

## 29510 Composite - 1000V UL Flexible Motor Supply Composite Cable



For more Information  
please call

1-800-Belden1



### General Description:

1 pr.(Signal)-16 AWG stranded (26x30) TC cond., XLPE insul., Beldfoil® shield (100% c.), drain; 3 cond.(VFD) plus 1 ground wire-16 AWG stranded (26x30) TC cond., XLPE insul., Duofoil® and TC braid Shield (100% a 85% c.), drain, PVC jacket.

### Usage (Overall)

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

### Twisted Pair

#### Physical Characteristics

##### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
1	16	26x30	TC - Tinned Copper

##### Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
XLPE - Cross Linked Polyethylene	0.030

Twisted Pair Color Code Chart:

Number	Color
1	Black and White

##### Inner Shield

Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG	Stranding	Conductor Material
18	19x30	TC - Tinned Copper

### Electrical Characteristics

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
34.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.000

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.990

### Multi Conductor

#### Physical Characteristics

##### Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
3	16	26x30	TC - Tinned Copper

##### Ground Wire

Ground Wire (Y/N): Yes

Ground Wire Material:

AWG	Stranding	Conductor Material	Insulation Material
16	26x30	TC - Tinned Copper	PVC - Polyvinyl Chloride

##### Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
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XLPE - Cross Linked Polyethylene	0.045
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**Insulation Color Code Chart:**

Number	Color
1	Black #1
2	Black #2
3	Black #3
4	Green/Yellow

**Outer Shield**

**Outer Shield Material:**

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
2		Braid	TC - Tinned Copper	85.000

**Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire Conductor Material
16	26x30	TC - Tinned Copper

**Electrical Characteristics**

**Nom. Inductance:**

<b>Inductance (µH/ft)</b>
0.230

**Nom. Capacitance Conductor to Shield:**

<b>Capacitance (pF/ft)</b>
38.000

**Nom. Capacitance Conductor to Conductor:**

<b>Capacitance (pF/ft)</b>
21.000

**Nom. Conductor DC Resistance:**

<b>DCR @ 20°C (Ohm/1000 ft)</b>
4.000

**Physical Characteristics (Overall)**

**Conductor**

**Outer Jacket**

**Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	0.075

Outer Jacket Ripcord: Yes

**Overall Cable**

Overall Nominal Diameter: 0.750 in.

**Mechanical Characteristics (Overall)**

Max. Recommended Pulling Tension: 272 lbs.

Min. Bend Radius/Minor Axis: 7.500 in.

**Applicable Specifications and Agency Compliance (Overall)**

**Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	TC-ER
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):	09/21/2006
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

## 29510 Composite - 1000V UL Flexible Motor Supply Composite Cable

<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

### Plenum/Non-Plenum

<b>Plenum (Y/N):</b>	No
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### Electrical Characteristics (Overall)

#### Max. Operating Voltage - UL:

<b>Voltage</b>
1000 V RMS (Flexible Motor Supply Cable)

#### Max. Operating Voltage - Other:

<b>Voltage</b>
1000 V RMS (CSA AWM I/II A/B)

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29510 010100	100 FT	35.900 LB	BLACK	C	COMPOSITE CABLE SH PVC
29510 0101000	1,000 FT	324.000 LB	BLACK	C	COMPOSITE CABLE SH PVC
29510 010500	500 FT	143.000 LB	BLACK	C	COMPOSITE CABLE SH PVC
29510 0105000	5,000 FT	1,485.000 LB	BLACK	C	COMPOSITE CABLE SH PVC

#### Notes:

C = CRATE REEL PUT-UP.

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