

METRIC MEASUREMENT VERSION

29502 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

For more Information
please call

1-800-Belden1



Description:

4-cond. (3) stranded tinned copper circuit conductors plus (1)ground wire with PVC insulation, XLPE insulation, Overall Duofoil® (100% coverage) plus a tinned copper braid shield (85% coverage) , tinned copper drain wire, Sun- & oil-resistant PVC jacket.

Usage (Overall)

Suitable Applications: AC Motor Drives, VFD, Variable Frequency Drive

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
3	12	65x30	TC - Tinned Copper

Total Number of Conductors: 3

Ground Wire

Ground Wire (Y/N): Y

Ground Wire AWG: 12

Ground Wire Stranding: 65x30

Ground Wire Conductor Material: TC - Tinned Copper

Ground Wire Insulation Material: PVC - Polyvinyl Chloride

Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
XLPE - Cross Linked Polyethylene	1.143

Insulation Resistance: 300 Megaohms/1000 ft.

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	85

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
12	65x30	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 16.002 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +90°C Dry, +90°C Wet

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UL Temperature Rating:	90°C Wet/Dry
Bulk Cable Weight:	372.050 Kg/Km
Max. Recommended Pulling Tension:	1494.595 N
Min. Bend Radius/Minor Axis:	160.020 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	TC-ER, Unlisted Singles, WTTC
NEC Articles:	336 - ER
CSA Specification:	1000 V AWM I/II A/B
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/13/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
PMSHA Specification:	P-07-KA070003
Other Specification:	1000V UL Flexible Motor Supply Cable

Flame Test

UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT4
IEEE Flame Test:	1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU)

Suitability

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

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
71

Nom. Inductance:

Inductance (µH/m)
0.646357

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
85.306

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)
154.207

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
5.2496

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Max. Operating Voltage - UL:

Voltage
1000 V RMS (Flexible Motor Supply Cable)
600 V RMS (NEC Type TC)

Max. Recommended Current:

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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29502 010100	30 MT	14.651 KG	BLACK		#12/4C XLPE SH PVC
29502 0101000	305 MT	136.532 KG	BLACK	C Z	#12/4C XLPE SHPVC
29502 010250	76 MT	34.700 KG	BLACK	C Z	#12/4C XLPE SHPVC
29502 010500	152 MT	66.225 KG	BLACK	C Z	#12/4C XLPE SHPVC
29502 0105000	1,524 MT	680.392 KG	BLACK	C Z	#12/4C XLPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

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

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