

## 29501 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 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.

Insulation Color Code Chart:

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3
3	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
14 41x30	TC - Tinned Copper

**Outer Jacket**

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
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PVC - Polyvinyl Chloride	1.854
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**Overall Cable**

Overall Nominal Diameter:	15.342 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:	282.758 Kg/Km
Max. Recommended Pulling Tension:	943.018 N
Min. Bend Radius/Minor Axis:	121.920 mm

**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
CSA Specification:	1000 V AWM I/II A/B
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
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)
80

**Nom. Inductance:**

Inductance (µH/m)
0.698853

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

## Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
75.463

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

Capacitance (pF/m)
137.802

## Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
8.26812

## 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	100 FT	27.000 LB	BLACK		4 #14 XLPE/PVC SH PVC
29501 0101000	1,000 FT	238.000 LB	BLACK	C Z	4 #14 XLPE/PVC SH PVC
29501 010250	250 FT	61.000 LB	BLACK	C Z	4 #14 XLPE/PVC SH PVC
29501 010500	500 FT	119.500 LB	BLACK	C Z	4 #14 XLPE/PVC SH PVC
29501 0105000	5,000 FT	1,240.000 LB	BLACK	C Z	4 #14 XLPE/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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