



## Product: 29504

VFD 300% Gnd, 3C+IG #8 Str TC, XLPO Ins+PVC Gnd, OS+TC Brd, Blk PVC Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable

[Request Sample](#)

### Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 8AWG (7x19x29) Tinned Copper, XLPO Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, Black PVC Outer Jacket, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable 1000V CSA AWM I/II A/B 600V CIC TC SUN RES DIR BUR Oil Resistant

### 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
	8	7x19x29	TC - Tinned Copper	3
Ground Wire	8	7x19x29	TC - Tinned Copper	

Conductor Count:	3
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##### Insulation

Material	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.06 in
XLP - Cross Linked Polyolefin	0.06 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	Drainwire Construction n x D
Tape	1	Aluminum/Polyester	Duofoil®	100 %	TC - Tinned Copper	14 (4x)	41x30 mm
Braid	2	TC - Tinned Copper		85 %			

##### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.923 in	0.093 in

#### Electrical Characteristics

##### Conductor DCR

Nominal Conductor DCR
0.64 Ohm/1000ft

##### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield

30 pF/ft	54 pF/ft
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#### Inductance

<b>Nominal Inductance</b>
0.181 $\mu$ H/ft

#### Impedance

<b>Nominal Characteristic Impedance</b>
62 Ohm

#### Current

<b>Max. Recommended Current [A]</b>
55 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 (CSA AWM I/II A/B)
	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:	604 lbs/1000ft
Max Recommended Pulling Tension:	768 lbs
Min Bend Radius/Minor Axis:	7.5 in

#### Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, WTTTC, XHHW-2
CEC/C(UL) Specification:	600V Type CIC TC
CSA AWM Specification:	1000 V AWM I/II A/B
PMSHA Specification:	P-07-KA070003
Other Specification:	1000V UL Flexible Motor Supply Cable

#### 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
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, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
IEEE Flammability:	1202, 383 Vertical Flexible Motor Supply Cable

UL voltage rating:	1000 V RMS (Flexible Motor Supply Cable)
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## Part Number

### Variants

Item #	Color	UPC	Length	Footnote
29504 0101000	Black	612825137016	1,000 ft	C Z
29504 010250	Black	612825137030	250 ft	C Z
29504 010500	Black	612825137078	500 ft	C Z
29504 0105000	Black	612825137085	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

Update and Revision:	Revision Number: 0.328 Revision Date: 09-10-2019
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