# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



# 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**

Outla Wile	
Ground Wire (Y/N):	Υ
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:**

ı	Layer#	ayer # Outer Shield Trade Name		Outer Shield Material	Coverage (%)
ľ	1	Duofoil®	Tape	Aluminum Foil-Polyester Tape	100
2	2		Braid	TC - Tinned Copper	85

#### **Outer Shield Drain Wire AWG:**

AWG	Stranding	<b>Drain Wire Conductor Material</b>
14	41x30	TC - Tinned Copper

#### **Outer Jacket**

#### **Outer Jacket Material:**

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

Page 1 of 3 10-30-2013

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#### **Overall Cable**

Overall Nominal Diameter: 15.342 mm

Mechanical Characteristics (Overa
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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	S II): Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS	S): Yes
EU RoHS Compliance Date (mr	m/dd/yyyy): 10/13/2005
EU Directive 2002/96/EC (WEEI	E): Yes
EU Directive 2003/11/EC (BFR)	: Yes
CA Prop 65 (CJ for Wire & Cab	le): 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

Yes

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 80

Oil Resistance:

Nom. Inductance:

Inductance (µH/m) 0.698853

Nom. Capacitance Conductor to Conductor:

Page 2 of 3 10-30-2013

# **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



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

Capacitance (pF/m)

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 137.802

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 8.26812

Max. Operating Voltage - UL:

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:

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

# **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29501 010100	30 MT	12.247 KG	BLACK		#14/4C XLPE SH PVC
29501 0101000	305 MT	107.955 KG	BLACK	CZ	#14/4C XLPE SHPVC
29501 010250	76 MT	27.669 KG	BLACK	CZ	#14/4C XLPE SHPVC
29501 010500	152 MT	54.205 KG	BLACK	CZ	#14/4C XLPE SHPVC
29501 0105000	1,524 MT	562.457 KG	BLACK	CZ	#14/4C XLPE SH PVC

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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