



# Product: <u>29506X</u> ☑

VFD 300% Gnd, 3C+G #4 Str TC, XLPE Ins+PVC Grd, OS+TC Brd w/4-#10 TC Drains, Blk LSZH-TS Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable Marine Approved

Request Sample

# **Product Description**

Belden 300% Ground Flexible VFD, 3 Conductor 4AWG (7x19x25) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/4-10AWG Tinned Copper Drains, 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           |
|--------------|-------------------|-----|-----------|--------------------|
| Conductor(s) | 3                 | 4   | 7x19x25   | TC - Tinned Copper |
| Ground       | 1                 | 4   | 7x19x25   | TC - Tinned Copper |

#### Insulation

| Element      | Material                                     | Thickness | Color Code          |
|--------------|--|-----------|---------------------|
| Conductor(s) | XLPE - Cross-Linked Polyethylene (Thermoset) | 0.062 in  | Black and Numbered  |
| Ground       | PVC - Polyvinyl Chloride                     | 0.062 in  | Green/Yellow Stripe |

### **Outer Shield Material**

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

#### **Outer Jacket Material**

| Material   |          | Thickness | Nom. Diameter | Ripcord |
|--|----------|-----------|---------------|---------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant, Thermoset) |          | 0.093 in  | 1.113 in      | Yes     |
| Cable Diameter (Nominal):                                  | 1.113 in |           |               |         |

## **Electrical Characteristics**

## Electricals

| Element      | Nom. Conductor<br>DCR | Nom. Capacitance<br>Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds +<br>Shield) | Characteristic<br>Impedence | Nom. Velocity of<br>Prop. | Max. Current                            |
|--------------|-----------------------|----------------------------------|--|-----------------------------|---------------------------|---|
| Conductor(s) | 0.16 Ohm/1000ft       | 40 pF/ft                         | 72 pF/ft   | 46 Ohm                      | 0.55%                     | 95 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

#### Bend Radius

| Stationary Min.   | Installation Min. | Flexing Min |
|-------------------|-------------------|-------------|
| 9.3 in            | 13.4 in           | 19.4 in     |
| Max. Pull Tension | 1:                |             |
| Bulk Cable Weigl  | nt:               |             |

## **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, Unlisted Singles                                     |  |
| 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

Update and Revision: Revision Number: 0.264 Revision Date: 09-30-2020

© 2020 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulators based on their individual usage of the product.