



Part Number: 29500F

VFD 300% Gnd, 3+IG C #16 Str TC, XLPO+PVC Ins M4, OS+TC Brd, Blk TPE Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable

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Product Description

Belden 300% Ground Flexible VFD, 3+IG Conductor 16AWG (65x34) Tinned Copper, XLPO+PVC Insulation M4 Color Code, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, Black TPE Outer Jacket, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable 1000V WTTC 600V CIC TC SUN RES OIL RES II DIR BUR

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
	16	65x34	TC - Tinned Copper	3
Ground Wire	16	65x34	TC - Tinned Copper	

Conductor Count:	3
Conductor Size:	16 AWG

Insulation

Material	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.045 in
XLP - Cross Linked Polyolefin	0.045 in

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
Tape	1	Aluminum/Polyester	Duofoil®	100 %	TC - Tinned Copper	16
Braid	2	TC - Tinned Copper		85 %		

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	0.528 in	0.063 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
4 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
21 pF/ft	38 pF/ft

Inductance

Nominal Inductance
0.23 µH/ft

Impedance

Nominal Characteristic Impedance
90 Ohm

Current

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

Voltage

UL Voltage Rating
1000 V RMS (Flexible Motor Supply Cable)
600 V RMS (NEC Type TC)

Temperature Range

Operating Temp Range:	-40C To +90C Wet/Dry
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Mechanical Characteristics

Bulk Cable Weight:	128 lbs/1000ft
Max Recommended Pulling Tension:	128 lbs
Min Bend Radius (Continuous Flexing):	4 in
Min Bend Radius/Minor Axis:	2.6 in

Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, RHW-2, WTTC
CEC/C(UL) Specification:	600V Type CIC TC
Other Specification:	1000V UL Flexible Motor Supply

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-10-13
CA Prop 65 (CJ for Wire & Cable):	Yes

Suitability

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

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
IEEE Flammability:	1202, 383 Vertical Tray Flame Test (70,000 BTU)
UL voltage rating:	1000 V RMS (Flexible Motor Supply Cable)

Part Number

Variants

Item #	Color	UPC	Length
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29500F 0101000	Black	612825367239	1,000 ft
29500F 0106000	Black	612825367246	6,000 ft

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