



Product: [29528](#)

VFD 100% Gnd, 3C #1 Str TC XLPE Ins + #1 Symm. Seg. Gnd (3 of #6) Str BC, CTS, Blk PVC Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC

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Product Description

Belden 100% Ground Flexible VFD, 3 Conductor 1AWG (7x19x22) Tinned Copper XLPE Insulation M4 Color Code + 1AWG Symmetrical Segmented Ground (3 of 6AWG) Bare Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black PVC Outer Jacket, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC 1000V CSA AWM I/II A/B 600V RW90 TC SUN RES DIR BUR Oil Resistant

Technical Specifications

Product Overview

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

Conductor

Element	Number of Element	AWG	Stranding	Material	Notes
Conductor(s)	3	1	7x19x22	TC - Tinned Copper	
Ground	3	6	7x19x27	BC - Bare Copper	Segmented Grounds

Insulation

Element	Material	Thickness	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.057 in (1.4 mm)	Black and Numbered
Ground	No Insulation		

Outer Shield Material

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

Outer Jacket Material

Material	Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.083 in (2.1 mm)	1.195 in	Yes

Cable Diameter (Nominal):	1.195 in (30.35 mm)
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Conductor(s)	0.118 Ohm/1000ft (0.387 Ohm/km)	48 pF/ft (160 pF/m)	86 pF/ft (280 pF/m)	37 Ohm	55%	145 Amps per Conductor at 30°C

Voltage

UL Voltage Rating
1000 V (TC, WTTC, UL Flexible Motor Supply Cable), 600 V (C(UL) CIC TC)

Mechanical Characteristics

Temperature

UL Rating	Operating

90°C Dry, 90°C Wet -40°C To +90°C

Bend Radius

Stationary Min.	Installation Min.
14.3 in (363 mm)	14.3 in (363 mm)

Max. Pull Tension:	4109 lbs (1864 kg)
Bulk Cable Weight:	1395 lbs/1000ft (2076 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Fire Resistance:	UL1685 UL Loading, RW90, FT4, FT4, 1202, 383 Vertical Tray Flame Test (70,000 BTU)
NEC / UL Compliance:	Article 336, TC-ER, WTTC, XHHW-2, UL Flexible Motor Supply Cable
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)
Other Standard Compliance(s):	P-07-KA070003-MSHA

History

Update and Revision:	Revision Number: 0.415 Revision Date: 06-08-2021
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