



Product: [29528X](#)

VFD 100% Gnd, 3C #1 Str TC XLPE Ins + #1 Symm. Seg. Grd (3 of #6) Str BC, CTS, Blk LSZH-TS Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable Marine Approved

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Product Description

Belden 100% Ground Flexible VFD, 3 Conductor 1AWG (7x19x22) Tinned Copper XLPE Insulation M4 Color Code + 1AWG Symmetrically Segmented Ground (3 of 6AWG) Bare Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black LSZH-TS Outer Jacket, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable Marine Approved SUN RES OIL RES II

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | Variable Frequency Drives (VFD); AC Motor and Drive Systems; Exposure to marine or saltwater environments |
|------------------------|---|

Construction Details

Conductor

| Element | Number of Element | AWG | Stranding | Material | Notes |
|--------------|-------------------|-----|-----------|--------------------|-------------------|
| Conductor(s) | 3 | 1 | 7x19x22 | TC - Tinned Copper | |
| Ground | 3 | 6 | 7x19x27 | BC - Bare Copper | Segmented Grounds |

Insulation

| Element | Material | Thickness | Color Code |
|--------------|--|-----------|--------------------|
| Conductor(s) | XLPE - Cross-Linked Polyethylene (Thermoset) | 0.057 in | Black and Numbered |
| Ground | No Insulation | | |

Outer Shield Material

| Shield Type | Material | Coverage |
|-----------------------------|-------------------------------------|-------------|
| Helical Tape + Helical Tape | Bare Copper (BC) + Bare Copper (BC) | 100% + 100% |

Outer Jacket Material

| Material | Thickness | Nom. Diameter | Ripcord |
|--|-----------|---------------|---------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant, Thermoset) | 0.083 in | 1.195 in | Yes |

| | |
|---------------------------|----------|
| Cable Diameter (Nominal): | 1.195 in |
|---------------------------|----------|

Electrical Characteristics

Electricals

| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Characteristic Impedance | Nom. Velocity of Prop. | Max. Current |
|--------------|--------------------|-------------------------------|---|--------------------------|------------------------|--|
| Conductor(s) | 0.26 Ohm/1000ft | 37 pF/ft | 67 pF/ft | 50 Ohm | 0.55% | 145 Amps per Conductor at 30°C (per NEC) |

Voltage

| UL Voltage Rating |
|--|
| 1000 V (TC, Flexible Motor Supply Cable), 600 / 1000 V (UL 1309) |

Mechanical Characteristics

Temperature

| UL Rating | Operating |
|-----------|-----------|
| | |

90°C Dry, 90°C Wet -40°C To +90°C

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 12 in | 14.3 in |

| | |
|--------------------|-----------------|
| Max. Pull Tension: | 4109 lbs |
| Bulk Cable Weight: | 1462 lbs/1000ft |

Standards and Compliance

| | |
|---------------------------------|--|
| Environmental Suitability: | Indoor, Outdoor, Sunlight Resistance, Oil Resistance |
| Sustainability: | CA Prop 65 |
| Flammability / Fire Resistance: | UL1685 FT4 Loading, FT4, 1202, 383 Vertical Tray Flame Test (70,000 BTU) |
| NEC / UL Compliance: | Article 336, TC-ER, XHHW-2 |
| ICEA Compliance: | S-95-658 |
| Marine Compliance: | ABS, DNV |
| European Directive Compliance: | EU CE Mark |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |

History

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| Update and Revision: | Revision Number: 0.278 Revision Date: 09-30-2020 |
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