

## 29504 Multi-Conductor - 1000V UL Flexible Motor Supply Cable



For more Information  
please call

1-800-Belden1



### Description:

4-cond. (3)stranded tinned copper circuit cond. plus (1)ground wire with PVC insulation, XLPE insulation, overall Duofoil® (100% cov.) plus a tinned copper braid shield (85% cov.), with 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	8	7x19x29	TC - Tinned Copper

#### Ground Wire

<b>Ground Wire (Y/N):</b>	Y
<b>Ground Wire AWG:</b>	8
<b>Ground Wire Stranding:</b>	7x19x29
<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 (mm)
XLPE - Cross Linked Polyethylene	1.524

**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 (4x)	41x30	TC - Tinned Copper

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Overall Cabling

**Overall Nominal Diameter:** 23.622 mm

### Mechanical Characteristics (Overall)

<b>UL Temperature Rating:</b>	90°C Wet/Dry
<b>Bulk Cable Weight:</b>	898.873 Kg/Km

Sold by:



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Max. Recommended Pulling Tension:	3416.218 N
Min. Bend Radius (Install)/Minor Axis:	190.500 mm

### 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)

62

#### Nom. Inductance:

Inductance (µH/m)

0.593861

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

98.43

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

Capacitance (pF/m)

177.174

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

2.09984

#### Max. Operating Voltage - UL:

Voltage



## METRIC MEASUREMENT VERSION

### 29504 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

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

#### Max. Recommended Current:

<b>Current</b>
55 Amps per conductor @ 30°C (per NEC)

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29504 0101000	305 MT	299.372 KG	BLACK	C Z	#8/4C XLPE SHPVC
29504 010250	76 MT	71.895 KG	BLACK	C Z	#8/4C XLPE SHPVC
29504 010500	152 MT	150.593 KG	BLACK	C Z	#8/4C XLPE SHPVC
29504 0105000	1,524 MT	1,422.019 KG	BLACK	C Z	#8/4C 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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