



Product: [29500](#)

VFD 300% Gnd, 3C+G #16 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/#16 TC Drain, Blk PVC Jkt, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable

[Request Sample](#)

Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 16AWG (26x30) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/16AWG Tinned Copper Drain, Black PVC Outer Jacket, 600V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable 1000V CSA AWM I/II A/B 600V CIC TC SUN RES DIR BUR Oil Resistant

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | AC Motor drives, VFD, Variable Frequency drives |
|------------------------|---|

Physical Characteristics (Overall)

Conductor

| Element | AWG | Stranding | Material | No. of Conductors |
|-----------|-----|-----------|--------------------|-------------------|
| Conductor | 16 | 26x30 | TC - Tinned Copper | 3 |
| Ground | 16 | 26x30 | TC - Tinned Copper | 1 |

| | |
|------------------|---|
| Conductor Count: | 3 |
|------------------|---|

Insulation

| Material | Nominal Wall Thickness |
|------------------------------|------------------------|
| XLPE, XLPO, XLPE (Thermoset) | 0.045 in |
| PVC - Polyvinyl Chloride | 0.045 in |

Color Chart

| Number | Color |
|--------|----------------------|
| 1 | Black and Numbered 1 |
| 2 | Black and Numbered 2 |
| 3 | Black and Numbered 3 |
| 4 | Green/Yellow |

Outer Shield Material

| Type | Layer | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG |
|-------|-------|--------------------|---------------------|--------------|--------------------|---------------|
| Tape | 1 | Alum / Poly / Alum | Duofoil® | 100 % | TC - Tinned Copper | 16 |
| Braid | 2 | TC - Tinned Copper | | 85 % | | |

Outer Jacket Material

| Material | Nominal Diameter | Nominal Wall Thickness |
|--------------------------|------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.534 in | 0.073 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR |
|-----------------------|
| 4 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 21 pF/ft | 38 pF/ft |

Inductance

| Nominal Inductance |
|--------------------|
| 0.23 µH/ft |

Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 90 Ohm |

Current

| Max. Recommended Current [A] |
|---------------------------------------|
| 8 Amps per conductor @ 30°C (per NEC) |

Voltage

| Description | UL Voltage Rating | Voltage Rating [V] |
|------------------|--|-------------------------------|
| CSA AWM 1/11 A/B | 1000 V RMS (Flexible Motor Supply Cable) | 1000 V RMS (CSA AWM I/II A/B) |
| | 600 V RMS (Type TC) | |

Temperature Range

| | |
|-----------------------|----------------------|
| UL Temp Rating: | 90°C Dry, 90°C Wet |
| Operating Temp Range: | -40C To +90C Wet/Dry |
| Wet Temp Range: | -40°C To +90 °C |
| Dry Temp Range: | -40°C To +90 °C |

Mechanical Characteristics

| | |
|----------------------------------|----------------|
| Bulk Cable Weight: | 160 lbs/1000ft |
| Max Recommended Pulling Tension: | 128 lbs |
| Min Bend Radius/Minor Axis: | 4.25 in |

Standards

| | |
|--------------------------|--------------------------------------|
| NEC Articles: | 336 - ER |
| NEC/(UL) Specification: | TC-ER, WTTTC, XHHW-2 |
| CEC/C(UL) Specification: | 600V Type CIC TC |
| CSA AWM Specification: | 1000 V AWM I/II A/B |
| PMSHA Specification: | P-07-KA070003 |
| Other Specification: | 1000V UL Flexible Motor Supply Cable |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-10-13 |
| MII Order #39 (China RoHS): | Yes |

Suitability

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

Flammability, LSOH, Toxicity Testing

| | |
|-------------------|-------------------|
| UL Flammability: | UL1685 UL Loading |
| CSA Flammability: | FT4 |

| | |
|--------------------|---|
| IEEE Flammability: | 1202, 383 Vertical Tray Flame Test (70,000 BTU) |
| UL voltage rating: | 1000 V RMS (Flexible Motor Supply Cable) |

Part Number

Variants

| Item # | Color | Putup Type | Length | UPC |
|---------------|-------|------------|----------|--------------|
| 29500 010100 | Black | Reel | 100 ft | 612825136491 |
| 29500 010250 | Black | Reel | 250 ft | 612825136521 |
| 29500 010500 | Black | Reel | 500 ft | 612825136538 |
| 29500 0101000 | Black | Reel | 1,000 ft | 612825136507 |
| 29500 0106000 | Black | Reel | 6,000 ft | 612825136545 |

| | |
|-----------|--|
| Footnote: | C - CRATE REEL PUT-UP. |
| Footnote: | Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN. |

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.349 Revision Date: 04-28-2020 |
|----------------------|--|

© 2020 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Belden Wire & Cable:](#)

[29500 010100](#) [29500 010250](#)