



Product: <u>1229502</u> ☑

VFD 300% Gnd, 3C+G #12 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd w/#12 TC Drain, PVC Jkt, AIA Armor, BIk PVC Jkt, 600V MC 90C Dry/Wet

Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 12AWG (65x30) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/12AWG Tinned Copper Drain, PVC Inner Jacket, Aluminum Interlock Armor, Black PVC Outer Jacket, 600V MC 90C Dry/Wet SUN RES DIR BUR CT USE Oil Resistant

Technical Specifications

Product Overview

Suitable Applications:

Variable Frequency Drives (VFD); AC Motor and Drive Systems; Exposure to rodents, crush or impact forces

Construction Details

Conductor

Element	Number of Element	Size	Stranding	Material
Conductor(s)	3	12 AWG	65x30	TC - Tinned Copper
Ground	1	12 AWG	65x30	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.046 in (1.2 mm)	0.187 in (4.75 mm)	Black and Numbered
Ground	PVC - Polyvinyl Chloride	0.046 in (1.2 mm)	0.187 in (4.75 mm)	Green/Yellow Stripe

Outer Shield

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

Inner Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.073 in (1.9 mm)	0.630 in (16.0 mm)

Armor

Armor Type & Material AIA - Aluminum Interlock Armor

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.050 in (1.3 mm)	0.960 in (24.4 mm)	Yes
Overall Cable Diameter (I	0.960 in (24.4 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)	1.567 Ohm/1000ft (5.141 Ohm/km)	45 pF/ft (150 pF/m)	81 pF/ft (270 pF/m)	41 Ohm	55%	30 Amps per Conductor at 30°C

UL Voltage Rating 600 V (MC)

Mechanical Characteristics

Temperature

UL Temperature	Operating	
90°C Dry, 90°C Wet	-25°C To +90°C	

Bend Radius

Stationary Min.	Installation Min.
11.5 in (292 mm)	11.5 in (292 mm)

Max. Pull Tension:	395 lbs (179 kg)
Bulk Cable Weight:	457 lbs/1000ft (680 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL 1685 Vertical Tray, 1202, 383 Vertical Tray Flame Test (70,000 BTU)
NEC / UL Compliance:	Article 336, MC
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)

History

Update and Revision: Revision Number: 0.71 Revision Date: 12-20-2022

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