Belden



Product: 29501

VFD 300% Gnd, 3C+G #14 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/#14 TC Ground/Drain, Blk PVC Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC

Request Sample

Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 14AWG (41x30) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/14AWG Tinned Copper Ground/Drain, 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 BTC075A0791RA

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material	Notes
Conductor(s)	3	14 AWG	41x30	TC - Tinned Copper	Phace Conductor
Insulated Ground	1	14 AWG	41x30	TC - Tinned Copper	Insulated Ground Wire
Uninsulated Ground Wire	1	14 AWG	41x30	TC - Tinned Copper	Uninsulated Ground Wire

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.046 in (1.2 mm)	0.173 in (4.39 mm)	ICEA Chart M4
Insulated Ground	PVC - Polyvinyl Chloride	0.047 in (1.2 mm)	0.169 in (4.29 mm)	Green/Yellow Stripe
Uninsulated Ground Wire				

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Tri-Laminate (Alum+Poly+Alum)	100%	14 AWG (41x30) TC
Braid	Tinned Copper (TC)	85%	

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.073 in (1.9 mm)	0.604 in (15.3 mm)	Yes

Overall Cable Diameter (Nominal):	0.604 in (15.3 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. Inductance	Nom. Velocity of Prop.	Max. Current
Conductor(s)	2.482 Ohm/1000ft (8.143 Ohm/km)	23.0 pF/ft (75.5 pF/m)	47 pF/ft (150 pF/m)	63 Ohm	0.213 µH/ft	0.213 µH/ft (0.699 µH/m)	55%	25 Amps per Conductor at 30ºC (per NEC)
Insulated Ground	2.73 Ohm/1000ft (8.96 Ohm/km)							
Uninsulated Ground Wire	2.73 Ohm/1000ft (8.96 Ohm/km)							

Nom Outer Shield DCR:	1.08 Ohm/1000ft (3.54 Ohm/km)

Voltage

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

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
6.0 in (150 mm)	7.2 in (180 mm)

Max. Pull Tension:	347 lbs (157 kg)
Bulk Cable Weight:	224 lbs/1000ft (333 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL 1685 FT4 Loading, FT4, IEEE 1202 FT4
NEC / UL Compliance:	Article 336, TC-ER, XHHW-2, RHW-2, 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: 0.749 Revision Date: 06-30-2026

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
29501 010100	Black	Reel	100 ft	612825136620	Recommended Cable Gland BTC075A0791RA In Stock
29501 010250	Black	Reel	250 ft	612825136651	C Z
29501 010500	Black	Reel	500 ft	612825136668	C Z
29501 0101000	Black	Reel	1,000 ft	612825136637	C Z
29501 0105000	Black	Reel	5,000 ft	612825136675	C Z

Footnote:	Recommended Cable Gland BTC075A0791RA In Stock, C - CRATE REEL PUT-UP., Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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