

## 29507 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, XLP 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 Drive

### Physical Characteristics (Overall)

#### Conductor

AWG:

| # Conductors | AWG | Stranding | Conductor Material |
|--------------|-----|-----------|--------------------|
| 3            | 2   | 7x19x23   | TC - Tinned Copper |

Total Number of Conductors: 3

#### Ground Wire

Ground Wire (Y/N): Y

Ground Wire AWG: 2

Ground Wire Stranding: 7x19x23

Ground Wire Conductor Material: TC - Tinned Copper

Ground Wire Insulation Material: PVC - Polyvinyl Chloride

#### Insulation

Insulation Material:

| Insulation Material           | Wall Thickness (in.) |
|-------------------------------|----------------------|
| XLP - Cross Linked Polyolefin | 0.060                |

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:

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

Outer Shield Drain Wire AWG:

| AWG    | Stranding | Drain Wire Conductor Material |
|--------|-----------|-------------------------------|
| 8 (4x) | 133x29    | TC - Tinned Copper            |

#### Outer Jacket

Outer Jacket Material:

| Outer Jacket Material    | Nom. Wall Thickness (in.) |
|--------------------------|---------------------------|
| PVC - Polyvinyl Chloride | 0.093                     |

#### Overall Cable

Overall Nominal Diameter: 1.310 in.

### Mechanical Characteristics (Overall)

Wet Temperature Range: -40°C To +90°C

Dry Temperature Range: -40°C To +90°C

Bulk Cable Weight: 1630 lbs/1000 ft.

## 29507 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

|                                   |            |
|-----------------------------------|------------|
| Max. Recommended Pulling Tension: | 3088 lbs.  |
| Min. Bend Radius/Minor Axis:      | 10.750 in. |

### 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 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): | 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                           |

#### Flame Test

|                  |                   |
|------------------|-------------------|
| UL Flame Test:   | UL1685 UL Loading |
| CSA Flame Test:  | FT4               |
| IEEE Flame Test: | 1202              |

#### Suitability

|                        |     |
|------------------------|-----|
| Suitability - Indoor:  | Yes |
| Suitability - Outdoor: | Yes |
| Suitability - Burial:  | Yes |
| Sunlight Resistance:   | Yes |
| Oil Resistance:        | Yes |

#### Plenum/Non-Plenum

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

### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

|                 |
|-----------------|
| Impedance (Ohm) |
| 46              |

#### Nom. Inductance:

|                    |
|--------------------|
| Inductance (µH/ft) |
| .153               |

#### Nom. Capacitance Conductor to Conductor:

|                     |
|---------------------|
| Capacitance (pF/ft) |
| 40                  |

#### Nom. Capacitance Cond. to Other Conductor & Shield:

|                     |
|---------------------|
| Capacitance (pF/ft) |
| 72                  |

#### Nom. Conductor DC Resistance:

|                          |
|--------------------------|
| DCR @ 20°C (Ohm/1000 ft) |
| 0.16                     |

#### Max. Operating Voltage - UL:

|  |
|--|
| Voltage                                  |
| 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:

## 29507 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

**Current**

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

**Put Ups and Colors:**

| Item #         | Putup    | Ship Weight  | Color | Notes | Item Desc                |
|----------------|----------|--------------|-------|-------|--------------------------|
| 29507 010S3000 | 3,000 FT | 5,163.000    | BLACK |       | 3 #2 XLPE, #2 PVC SH HMF |
| 29507 0101000  | 1,000 FT | 1,714.000 LB | BLACK | C Z   | 3 #2 XLPE, #2 PVC SH HMF |
| 29507 0102000  | 2,000 FT | 3,318.000 LB | BLACK | C Z   | 3 #2 XLPE, #2 PVC SH HMF |
| 29507 010250   | 250 FT   | 504.500 LB   | BLACK | C Z   | 3 #2 XLPE, #2 PVC SH HMF |
| 29507 010500   | 500 FT   | 891.000 LB   | BLACK | C Z   | 3 #2 XLPE, #2 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.

Revision Number: 4    Revision Date: 04-04-2016

© 2016 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 2014/35/EU).