# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



# 29505 Multi-Conductor - 1000V UL Flexible Motor Supply Cable



For more Information please call

1-800-Belden1



## **Description:**

4-cond. (3)stranded tinned copper circuit conductors plus (1)ground wire with PVC insulation, XLPE insulation, Overall Duofoil® (100% cov.) plus a tinned copper braid shield (85% cov.), 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	6	7x19x27	TC - Tinned Copper

Total Number of Conductors: 3

# **Ground Wire**

Outla Wile	
Ground Wire (Y/N):	Υ
Ground Wire AWG:	6
Ground Wire Stranding:	7x19x27
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.

#### Insulation Color Code Chart:

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3
4	Green/Yellow

### **Outer Shield**

#### **Outer Shield Material:**

ı	Layer#	Outer Shield Trade Name	Type	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>		
ı	12 (4x)	65x30	TC - Tinned Copper		

### **Outer Jacket**

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

Outer Jacket Material
PVC - Polyvinyl Chloride

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#### **Overall Cable**

Overall Nominal Diameter: 26.111 mm

Mechanical Characteristics (Overall)
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Wet Temperature Range:	-40°C To +90°C	
Dry Temperature Range:	-40°C To +90°C	
UL Temperature Rating:	90°C Wet/Dry	
Bulk Cable Weight:	1206.930 Kg/Km	
Max. Recommended Pulling Tension:	5426.804 N	
Min. Bend Radius/Minor Axis:	209.550 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
Fla	me Test	
	UL Flame Test:	UL1685 UL Loading
	CSA Flame Test:	FT4
	IEEE Flame Test:	1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU)
Su	itability	
	Suitability - Indoor:	Yes
	Suitability - Outdoor:	Yes
	Suitability - Burial:	Yes
	Sunlight Resistance:	Yes
	Oil Resistance:	Yes

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 56

Nom. Inductance:

Inductance (μH/m) 0.561051

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

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108.273

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 196.86

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 1.34521

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:

Current

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

#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29505 0101000	305 MT	410.957 KG	BLACK	CZ	3 #6 XLPE, #6 PVC SH HMF
29505 010250	76 MT	100.358 KG	BLACK	CZ	#6/4C XLPE SHPVC
29505 0103500	1,067 MT	1,454.224 KG	BLACK	CZ	3 #6 XLPE, #6 PVC SH HMF

#### 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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