



**Part Number: 29502F**

1000V UL Flexible Motor VFD, (3) 12 AWG (7x24x34) TC+Grd, XLP/TPE, Foil+TC Braid Shld, TC-ER

[Request Sample](#)

## Product Description

Three 12 AWG stranded (7x24x34) tinned copper circuit conductors plus ground wire, cross-linked polyolefin insulation, overall Duofoil® (100% coverage) plus a tinned copper braid shield (85% coverage), TPE jacket.

## Technical Specifications

### Product Overview

Suitable Applications:	AC Motor drives, VFD, Variable Frequency drives
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### Physical Characteristics (Overall)

#### Conductor

Element	AWG	Stranding	Material	No. of Conductors
	12	7x24x34	TC - Tinned Copper	3
Ground Wire	12	7x24x34	TC - Tinned Copper	

Conductor Count:	3
Conductor Size:	14 AWG

#### Insulation

Material	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.045 in
XLP - Cross Linked Polyolefin	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	Aluminum/Polyester	Duofoil®	100 %	TC - Tinned Copper	12
Braid	2	TC - Tinned Copper		85 %		

#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	0.661 in	0.073 in

### Electrical Characteristics

#### Conductor DCR

<b>Nominal Conductor DCR</b>
1.6 Ohm/1000ft

#### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
26 pF/ft	47 pF/ft
Shielding:	Foil + Braid(s)

## Inductance

### Nominal Inductance

0.197 µH/ft

## Impedance

### Nominal Characteristic Impedance

71 Ohm

## Current

### Max. Recommended Current [A]

30 Amps per conductor @ 30°C (per NEC)

## Voltage

### UL Voltage Rating

1000 V RMS (Flexible Motor Supply Cable)

600 V RMS (NEC Type TC)

## Temperature Range

Operating Temp Range: -40C To +90C Wet/Dry

## Mechanical Characteristics

Bulk Cable Weight: 250 lbs/1000ft

Max Recommended Pulling Tension: 336 lbs

Min Bend Radius (Continuous Flexing): 5 in

Min Bend Radius/Minor Axis: 3.3 in

## Standards

NEC Articles: 336 - ER

NEC/(UL) Specification: N/A

CEC/C(UL) Specification: 600V Type CIC TC

Other Specification: 1000V UL Flexible Motor Supply

## 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

CA Prop 65 (CJ for Wire & Cable): Yes

## Suitability

Suitability - Indoor: 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
29502F 0101000	Black
29502F 0105000	Black

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