

## 29505 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% cov.) plus a tinned copper braid shield (85% cov.) , tinned copper sectioned 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	6	7x19x27	TC - Tinned Copper

#### Ground Wire

<b>Ground Wire (Y/N):</b>	Y
<b>Ground Wire AWG:</b>	6
<b>Ground Wire Stranding:</b>	7x19x27
<b>Ground Wire Conductor Material:</b>	TC - Tinned Copper
<b>Ground Wire Insulation Material:</b>	PVC - Polyvinyl Chloride

#### Insulation

**Insulation Material:**

Insulation Material	Wall Thickness (in.)
XLPE - Cross Linked Polyethylene	.060

**Insulation Resistance:** 300 Megaohms/1000 ft.

**Insulation Color Code Chart:**

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

#### 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
12 (4x)	65x30	TC - Tinned Copper

#### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride



## 29505 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

### Overall Cabling

Overall Nominal Diameter: 1.020 in.

### Mechanical Characteristics (Overall)

UL Temperature Rating: 90°C Wet/Dry

Bulk Cable Weight: 811 lbs/1000 ft.

Max. Recommended Pulling Tension: 1220 lbs.

Min. Bend Radius (Install)/Minor Axis: 8.200 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: TC-ER, Unlisted Singles, WTTC

NEC Articles: 336 - ER

CSA Specification: 1000 V AWM I/II A/B

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)

56

#### Nom. Inductance:

Inductance (µH/ft)

.171

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

33

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

Capacitance (pF/ft)



## 29505 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

60

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)
0.41

**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
75 Amps per conductor @ 30°C (per NEC)

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29505 0101000	1,000 FT	906.000 LB	BLACK	C Z	#6/4C XLPE SHPVC
29505 010250	250 FT	221.250 LB	BLACK	C Z	#6/4C XLPE SHPVC
29505 0103500	3,500 FT	3,206.000 LB	BLACK	C Z	#6/4C 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.

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