

## 29501F 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 TPE jacket.

**Usage (Overall)**

Suitable Applications: AC Motor Drives, VFD, Variable Frequency Drive

**Physical Characteristics (Overall)****Conductor**

AWG:

# Conductors	AWG	Stranding	Conductor Material
3	14	104x34	TC - Tinned Copper

Total Number of Conductors: 3

**Ground Wire**

Ground Wire (Y/N): Y

Ground Wire AWG: 14

Ground Wire Stranding: 104x34

Ground Wire Conductor Material: TC - Tinned Copper

Ground Wire Insulation Material: PVC - Polyvinyl Chloride

**Insulation**

Insulation Material:

Insulation Material	Wall Thickness (in.)
XLP - Cross-Linked Polyolefin	0.045

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	104x34	TC - Tinned Copper

**Outer Jacket**

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
TPE - Thermoplastic Elastomer	0.073

**Overall Cable**

Overall Cabling Separator Material: Non-Woven Polyester Slip Tape

Overall Nominal Diameter: 0.587 in.

**Mechanical Characteristics (Overall)**

Wet Temperature Range: -40°C To +90°C

Dry Temperature Range: -40°C To +90°C

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Bulk Cable Weight:	190 lbs/1000 ft.
Max. Recommended Pulling Tension:	212 lbs.
Min. Bend Radius/Minor Axis:	2.900 in.
Min. Bend Radius (Continuous Flexing):	4.400 in.
Flex Cycle Rating:	10 Million Flexes

**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
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
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 - Oil Res II

**Electrical Characteristics (Overall)****Nom. Characteristic Impedance:****Impedance (Ohm)**

80

**Nom. Inductance:****Inductance (µH/ft)**

.213

**Nom. Capacitance Conductor to Conductor:****Capacitance (pF/ft)**

23

**Nom. Capacitance Cond. to Other Conductor & Shield:****Capacitance (pF/ft)**

42

**Nom. Conductor DC Resistance:****DCR @ 20°C (Ohm/1000 ft)**

2.52

**Max. Operating Voltage - UL:****Voltage**

1000 V RMS (Flexible Motor Supply Cable)

600 V RMS (NEC Type TC)

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

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

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### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29501F 0101000	1,000 FT	219.000 LB	BLACK		4 #14 XLPO/PVC SH TPE
29501F 0105000	5,000 FT	1,145.000 LB	BLACK		4 #14 XLPO/PVC SH TPE

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