



Product: [29502F](#)

VFD 300% Gnd, 3C+G #12 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/#12 TC Drain, Blk TPE Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC

[Request Sample](#)

Product Description

Belden 300% Ground Extra Flexible VFD, 3 Conductor 12AWG (7x24x34) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/12AWG TC Drain, Black TPE Outer Jacket, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable 1000V WTTC 600V CIC TC SUN RES OIL RES II DIR BUR

Technical Specifications

Product Overview

Suitable Applications:	Variable Frequency Drives (VFD); AC Motor and Drive Systems, Exposure to high flex, motion, and abrasion, Hard to reach installation areas
------------------------	--

Construction Details

Conductor

Element	Number of Element	Size	Stranding	Material
Conductor(s)	3	12 AWG	7x24x34	TC - Tinned Copper
Ground	1	12 AWG	7x24x34	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.046 in (1.2 mm)	Black and Numbered
Ground	PVC - Polyvinyl Chloride	0.046 in (1.2 mm)	Green/Yellow Stripe

Outer Shield

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

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
TPE - Thermoplastic Elastomer	0.073 in (1.9 mm)	0.661 in (16.8 mm)	Yes

Overall Cable Diameter (Nominal):	0.661 in (16.8 mm)
-----------------------------------	--------------------

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Conductor(s)	1.546 Ohm/1000ft (5.072 Ohm/km)	29 pF/ft (95 pF/m)	53 pF/ft (170 pF/m)	53 pF/ft (170 pF/m)	63 Ohm	55%	30 Amps per Conductor at 30°C (per NEC)

Voltage

UL Voltage Rating
1000 V (TC, WTTC, 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.	Flexing Min.
3.3 in (84 mm)	5.0 in (130 mm)	5.0 in (130 mm)

Max. Pull Tension:	458 lbs (208 kg)
Bulk Cable Weight:	280 lbs/1000ft (420 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1685 UL Loading, FT4, 1202, 383 Vertical Tray Flame Test (70,000 BTU)
NEC / UL Compliance:	Article 336, TC-ER, WTTC, RHW-2, UL Flexible Motor Supply Cable
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)

History

Update and Revision:	Revision Number: 0.400 Revision Date: 04-14-2023
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	UPC
29502F 0101000	Black	Reel	612825367208
29502F 0105000	Black	Reel	612825367215

© 2023 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.