



Product: [29506](#)

VFD 300% Gnd, 3C+G #4 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/4-#10 TC Drains, Blk PVC Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC

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Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 4AWG (7x19x25) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/4-10AWG Tinned Copper Ground/Drains, 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 CIC 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 Belden BTC125A1271RA
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material	Notes
Conductor(s)	3	4 AWG	7x19x25	TC - Tinned Copper	
Insulated Ground	1	4 AWG	7x19x25	TC - Tinned Copper	Insulated Ground Wire
Uninsulated Ground Wire	4	10 AWG	105x30	TC - Tinned Copper	Segmented Ground Wire (4 Totaling 4 AWG)

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code	Notes
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.062 in (1.6 mm)	0.367 in (9.32 mm)	ICEA Chart M4	
Ground Wire	PVC - Polyvinyl Chloride	0.062 in (1.6 mm)	0.367 in (9.32 mm)	Green/Yellow Stripe	
Uninsulated Ground Wire					Segmented Ground (4 Totaling 4 AWG)

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Tri-Laminate (Alum+Poly+Alum)	100%	10 AWG (105x30) TC
Braid	Tinned Copper (TC)	86%	

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.093 in (2.4 mm)	1.113 in (28.27 mm)	Yes

Overall Cable Diameter (Nominal): 1.113 in (28.27 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Inductance Cond-Grnd	Nom. Velocity of Prop.	Max. Current
Conductor(s)	0.239 Ohm/1000ft	32 pF/ft (100 pF/m)	60 pF/m (18 pF/ft)	37 Ohm	0.12 µH/ft	55%	95 Amps per Conductor at 30°C
Insulated Ground	0.2689 Ohm/1000ft (0.8822 Ohm/km)						
Uninsulated Ground Wire	0.2689 Ohm/1000ft (0.8822 Ohm/km)						

Voltage

UL Voltage Rating	Voltage Rating
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1000 V (TC-ER, WTTC, UL44, UL Flexible Motor Supply Cable), 600 V (C(UL) CIC TC)	1000 V (AWM I/II A/B)
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Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
13.4 in (340 mm)	13.4 in (340 mm)

Max. Pull Tension:	2420 lbs (1100 kg)
Bulk Cable Weight:	1061 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, WTTC, UL Flexible Motor Supply Cable
AWM Compliance:	AWM I/II A/B
CEC / C(UL) Compliance:	CIC, 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: 0.663 Revision Date: 02-03-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
29506 010250	Black	Reel	250 ft	612825137245	C Z
29506 0101000	Black	Reel	1,000 ft	612825137238	C Z
29506 0103000	Black	Reel	3,000 ft	612825137269	C Z

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