

## 29503F 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 TPE jacket.

### Usage (Overall)

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

### Physical Characteristics (Overall)

#### Conductor

**AWG:**

# Conductors	AWG	Stranding	Conductor Material
3	10	7x37x34	TC - Tinned Copper

**Total Number of Conductors:** 3

#### Ground Wire

**Ground Wire (Y/N):** Y

**Ground Wire AWG:** 10

**Ground Wire Stranding:** 7x37x34

**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	7x37x34	TC - Tinned Copper

#### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (mm)
TPE - Thermoplastic Elastomer	1.854

#### Overall Cable

**Overall Cabling Separator Material:** Non-Woven Polyester Slip Tape

**Overall Nominal Diameter:** 18.186 mm

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### Mechanical Characteristics (Overall)

Wet Temperature Range:	-40°C To +90°C
Dry Temperature Range:	-40°C To +90°C
Bulk Cable Weight:	520.870 Kg/Km
Max. Recommended Pulling Tension:	2633.334 N
Min. Bend Radius/Minor Axis:	91.440 mm
Min. Bend Radius (Continuous Flexing):	137.160 mm
Flex Cycle Rating:	10 Million Flexes

### 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
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
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 - Oil Res II

### 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

METRIC MEASUREMENT VERSION

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

### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)
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
29503F 0101000	1,000 FT	414.000 LB	BLACK		4 #10 XLPO/PVC SH TPE
29503F 0105000	5,000 FT	1,905.000 LB	BLACK		4 #10 XLPO/PVC SH TPE

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