



**Product: 29500** 

VFD 300% Gnd, 3C+IG #16 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 16AWG (26x30) 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

## **Physical Characteristics (Overall)**

## Conductor

Element	AWG	Stranding	Material	No. of Conductors
	16	26x30	TC - Tinned Copper	3
Ground Wire	16	26x30	TC - Tinned Copper	
Conductor Count: 3				

#### 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**

T	ype	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Ta	ape	1	Aluminum/Polyester	Duofoil®	100 %	TC - Tinned Copper	16	26x30 mm
В	raid	2	TC - Tinned Copper		85 %			

#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.534 in	0.073 in

## **Electrical Characteristics**

#### Conductor DCR

Nominal Conductor DCR 4 Ohm/1000ft

## Capacitance

2	1 pF/ft	38 pF/ft

#### Inductance

Nominal Inductance

## Impedance

Nominal Characteristic Impedance
90 Ohm

## Current

## Max. Recommended Current [A]

8 Amps per conductor @ 30°C (per NEC)

# Voltage

Description	UL Voltage Rating	Voltage Rating [V]
CSA AWM 1/11 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
Operating Temp Range:	-40C To +90C Wet/Dry
Wet Temp Range:	-40°C To +90 °C
Dry Temp Range:	-40°C To +90 °C

# **Mechanical Characteristics**

Bulk Cable Weight:	160 lbs/1000ft
Max Recommended Pulling Tension:	128 lbs
Min Bend Radius/Minor Axis:	4.25 in

## **Standards**

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, WTTC, 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 Tray Flame Test (70,000 BTU)
UL voltage rating:	1000 V RMS (Flexible Motor Supply Cable)

## **Part Number**

#### Variants

Item #	Color	UPC	Length	Footnote
29500 010100	Black	612825136491	100 ft	
29500 0101000	Black	612825136507	1,000 ft	CZ
29500 010250	Black	612825136521	250 ft	CZ
29500 010500	Black	612825136538	500 ft	CZ
29500 0106000	Black	612825136545	6,000 ft	CZ

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: 0.326 Revision Date: 09-10-2019

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