

Product: 29503F

VFD 300% Gnd, 3C+IG #10 Str TC, XLPO Ins+PVC Gnd, OS+TC Brd, Blk TPE Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable

Request Sample

Product Description

Belden 300% Ground Extra Flexible VFD, 3 Conductor 10AWG (7x37x34) Tinned Copper, XLPO Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, Black TPE Outer Jacket, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable 1000V WTTC 600V CIC TC SUN RES OIL RES I&II DIR BUR

Technical Specifications

Product Overview

Suitable Applications:	AC Motor drives, VFD, Variable Frequency drives

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
	10	7x37x34	TC - Tinned Copper	3
Ground Wire	10	7x37x34	TC - Tinned Copper	

Conductor Count:	3

Insulation

Material	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.045 in
XLP - Cross Linked Polyolefin	0.045 in

Color Chart

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3
4	Green/Yellow

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	1	Aluminum/Polyester	Duofoil®	100 %	TC - Tinned Copper	10
Braid	2	TC - Tinned Copper		85 %		

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	0.716 in	0.073 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
0.988 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield

29 pF/ft	53 pF/ft

Inductance

Nominal Inductance
0.184 µH/ft

Impedance

Nominal Characteristic Impedance
63 Ohm

Current

Max. Recommended Current [A]
40 Amps per conductor @ 30°C (per NEC)

Voltage

UL Voltage Rating
1000 V RMS (Flexible Motor Supply Cable)

Temperature Range

UL Temp Rating:	90°C Dry, 90°C Wet
Operating Temp Range:	-40C To +90C Wet/Dry
Wet Temp Range:	-40°C To +90 °C

Mechanical Characteristics

Bulk Cable Weight:	357 lbs/1000ft
Max Recommended Pulling Tension:	592 lbs
Min Bend Radius (Continuous Flexing):	5.4 in
Min Bend Radius/Minor Axis:	3.6 in

Standards

NEC Articles:	336 - ER
NEC/(UL) Specification:	TC-ER, WTTC, XHHW-2
CEC/C(UL) Specification:	600V Type CIC TC
Other Specification:	1000V UL Flexible Motor Supply

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-10-13
CA Prop 65 (CJ for Wire & Cable):	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
IEEE Flammability:	1202, 383 Vertical Tray Flame Test (70,000 BTU)
UL voltage rating:	1000 V RMS (Flexible Motor Supply Cable)

Part Number

Variants

Item #	Color	UPC	Length

29503F 0101000	Black	612825367178	1,000 ft
29503F 0105000	Black	612825367185	5,000 ft

History

Update and Revision:	Revision Number: 0.116 Revision Date: 09-10-2019

© 2019 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.