



Product: [29730C](#)

VFD, 3C #2/0 Str BC XLPE Ins + #5 Symm. Seg. Gnd (3 of #10) Str BC, CTS, Blk PVC Jkt, 2000V TC-ER 90C Dry/Wet 1000V CSA AWM I/II A/B

Product Description

Belden Basics VFD, 3 Conductor 2/0AWG (19x12) Bare Copper XLPE Insulation M4 Color Code + 5AWG Symmetrical Segmented Ground (3 of 10AWG) Bare Copper Stranded, Overall Dual Copper Tapes Helically Applied Shield, Black PVC Outer Jacket, 2000V TC-ER 90C Dry/Wet 1000V CSA AWM I/II A/B 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 | Notes |
| Conductor(s) | 3 | 2/0 AWG | 19x12 | BC - Bare Copper | ASTM B3 Copper B8 Class B Stranding |
| Ground | 3 | 10 AWG | 7x18 | BC - Bare Copper | Segmented Grounds |

| Insulation | | | | |
|--------------|--|-------------------|--------------------------|--------------------|
| Element | Material | Nom. Thickness | Nom. Insulation Diameter | Color Code |
| Conductor(s) | XLPE - Cross-Linked Polyethylene (Thermoset) | 0.095 in (2.4 mm) | 0.592 in (15.0 mm) | Black and Numbered |
| Ground | No Insulation | | | |

| Outer Shield | | |
|--------------|------------------|----------|
| Shield Type | Material | Coverage |
| Helical Tape | Bare Copper (BC) | 100% |
| Helical Tape | Bare Copper (BC) | 100% |

| Outer Jacket | | | |
|-----------------------------------|-------------------|---------------------|---------|
| Material | Nom. Thickness | Nom. Diameter | Ripcord |
| PVC - Polyvinyl Chloride | 0.083 in (2.1 mm) | 1.454 in (36.93 mm) | Yes |
| Overall Cable Diameter (Nominal): | | 1.454 in (36.93 mm) | |

Electrical Characteristics

| Electricals | | | | | | |
|--------------|--------------------------------|-------------------------------|---|-------------------------------|------------------------|--------------------------------|
| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Characteristic Impedence | Nom. Velocity of Prop. | Max. Current |
| Conductor(s) | 0.083 Ohm/1000ft (0.27 Ohm/km) | 26 pF/ft (85 pF/m) | 47 pF/ft (150 pF/m) | 71 Ohm | 55% | 195 Amps per Conductor at 30°C |

| Voltage | |
|--|--|
| UL Voltage Rating | |
| 2000 V (TC), 1000 V (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. |
|------------------|-------------------|
| 17.4 in (442 mm) | 17.4 in (442 mm) |

| | |
|--------------------|------------------------------|
| Max. Pull Tension: | 4893 lbs (2219 kg) |
| Bulk Cable Weight: | 1810 lbs/1000ft (2690 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, 1202, 383 Vertical Tray Flame Test (70,000 BTU) |
| NEC / UL Compliance: | Article 336, TC-ER, RHW-2 |
| AWM Compliance: | I/II A/B |
| 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: 0.76 Revision Date: 05-31-2024 |
|----------------------|---|

Part Numbers

Variants

| Item # | Putup Type | UPC |
|----------------|------------|--------------|
| 29730C 0101000 | Reel | 612825445616 |
| 29730C 0102500 | Reel | 612825445623 |

© 2024 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:](#)

[29730C 0101000](#) [29730C 0102500](#)