



**Product:** [29529X](#)

VFD 100% Gnd, 3C #1/0 Str TC XLPE Ins + #1/0 Symm. Seg. Grd (3 of #4) Str BC, CTS, Blk LSZH-TS Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC Marine Approved

[Request Sample](#)

## Product Description

Belden 100% Ground Flexible VFD, 3 Conductor 1/0AWG (7x19x21) Tinned Copper XLPE Insulation M4 Color Code + 1/0AWG Symmetrically Segmented Ground (3 of 4AWG) 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
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### Construction Details

#### Conductor

Element	Number of Element	AWG	Stranding	Material	Notes
Conductor(s)	3	1/0	7x19x21	TC - Tinned Copper	
Ground	3	4	7x19x25	BC - Bare Copper	Segmented Grounds

#### Insulation

Element	Material	Thickness [in.]	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.057	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	1.292 in	Yes

Cable Diameter (Nominal):	1.292 in
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### 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%	170 Amps per Conductor at 30°C

#### 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.
12.9 in	15.5 in

Max. Pull Tension:	5506 lbs
Bulk Cable Weight:	1836 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, UL Flexible Motor Supply Cable
ICEA Compliance:	S-95-658
IEEE Compliance:	IEEE 1580-2010 Type P
Marine Compliance:	ABS, DNV, UL 1309
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	P-07-KA14008-MSHA

#### History

Update and Revision:	Revision Number: 0.374 Revision Date: 09-30-2020
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