



Product: [29544](#)

VFD 100% Gnd, 3C #1/0 Str TC XLPE Ins + #1/0 Symm. Seg. Gnd (3 of #4) Str BC, CTS, Blk PVC Jkt, 2000V TC-ER 90C Dry/Wet 2000V Flexible Motor Supply Cable WTTC

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Product Description

Belden 100% Ground Flexible VFD, 3 Conductor 1/0AWG (7x19x21) Tinned Copper XLPE Insulation M4 Color Code + 1/0AWG Symmetrical Segmented Ground (3 of 4AWG) Bare Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black PVC Outer Jacket, 2000V TC-ER 90C Dry/Wet 2000V Flexible Motor Supply Cable WTTC 1000V CSA AWM I/II A/B 2000V RW90 TC SUN RES DIR BUR Oil Resistant

Technical Specifications

Product Overview

Suitable Applications:	Variable Frequency Drives (VFD); AC Motor and Drive Systems; High voltage requirements
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material	Notes
Conductor(s)	3	1/0 AWG	7x19x21	TC - Tinned Copper	
Ground	3	4 AWG	7x19x25	BC - Bare Copper	Segmented Grounds

Insulation

Element	Material	Nom. Thickness	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.093 in (2.4 mm)	Black and Numbered
Ground	No Insulation		

Outer Shield

Shield Type	Material	Coverage
Helical Tape	Bare Copper (BC)	100%
Helical Tape	Bare Copper (BC)	100%

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.083 in (2.1 mm)	1.447 in (36.75 mm)	Yes

Overall Cable Diameter (Nominal):	1.447 in (36.75 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 Impedence	Nom. Velocity of Prop.	Max. Current
Conductor(s)	0.094 Ohm/1000ft (0.31 Ohm/km)	50 pF/ft (160 pF/m)	90 pF/ft (300 pF/m)	36 Ohm	55%	170 Amps per Conductor at 30°C

Voltage

UL Voltage Rating
2000 V (TC, C(UL) TC), 1000 V (WTTC, UL Flexible Motor Supply Cable, CSA AWM I/II A/B)

Mechanical Characteristics

Temperature

UL Temperature	Operating
90°C Dry, 90°C Wet	-40°C To +90°C

Bend Radius

Stationary Min.	Installation Min.
17.4 in (442 mm)	17.4 in (442 mm)

Max. Pull Tension:	4737 lbs (2149 kg)
Bulk Cable Weight:	1905 lbs/1000ft (2835 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1685 UL Loading, FT4, 1202, 383 Vertical Tray Flame Test (70,000 BTU)
NEC / UL Compliance:	Article 336, TC-ER, WTTC, RHW-2, UL Flexible Motor Supply Cable
AWM Compliance:	I/II A/B
CEC / C(UL) Compliance:	TC
ICEA Compliance:	S-95-658
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.489 Revision Date: 05-31-2024
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
29544 0101000	Black	Reel	1,000 ft	612825138556
29544 0102000	Black	Reel	2,000 ft	612825138563

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