

29503 Multi-Conductor - 1000V UL Flexible Motor Supply Cable



For more Information
please call

1-800-Belden1



General Description:

4-cond. (3)stranded tinned copper circuit conductors plus (1)ground wire with PVC insulation, XLPE insulation, Overall Duofoil® (100% coverage) plus a tinned copper braid shield (85% coverage) , tinned copper drain wire, Sun- & oil-resistant PVC jacket.

Usage (Overall)

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

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
3	10	105x30	TC - Tinned Copper

Total Number of Conductors: 3

Ground Wire

Ground Wire (Y/N): Y

Ground Wire AWG: 10

Ground Wire Stranding: 105x30

Ground Wire Conductor Material: TC - Tinned Copper

Ground Wire Insulation Material: PVC - Polyvinyl Chloride

Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
XLP - Cross Linked Polyolefin	1.143

Insulation Resistance: 300 Megaohms/1000 ft.

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	85

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
10	105x30	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.854

Overall Cable

Overall Nominal Diameter: 17.526 mm

Mechanical Characteristics (Overall)

Wet Temperature Range: -40°C To +90°C

29503 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

Dry Temperature Range:	-40°C To +90°C
UL Temperature Rating:	90°C Wet/Dry
Bulk Cable Weight:	520.870 Kg/Km
Max. Recommended Pulling Tension:	2633.334 N
Min. Bend Radius/Minor Axis:	139.700 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	TC-ER, Unlisted Singles, WTTC
NEC Articles:	336 - ER
CEC/C(UL) Specification:	600V Type CIC TC
CSA Specification:	1000 V AWM I/II A/B
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/13/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
PMSHA Specification:	P-07-KA070003
Other Specification:	1000V UL Flexible Motor Supply Cable

Flame Test

UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT4
IEEE Flame Test:	1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU)

Suitability

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

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

63

Nom. Inductance:

Inductance (µH/m)

0.603704

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

95.149

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)

METRIC MEASUREMENT VERSION

29503 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

173.893

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
3.24163

Max. Operating Voltage - UL:

Voltage
1000 V RMS (Flexible Motor Supply Cable)
600 V RMS (NEC Type TC)

Max. Recommended Current:

Current
40 Amps per conductor @ 30°C (per NEC)

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29503 010100	30 MT	18.280 KG	BLACK		#10/4C XLPE SH PVC
29503 0101000	305 MT	180.984 KG	BLACK	C Z	#10/4C XLPE SHPVC
29503 010250	76 MT	43.772 KG	BLACK	C Z	#10/4C XLPE SHPVC
29503 010500	152 MT	84.369 KG	BLACK	C Z	#10/4C XLPE SHPVC
29503 0105000	1,524 MT	864.097 KG	BLACK	C Z	#10/4C XLPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

Revision Number: 3 Revision Date: 08-20-2013

© 2013 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 herein 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 "AS IS" 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.