



Product: 29502X

VFD 300% Gnd, 3C+IG #12 Str TC, XLPO Ins+PVC Grd, OS+TC Brd, 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 12AWG (65x30) Tinned Copper, XLPO Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) 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:	AC Motor drives, VFD, Variable Frequency drives
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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
	12	65x30	TC - Tinned Copper	3
Ground Wire	12	65x30	TC - Tinned Copper	

Conductor Count:	3
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Insulation

Material	Nominal Wall Thickness
XLPE - Cross Linked Polyethylene	0.045 in
XLPE - Cross Linked Polyolefin	

Color Chart

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3
4	Green/Yellow

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Aluminum/Polyester	Duofoil®	100 %	TC - Tinned Copper	12	65x30 mm
Braid	2	TC - Tinned Copper		85 %			

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
Haloarrest Xlink 2	0.63 in	0.073 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
1.6 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
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26 pF/ft	47 pF/ft
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Inductance

Nominal Inductance
0.197 µH/ft

Impedance

Nominal Characteristic Impedance
71 Ohm

Current

Max. Recommended Current [A]
30 Amps per conductor @ 30°C (per NEC)

Voltage

Description	UL Voltage Rating	Voltage Rating [V]
CSA AWM I/II A/B	1000 V RMS (Flexible Motor Supply Cable)	1000 V RMS
	600 V RMS (Type TC)	

Temperature Range

UL Temp Rating:	90°C Dry, 90°C Wet
Wet Temp Range:	-40°C To +90 °C
Dry Temp Range:	-40°C To +90 °C

Mechanical Characteristics

Bulk Cable Weight:	250 lbs/1000ft
Max Recommended Pulling Tension:	336 lbs
Min Bend Radius/Minor Axis:	6.3 in

Standards

NEC/(UL) Specification:	TC-ER, Unlisted Singles, WTTTC
CPR Euroclass:	Fca

Applicable Environmental and Other Programs

EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Burial:	Yes
Suitability - Indoor:	Yes
Suitability - Oil Resistance:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
IEEE Flammability:	1202
UL voltage rating:	1000 V RMS (Flexible Motor Supply Cable)

Part Number

Variants

Item #	Color	UPC	Length	Footnote
29502X 0105000	Black	612825136842	5,000 ft	C Z

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

History

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