

## 29501 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

For more Information  
please call

1-800-Belden1



### 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 Drive

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Conductors	AWG	Stranding	Conductor Material
3	14	41x30	TC - Tinned Copper

**Total Number of Conductors:** 3

#### Ground Wire

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

**Ground Wire AWG:** 14

**Ground Wire Stranding:** 41x30

**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
14	41x30	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:** 15.342 mm

### Mechanical Characteristics (Overall)

**UL Temperature Rating:** 90°C Wet/Dry

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<b>Bulk Cable Weight:</b>	282.758 Kg/Km
<b>Max. Recommended Pulling Tension:</b>	943.018 N
<b>Min. Bend Radius/Minor Axis:</b>	121.920 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

<b>NEC/(UL) Specification:</b>	TC-ER, Unlisted Singles, WTTC
<b>NEC Articles:</b>	336 - ER
<b>CEC/C(UL) Specification:</b>	XHHW-2
<b>CSA Specification:</b>	1000 V AWM I/II A/B
<b>EU CE Mark:</b>	Yes
<b>EU Directive 2000/53/EC (ELV):</b>	Yes
<b>EU Directive 2002/95/EC (RoHS):</b>	Yes
<b>EU RoHS Compliance Date (mm/dd/yyyy):</b>	10/13/2005
<b>EU Directive 2002/96/EC (WEEE):</b>	Yes
<b>EU Directive 2003/11/EC (BFR):</b>	Yes
<b>CA Prop 65 (CJ for Wire &amp; Cable):</b>	Yes
<b>MII Order #39 (China RoHS):</b>	Yes
<b>PMSHA Specification:</b>	P-07-KA070003
<b>Other Specification:</b>	1000V UL Flexible Motor Supply Cable

#### Flame Test

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

#### Suitability

<b>Suitability - Indoor:</b>	Yes
<b>Suitability - Outdoor:</b>	Yes
<b>Suitability - Burial:</b>	Yes
<b>Sunlight Resistance:</b>	Yes
<b>Oil Resistance:</b>	Yes

### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)

80

#### Nom. Inductance:

Inductance (µH/m)

0.698853

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

75.463

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

Capacitance (pF/m)

137.802

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

8.26812

## METRIC MEASUREMENT VERSION

### 29501 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

#### Max. Operating Voltage - UL:

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

#### Max. Operating Voltage - Other:

Voltage	Description
1000 V RMS	CSA AWM I/II A/B

#### Max. Recommended Current:

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

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29501 010100	30 MT	12.247 KG	BLACK		#14/4C XLPE SH PVC
29501 0101000	305 MT	107.955 KG	BLACK	C Z	#14/4C XLPE SHPVC
29501 010250	76 MT	27.669 KG	BLACK	C Z	#14/4C XLPE SHPVC
29501 010500	152 MT	54.205 KG	BLACK	C Z	#14/4C XLPE SHPVC
29501 0105000	1,524 MT	562.457 KG	BLACK	C Z	#14/4C 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: 1    Revision Date: 07-18-2012

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