Product: 29510

VFD 300% Gnd, 3C+G #16 Str TC, XLPE Ins+PVC Gnd, OS+TC Brd, 1 Pr #16 Str TC XLPE IS, 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, 1 Pair 16AWG (26x30) Tinned Copper XLPE Beldfoil, 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:	Variable Frequency Drives (VFD); AC Motor and Drive Systems

Construction Details

Conductor

Element	Number of Element	AWG	Stranding	Material	Notes
Conductor(s)	3	16	26x30	TC - Tinned Copper	
Pair(s)	1	16	26x30	TC - Tinned Copper	Used as control or brake pair
Ground	1	16	26x30	TC - Tinned Copper	

Insulation

Element	Material	Thickness	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.046 in (1.2 mm)	Black and Numbered
Pair(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.032 in (0.81 mm)	Black, White
Ground	PVC - Polyvinyl Chloride	0.047 in (1.2 mm)	Green/Yellow Stripe

Inner Shield Material

Element	Shield Type	Material	Coverage	Drainwire Type	Notes
Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%	18 AWG (19x30) TC	Foil-In, Shorting fold

Outer Shield Material

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

Table Notes:	Foil+braid shield on power conductors & Ground only; extra pair has own foil shield.

Outer Jacket Material

Material	Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.075 in (1.9 mm)	0.750 in	Yes

Cable Diameter (Nominal):	0.750 in (19.1 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Inner Shield DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield	Nom. Capacitance Cond-to-Other (Conds + Shield)	Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Conductor(s)	3.914 Ohm/1000ft (12.84 Ohm/km)		46 pF/ft (150 pF/m)	38 pF/ft (120 pF/m)	83 pF/ft (270 pF/m)	37 Ohm	55%	18 Amps per Conductor at 30ºC (per NEC)
Pair(s)	4 Ohm/1000ft (13 Ohm/km)	4.99 Ohm/1000ft (16.4 Ohm/km)	34 pF/ft (110 pF/m)					

Ground								

Voltage

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

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
9.0 in (230 mm)	9.0 in (230 mm)

Max. Pull Tension:	336 lbs (152 kg)
Bulk Cable Weight:	259 lbs/1000ft (385 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Fire Resistance:	UL1685 UL Loading, FT4, FT4, 1202, 383 Vertical Tray Flame Test (70,000 BTU)
NEC / UL Compliance:	Article 336, TC-ER, 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: 0.403 Revision Date: 06-08-2021