



Product: [29501F](#)

VFD 300% Gnd, 3C+G #14 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/#14 TC Drain, Blk TPE Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC

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### Product Description

Belden 300% Ground Extra Flexible VFD, 3 Conductor 14AWG (104x30) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/14AWG Tinned Copper Drain, Black TPE Outer Jacket, 600/1000V 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:	Variable Frequency Drives (VFD); AC Motor and Drive Systems, Exposure to high flex, motion, and abrasion, Hard to reach installation areas
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#### Construction Details

##### Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	3	14 AWG	104x34	TC - Tinned Copper
Ground Wire	1	14 AWG	104x34	TC - Tinned Copper

##### Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLPO - Crosslink Polyolefin	0.046 in (1.2 mm)	0.167 in (4.24 mm)	ICEA Chart M4
Ground Wire	PVC - Polyvinyl Chloride	0.046 in (1.2 mm)	0.167 in (4.24 mm)	Green/Yellow Stripe

##### Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Tri-Laminate (Alum+Poly+Alum)	100%	14 AWG (104x34) TC
Braid	Tinned Copper (TC)	86%	

##### Outer Jacket

Separator	Material	Nom. Thickness	Nom. Diameter	Ripcord
Polyester Tape	TPE - Thermoplastic Elastomer	0.073 in (1.9 mm)	0.587 in (14.9 mm)	Yes

Overall Cable Diameter (Nominal):	0.587 in (14.9 mm)
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#### Electrical Characteristics

##### Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Conductor(s)	2.468 Ohm/1000ft	40 pF/ft (130 pF/m)	72 pF/ft (240 pF/m)	46 Ohm	55%	25 Amps per Conductor at 30°C (per NEC)
	2.73 Ohm/1000ft (8.96 Ohm/km)					25 Amps per Conductor at 30°C (per NEC)

##### Voltage

UL Voltage Rating
1000 V (TC-ER, XHHW-2, UL Flexible Motor Supply Cable), 600 V (C(UL) CIC TC)

#### Mechanical Characteristics

## Temperature

UL Temperature	Operating
90°C Dry, 90°C Wet	-40°C To +90°C

## Bend Radius

Stationary Min.	Installation Min.
7.0 in (180 mm)	7.0 in (180 mm)

Max. Pull Tension:	340 lbs (150 kg)
Bulk Cable Weight:	216 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL 1685 UL Loading, FT4, IEEE 1202 FT4
NEC / UL Compliance:	Article 336, Article 310, TC-ER, XHHW-2, UL Flexible Motor Supply Cable
CEC / C(UL) Compliance:	CIC, TC
ICEA Compliance:	S-95-658
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

## History

Update and Revision:	Revision Number: 0.189 Revision Date: 04-14-2023
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## Part Numbers

### Variants

Item #	Color	Putup Type	Length	UPC
29501F 0101000	Black	Reel	1,000 ft	612825367222
29501F 0105000	Black	Reel	5,000 ft	612825367253

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