24.4 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Electricals

| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Characteristic Impedance | Nom. Velocity of Prop. | Max. Current |
|--------------|---------------------------------|-------------------------------|---|-------------------------------|------------------------|-------------------------------|
| Conductor(s) | 1.567 Ohm/1000ft (5.141 Ohm/km) | 45 pF/ft (150 pF/m) | 81 pF/ft (270 pF/m) | 41 Ohm | 55% | 30 Amps per Conductor at 30°C |

Voltage

| UL Voltage Rating |
|-------------------|
| 600 V (MC) |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|--------------------|----------------|
| 90°C Dry, 90°C Wet | -25°C To +90°C |

Bend Radius

| Stationary Min. | Installation Min. |
|------------------|-------------------|
| 11.5 in (292 mm) | 11.5 in (292 mm) |

| | |
|--------------------|----------------------------|
| Max. Pull Tension: | 395 lbs (179 kg) |
| Bulk Cable Weight: | 457 lbs/1000ft (680 kg/km) |

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial |
| Sustainability: | CA Prop 65 |
| Flammability / Reaction to Fire: | UL 1685 Vertical Tray, 1202, 383 Vertical Tray Flame Test (70,000 BTU) |
| NEC / UL Compliance: | Article 336, MC |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |

History

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| Update and Revision: | Revision Number: 0.76 Revision Date: 05-31-2024 |
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