

## 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
--------------	-----	-----------	--------------------

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

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.)
XLPE - Cross Linked Polyethylene	0.045

#### 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:

Inductance (µH/ft)
0.230

#### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
38.000

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
21.000

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
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.

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

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	TC-ER
NEC Articles:	336 - ER
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
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

#### Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

### 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.

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

Revision Number: 0    Revision Date: 10-19-2011

© 2013 Belden, Inc.  
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.