



Product: [29502T](#)

VFD 300% Gnd, 3C+G #12 Str TC, XLPE Ins+PVC Grd, OS+TC Brd w/#12 TC Drain, Blk LSZH Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC

### Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 12AWG (65x30) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/12AWG Tinned Copper Drain, Black LSZH Outer Jacket, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC SUN RES DIR BUR

### Technical Specifications

#### Product Overview

Suitable Applications:	Variable Frequency Drives (VFD); AC Motor and Drive Systems; Human safety applications with flame or toxicity concerns (low smoke, zero halogen)
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#### Construction Details

##### Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	3	12 AWG	65x30	TC - Tinned Copper
Ground	1	12 AWG	65x30	TC - Tinned Copper

##### Insulation

Element	Material	Nom. Thickness	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.046 in (1.2 mm)	Black and Numbered
Ground	PVC - Polyvinyl Chloride	0.046 in (1.2 mm)	Green/Yellow Stripe

##### Outer Shield

Shield Type	Material	Coverage
Tape	Tri-Laminate (Alum+Poly+Alum)	100%
Braid	Tinned Copper (TC)	85%

##### Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.073 in (1.9 mm)	0.630 in (16.0 mm)	Yes

Overall Cable Diameter (Nominal):	0.630 in (16.0 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)	1.566 Ohm/1000ft (5.138 Ohm/km)	29 pF/ft (95 pF/m)	53 pF/ft (170 pF/m)	63 Ohm	55%	30 Amps per Conductor at 30°C

##### Voltage

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

#### Mechanical Characteristics

##### Temperature

UL Temperature	Operating
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90°C Dry, 90°C Wet -25°C To +90°C

#### Bend Radius

Stationary Min.	Installation Min.
7.6 in (190 mm)	7.6 in (190 mm)

Max. Pull Tension:	458 lbs (208 kg)
Bulk Cable Weight:	274 lbs/1000ft (408 kg/km)

#### Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1685 FT4 Loading
NEC / UL Compliance:	Article 336, TC-ER, WTTC, XHHW-2, UL Flexible Motor Supply Cable
ICEA Compliance:	S-95-658
APAC Compliance:	China RoHS II (GB/T 26572-2011)

#### History

Update and Revision:	Revision Number: 0.263 Revision Date: 04-11-2025
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#### Part Numbers

##### Variants

Item #	Color	Putup Type	UPC	Footnote
29502T 0101000	Black	Reel	612825136828	C
29502T 0105000	Black	Reel	612825136835	C

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