



Product: 29512

VFD 300% Gnd, 3C+IG #12 Str TC, XLPO Ins+PVC Gnd, OS+TC Brd, 1 Pr #16 Str TC XLPO IS, 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 12AWG (65x30) Tinned Copper, XLPO Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, 1 Pair 16AWG (26x30) Tinned Copper XLPO 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	No. of Pairs
XLPE	12	65x30	TC - Tinned Copper	3	
	16	26x30	TC - Tinned Copper		1
Ground Wire	12	65x30	TC - Tinned Copper	1	

Conductor Count:	6
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Insulation

Material	Nominal Wall Thickness
XLPE - Cross Linked Polyethylene	0.046 in
XLPE - Cross Linked Polyethylene	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	Drainwire Construction n x D
Tape	Aluminum Foil-Polyester Tape	Beldfoil®	100 %	TC - Tinned Copper	18	19x30

Outer Shield Material

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

Outer Jacket Material

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

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 Recommended Pulling Tension:	527 lbs
Min Bend Radius/Minor Axis:	9 in

Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	RHW-2, TC-ER
CEC/C(UL) Specification:	CIC, TC
CSA AWM Specification:	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):	2006-09-21
CA Prop 65 (CJ for Wire & Cable):	Yes
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
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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	UPC	Length	Footnote
29512 010100	Black	612825137542	100 ft	C
29512 0101000	Black	612825137559	1,000 ft	C
29512 0104000	Black	612825137566	4,000 ft	C
29512 010500	Black	612825137573	500 ft	C

Footnote:	C - CRATE REEL PUT-UP.
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History

Update and Revision:	Revision Number: 0.317 Revision Date: 09-10-2019
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