



Product: [29529T](#)

VFD 100% Gnd, 3C #1/0 Str TC XLPE Ins + #1/0Symm. Seg. Grd (3 of #4) Str BC, CTS, Blk LSZH Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC

Product Description

Belden 100% Ground Flexible VFD, 3 Conductor 1/0AWG (7x19x21) Tinned Copper XLPE Insulation M4 Color Code + 1/0AWG Symmetrically Segmented Ground (3 of 4AWG) Bare Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black LSZH Outer Jacket, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC SUN RES DIR BUR Oil Resistant

Technical Specifications

Product Overview

Suitable Applications:	Variable Frequency Drives (VFD); AC Motor and Drive Systems; Human safety applications with flame or toxicity concerns (low smoke, zero halogen)
------------------------	--

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)	0.057 in (1.4 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
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.085 in (2.2 mm)	1.294 in (32.87 mm)	Yes

Overall Cable Diameter (Nominal):	1.294 in (32.87 mm)
-----------------------------------	---------------------

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%	24 Amps per Conductor at 30°C

Voltage

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

Mechanical Characteristics

Temperature

UL Temperature	Operating
----------------	-----------

90°C Dry, 90°C Wet	-25°C To +90°C
--------------------	----------------

Bend Radius

Stationary Min.	Installation Min.
15.5 in (394 mm)	15.5 in (394 mm)

Max. Pull Tension:	5506 lbs (2497 kg)
Bulk Cable Weight:	1855 lbs/1000ft (2761 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1685 FT4 Loading
NEC / UL Compliance:	Article 336, TC-ER, WTTC, UL Flexible Motor Supply Cable
ICEA Compliance:	S-95-658
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.262 Revision Date: 12-22-2023
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	UPC
29529T 0101000	Black	Reel	612825138013
29529T 0102000	Black	Reel	612825138020

© 2024 Belden, Inc
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.