Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

29513 Composite - 1000V UL Flexible Motor Supply Cable

For more Information please call

1-800-Belden1

General Description:

1 pr.(Signal)-16 AWG stranded (26x30) TC cond., XLPE insul., Beldfoil® shield (100% c; 3 cond.(VFD) plus 1 ground wire-10 AWG stranded (105x30) TC cond., XLPE insul., Duofoil® and TC braid Shield (100% acdrain, PVC jacket.

Usage (Overall)

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

Twisted Pair

Physical Characteristics

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
1	16	26x30	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
XLPE - Cross Linked Polyethylene	0.030

Twisted Pair Color Code Chart:

Number	Color
1	Black and White

Inner Shield

Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG	Stranding	Conductor Material
18	19x30	TC - Tinned Copper

Electrical Characteristics

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
34.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.000

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.990

Multi Conductor

Physical Characteristics

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
1	10	105x30	TC - Tinned Copper

Ground Wire

Ground Wire (Y/N): Yes

Ground Wire Material:

AWG	Stranding	Conductor Material	Insulation Material
10	105x30	TC - Tinned Copper	PVC - Polyvinyl Chloride

Insulation

Insulation Material:

Insulation Material	Dia. (in.)

XLPE - Cross Linked Polyethylene	0.045

Insulation Color Code Chart:

Number	Color
1	Black #1
2	Black #2
3	Black #3
4	Green/Yellow

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
2		Braid	TC - Tinned Copper	85.000

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
10	105x30	TC - Tinned Copper

Electrical Characteristics

Nom. Inductance:

Inductance (µH/ft)
0.184

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
53.000

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
29.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
0.988

Physical Characteristics (Overall)

Conductor

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	0.105

Outer Jacket Ripcord:	Yes

Overall Cable

Overall Nominal Diameter:	0.985 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +90°C
Max. Recommended Pulling Tension:	718 lbs.
Min. Bend Radius/Minor Axis:	9.900 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	RHW-2 Singles, TC-ER, XHHW-2
NEC Articles:	336 - ER
CEC/C(UL) Specification:	600V Type CIC TC
CSA Specification:	1000 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):	09/21/2006
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes

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Mfr Order #39 (China RoHS):	Yes
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

Plenum/Non-Plenum

Plenum (Y/N):	No

Electrical Characteristics (Overall)

Max. Operating Voltage - UL:

Voltage
1000 V RMS (Flexible Motor Supply Cable)

Max. Operating Voltage - Other:

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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29513 010100	100 FT	89.300 LB	BLACK	C	COMPOSITE CABLE SH PVC
29513 0101000	1,000 FT	563.000 LB	BLACK	C	COMPOSITE CABLE SH PVC
29513 0103000	3,000 FT	1,671.000 LB	BLACK	C	COMPOSITE CABLE SH PVC
29513 010500	500 FT	286.500 LB	BLACK	C	COMPOSITE CABLE SH PVC

Notes:
C = CRATE REEL PUT-UP.

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