

**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

Total Number of Conductors:

3

**Ground Wire**

Ground Wire (Y/N):

Y

Ground Wire AWG:

8

Ground Wire Stranding:

7x19x29

Ground Wire Conductor Material:

TC - Tinned Copper

Ground Wire Insulation Material:

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	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	2.362

**Overall Cable**

Overall Nominal Diameter:

23.444 mm

**Mechanical Characteristics (Overall)**

UL Temperature Rating:

90°C Wet/Dry

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<b>Bulk Cable Weight:</b>	898.873 Kg/Km
<b>Max. Recommended Pulling Tension:</b>	3416.218 N
<b>Min. Bend Radius/Minor Axis:</b>	190.500 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>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)

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:**

## METRIC MEASUREMENT VERSION

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

**Voltage**

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

**Max. Recommended Current:****Current**

55 Amps per conductor @ 30°C (per NEC)
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**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	3 #8 XLPE, #8 PVC 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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