



**Product:** [29512](#)

VFD 300% Gnd, 3C+G #12 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd, 1 Pr #16 Str TC XLPE IS, Blk PVC Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable

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## 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, 1 Pair 16AWG (26x30) Tinned Copper XLPE Beldfoil, 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
Conductor	12	65x30	TC - Tinned Copper	3
Brake Pair	16	26x30	TC - Tinned Copper	2
Ground	12	65x30	TC - Tinned Copper	1

Conductor Count:	5
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#### Insulation

Material	Nominal Wall Thickness
XLPE, XLPO, XLPE (Thermoset)	0.046 in
XLPE, XLPO, XLPE (Thermoset)	0.032 in
PVC - Polyvinyl Chloride	0.045 in

#### Color Chart

Number	Color
1	Black #1
2	Black #2
3	Black #3
4	Black and White Pair
5	Green/Yellow

#### Inner Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	Alum / Poly	Beldfoil®	100%	TC - Tinned Copper	18

#### Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Alum / Poly / Alum	Duofoil®	100%	TC - Tinned Copper	12	65x30
Braid	2	Tinned Copper (TC)		85%			

Table Notes:	Duofoil+Braid is over Power conductors only, Brake Pair has only the Foil Inner Shield
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#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness	Ripcord
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PVC - Polyvinyl Chloride	0.895 in	0.08 in	Yes
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## Electrical Characteristics

### Conductor DCR

Nominal Conductor DCR	Nominal Inner Shield DCR
1.6 Ohm/1000ft	4.99 Ohm/1000ft
4 Ohm/1000ft	4.99 Ohm/1000ft
1.6 Ohm/1000ft	

### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
26 pF/ft	47 pF/ft
34 pF/ft	
26 pF/ft	47 pF/ft

### Inductance

Nominal Inductance
0.197 µH/ft
0.197 µH/ft

### Voltage

UL Voltage Rating
1000 V RMS
600 V RMS (Type TC)

## Temperature Range

UL Temp Rating:	90°C Dry, 90°C Wet
Operating Temp Range:	-40°C To +90°C

## Mechanical Characteristics

Max. Pull Tension:	527 lbs
Min Bend Radius/Minor Axis:	9 in

## Standards

NEC Articles:	Article 336
NEC/(UL) Compliance:	RHW-2, TC-ER
CEC/C(UL) Compliance:	CIC, TC
CSA AWM Compliance:	AWM I/II A/B
PMSHA Compliance:	P-07-KA070003
Other Compliance:	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):	2006-09-21
MII Order #39 (China RoHS):	Yes

## Suitability

Suitability - Burial:	Yes
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

## Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
IEEE Flammability:	1202, 383
UL voltage rating:	1000 V RMS (Flexible Motor Supply Cable)

## Plenum/Non-Plenum

Plenum (Y/N):	No
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## Part Number

### Variants

Item #	Color	Putup Type	Length	UPC
29512 010100	Black	Reel	100 ft	612825137542
29512 010500	Black	Reel	500 ft	612825137573
29512 0101000	Black	Reel	1,000 ft	612825137559
29512 0104000	Black	Reel	4,000 ft	612825137566

Footnote:	C - CRATE REEL PUT-UP.
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## History

Update and Revision:	Revision Number: 0.355 Revision Date: 04-28-2020
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