



Product: [29532](#)

VFD 100% Gnd, 3C #4/0 Str TC XLPE Ins + #4/0 Symm. Seg. Gnd (3 of #2) Str BC, CTS, Blk PVC Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTTC

[Request Sample](#)

Product Description

Belden 100% Ground Flexible VFD, 3 Conductor 4/0AWG (7x19x18) Tinned Copper XLPE Insulation M4 Color Code + 4/0AWG Symmetrical Segmented Ground (3 of 2AWG) 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 WTTTC 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; Class 1 Division 2 Hazardous Locations; Recommended Cable Gland BTC200A1741RA
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material	Notes
Conductor(s)	3	4/0 AWG	7x19x18	TC - Tinned Copper	Fine Strand Optimized for VF Applications
Segmented Ground Wire	3	2 AWG	7x19x23	BC - Bare Copper	Segmented Grounds (3 Totaling 4/0 AWG)

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.057 in (1.4 mm)	0.669 in (17.0 mm)	ICEA Chart M4
Ground Wire	No Insulation			

Outer Shield

Shield Type	Material	Coverage	Notes
Helical Tape	Bare Copper (BC)	100%	2 mil helical copper for crack resistance and high frequency performance
Helical Tape	Bare Copper (BC)	100%	2 mil helical copper for crack resistance and high frequency performance

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.083 in (2.1 mm)	1.620 in (41.15 mm)	Yes

Overall Cable Diameter (Nominal):	1.620 in (41.15 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 Impedance	Nom. Inductance Cond-Grnd	Nom. Velocity of Prop.	Max. Current
Conductor(s)	0.047 Ohm/1000ft	33 pF/ft (110 pF/m)	60 pF/ft (200 pF/m)	56 Ohm	0.055 µH/ft	55%	260 Amps per Conductor at 30°C
Segmented Ground Wire	0.05 Ohm/1000ft (0.16 Ohm/km)						
Cable							

Voltage

UL Voltage Rating
1000 V (TC, WTTTC, UL44, UL Flexible Motor Supply Cable), 600 V (C(UL) CIC TC)

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
19.4 in (493 mm)	19.4 in (493 mm)

Max. Pull Tension:	10048 lbs (4557.7 kg)
Bulk Cable Weight:	3185 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL 1685 UL Loading, FT4, IEEE 1202 FT4
NEC / UL Compliance:	Article 336, TC-ER, WTTTC, 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: 0.652 Revision Date: 06-20-2024
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
29532 0101500	Black	Reel	1,500 m	612825332305	C Z

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