Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

29531 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

For more Information
please call

1-800-Belden1

General Description:

3 stranded tinned copper circuit conductors plus (3) symmetrical bare copper ground wires, XLP insulation, two spiral copper tape shields (100% Coverage) ~ sun- and 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	3/0	19x7x19	TC - Tinned Copper

Total Number of Conductors:	3

Ground Wire

Ground Wire (Y/N):	Y
Ground Wire AWG:	4
Ground Wire Stranding:	7x19x25
Ground Wire Conductor Material:	BC - Bare Copper

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
XLP - Cross Linked Polyolefin	0.057

Insulation Color Code Chart:

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3

Outer Shield

Outer Shield Material:

Layer #	Type	Outer Shield Material	Coverage (%)	Description
1	Tape	Spiral Copper	100.000	.002"
2	Tape	Spiral Copper	100.000	.002"

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	0.083

Overall Cable

Overall Nominal Diameter:	1.520 in.

Mechanical Characteristics (Overall)

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

Bulk Cable Weight:	2538 lbs/1000 ft.
Max. Recommended Pulling Tension:	5025 lbs.
Min. Bend Radius/Minor Axis:	15.200 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	600V Type RW90 TC
CSA Specification:	600 V AWM I/II A/B
EU Directive 2011/65/EU (ROHS II):	Yes
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):	11/09/2005
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. Inductance:

Inductance (µH/ft)
.138

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
48

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
86

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
.063

Max. Operating Voltage - UL:

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

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Max. Operating Voltage - Other:

Voltage	Description
1000 V RMS	CSA AWM I/II A/B

Max. Recommended Current:

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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29531 0101000	1,000 FT	2,952.000 LB	BLACK	C 9	3C3/0 133STR VFD 600V
29531 0102000	2,000 FT	6,092.000 LB	BLACK	C Z	3C3/0 133STR VFD 600V
29531 010250	250 FT	699.500 LB	BLACK	C 9	3C3/0 133STR VFD 600V
29531 010500	500 FT	1,560.000 LB	BLACK	C 9	3C3/0 133STR VFD 600V

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.
9 = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 5% FROM LENGTH SHOWN.

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