



Product: [29540](#)

VFD 300% Gnd, 3C+G #6 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/3-#12 TC Drains, Blk PVC Jkt, 2000V TC-ER 90C Dry/Wet 2000V Flexible Motor Supply Cable WTTC

[Request Sample](#)

### Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 6AWG (7x19x27) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/3-12AWG Tinned Copper Drains, Black PVC Outer Jacket, 2000V TC-ER 90C Dry/Wet 2000V Flexible Motor Supply Cable WTTC 1000V CSA AWM I/II A/B 600V CIC TC SUN RES DIR BUR Oil Resistant

### Technical Specifications

#### Product Overview

|                        |  |
|------------------------|--|
| Suitable Applications: | Variable Frequency Drives (VFD); AC Motor and Drive Systems; High voltage requirements |
|------------------------|--|

#### Construction Details

##### Conductor

| Element      | No. of Elements | Size  | Stranding | Material           |
|--------------|-----------------|-------|-----------|--------------------|
| Conductor(s) | 3               | 6 AWG | 7x19x27   | TC - Tinned Copper |
| Ground       | 1               | 6 AWG | 7x19x27   | TC - Tinned Copper |

##### Insulation

| Element      | Material                                     | Nom. Thickness    | Color Code          |
|--------------|--|-------------------|---------------------|
| Conductor(s) | XLPE - Cross-Linked Polyethylene (Thermoset) | 0.072 in (1.8 mm) | Black and Numbered  |
| Ground       | XLPE - Cross-Linked Polyethylene (Thermoset) | 0.072 in (1.8 mm) | Green/Yellow Stripe |

##### Outer Shield

| Shield Type | Material                      | Coverage |
|-------------|-------------------------------|----------|
| Tape        | Tri-Laminate (Alum+Poly+Alum) | 100%     |
| Braid       | Tinned Copper (TC)            | 85%      |

##### Outer Jacket

| Material                 | Nom. Thickness    | Nom. Diameter       | Ripcord |
|--------------------------|-------------------|---------------------|---------|
| PVC - Polyvinyl Chloride | 0.095 in (2.4 mm) | 1.049 in (26.64 mm) | Yes     |

|                                   |                     |
|-----------------------------------|---------------------|
| Overall Cable Diameter (Nominal): | 1.049 in (26.64 mm) |
|-----------------------------------|---------------------|

#### Electrical Characteristics

##### Electricals

| Element      | Nom. Conductor DCR             | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Characteristic Impedance | Nom. Velocity of Prop. | Max. Current                  |
|--------------|--------------------------------|-------------------------------|---|-------------------------------|------------------------|-------------------------------|
| Conductor(s) | 0.379 Ohm/1000ft (1.24 Ohm/km) | 33 pF/ft (110 pF/m)           | 60 pF/ft (200 pF/m)                             | 56 Ohm                        | 55%                    | 75 Amps per Conductor at 30°C |

##### Voltage

| UL Voltage Rating  |
|--|
| 2000 V (TC, C(UL) TC), 1000 V (WTTC, UL Flexible Motor Supply Cable, CSA AWM I/II A/B) |

#### Mechanical Characteristics

##### Temperature

| UL Temperature     | Operating      |
|--------------------|----------------|
| 90°C Dry, 90°C Wet | -40°C To +90°C |

#### Bend Radius

| Stationary Min.  | Installation Min. |
|------------------|-------------------|
| 12.6 in (320 mm) | 12.6 in (320 mm)  |

|                    |                             |
|--------------------|-----------------------------|
| Max. Pull Tension: | 1358 lbs (616.0 kg)         |
| Bulk Cable Weight: | 785 lbs/1000ft (1170 kg/km) |

#### Standards and Compliance

|                                  |   |
|----------------------------------|---|
| Environmental Suitability:       | Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial  |
| Sustainability:                  | CA Prop 65  |
| Flammability / Reaction to Fire: | UL1685 UL Loading, FT4, 1202, 383 Vertical Tray Flame Test (70,000 BTU)   |
| NEC / UL Compliance:             | Article 336, TC-ER, WTTC, RHW-2, UL Flexible Motor Supply Cable   |
| AWM Compliance:                  | I/II A/B  |
| CEC / C(UL) Compliance:          | CIC, TC   |
| ICEA Compliance:                 | S-95-658  |
| European Directive Compliance:   | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)   |
| Other Standard Compliance(s):    | P-07-KA070003-MSHA  |

#### History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.502 Revision Date: 05-31-2024 |
|----------------------|--|

#### Part Numbers

#### Variants

| Item #        | Color | Putup Type | Length   | UPC          |
|---------------|-------|------------|----------|--------------|
| 29540 0101000 | Black | Reel       | 1,000 ft | 612825138471 |
| 29540 0103500 | Black | Reel       | 3,500 ft | 612825138488 |

© 2025 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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.