

## 29511 Composite - 1000V UL Flexible Motor Supply Cable



For more Information  
please call

1-800-Belden1



### Description:

1 pr.(Signal)-16 AWG stranded (26x30) TC cond., XLPE insul., Beldfoil® shield (100% c), drain; 3 cond.(VFD) plus 1 ground wire-14 AWG stranded (41x30) TC cond., XLPE insul., Duofoil® and TC braid Shield (100% a85% 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 |
|--------------|-----|-----------|--------------------|
|--------------|-----|-----------|--------------------|

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|   |    |       |                    |
|---|----|-------|--------------------|
| 3 | 14 | 41x30 | TC - Tinned Copper |
|---|----|-------|--------------------|

## Ground Wire

Ground Wire (Y/N): Yes

## Ground Wire Material:

| AWG | Stranding | Conductor Material | Insulation Material      |
|-----|-----------|--------------------|--------------------------|
| 14  | 41x30     | 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 |

## Individual Shield

## 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 |
|-----|-----------|-------------------------------|
| 14  | 41x30     | TC - Tinned Copper            |

## Electrical Characteristics

## Nom. Inductance:

| Inductance (µH/ft) |
|--------------------|
| 0.213              |

## Nom. Capacitance Conductor to Shield:

| Capacitance (pF/ft) |
|---------------------|
| 42.000              |

## Nom. Capacitance Conductor to Conductor:

| Capacitance (pF/ft) |
|---------------------|
| 23.000              |

## Nom. Conductor DC Resistance:

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
| 2.520                    |

## 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: 0.820 in.

## Mechanical Characteristics (Overall)

Max. Recommended Pulling Tension: 368 lbs.

Min. Bend Radius (Install)/Minor Axis: 8.200 in.

## 29511 Composite - 1000V UL Flexible Motor Supply Cable

## Applicable Specifications and Agency Compliance (Overall)

## Applicable Standards &amp; Environmental Programs

|                                       |                                      |
|---------------------------------------|--------------------------------------|
| NEC(UL) Specification:                | RHW-2 Singles, TC-ER, XHHW-2         |
| NEC Articles:                         | 335 - 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): | 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:

|  |
|--|
| Voltage                                  |
| 1000 V RMS (Flexible Motor Supply Cable) |

## Max. Operating Voltage - Other:

|                               |
|-------------------------------|
| Voltage                       |
| 1000 V RMS (CSA AWM I/II A/B) |

## Related Documents:

No related documents are available for this product

## Put Ups and Colors:

| Item #        | Putup    | Ship Weight  | Color | Notes | Item Desc              |
|---------------|----------|--------------|-------|-------|------------------------|
| 29511 010100  | 100 FT   | 67.500 LB    | BLACK | C     | COMPOSITE CABLE SH PVC |
| 29511 0101000 | 1,000 FT | 340.000 LB   | BLACK | C     | COMPOSITE CABLE SH PVC |
| 29511 010500  | 500 FT   | 177.500 LB   | BLACK | C     | COMPOSITE CABLE SH PVC |
| 29511 0105000 | 5,000 FT | 1,565.000 LB | BLACK | C     | COMPOSITE CABLE SH PVC |

## Notes:

C = CRATE REEL PUT-UP.

## 29511 Composite - 1000V UL Flexible Motor Supply Cable

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

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