



**Product:** [29502F](#)

VFD 300% Gnd, 3C+G #12 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/#12 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 12AWG (7x24x34) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/12AWG TC 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	Number of Element	AWG	Stranding	Material
Conductor(s)	3	12	7x24x34	TC - Tinned Copper
Ground	1	12	7x24x34	TC - Tinned Copper

#### Insulation

Element	Material	Thickness	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.046 in	Black and Numbered
Ground	PVC - Polyvinyl Chloride	0.046 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
TPE - Thermoplastic Elastomer	0.073 in	0.661 in	Yes

Cable Diameter (Nominal):	0.661 in
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### Electrical Characteristics

#### Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield	Nom. Capacitance Cond-to-Other (Conds + Shield)	Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Conductor(s)	1.546 Ohm/1000ft	29 pF/ft	53 pF/ft	53 pF/ft	63 Ohm	55%	30 Amps per Conductor at 30°C (per NEC)

#### Voltage

UL Voltage Rating
1000 V (TC, WTTC, UL Flexible Motor Supply Cable), 600 V (C(UL) CIC TC)

### Mechanical Characteristics

#### Temperature

UL Rating	Operating

90°C Dry, 90°C Wet -40°C To +90°C

#### Bend Radius

Stationary Min.	Installation Min.	Flexing Min.
3.3 in	5 in	5 in

Max. Pull Tension:	458 lbs
Bulk Cable Weight:	280 lbs/1000ft

#### Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Fire Resistance:	UL1685 UL Loading, FT4, FT4, 1202, 383 Vertical Tray Flame Test (70,000 BTU)
NEC / UL Compliance:	Article 336, TC-ER, WTTC, 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, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

#### History

Update and Revision:	Revision Number: 0.315 Revision Date: 03-16-2021
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