

## 29507 Multi-Conductor - 1000V UL Flexible Motor Supply Cable



For more Information  
please call

1-800-Belden1



### General Description:

4-cond. (3) stranded tinned copper circuit conductors plus (1)ground wire with PVC insulation, XLP insulation, overall Duofoil® (100% cov.) plus a tinned copper braid shield (85% cov.), tinned copper sectioned 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	2	7x19x23	TC - Tinned Copper

**Total Number of Conductors:** 3

#### Ground Wire

**Ground Wire (Y/N):** Y

**Ground Wire AWG:** 2

**Ground Wire Stranding:** 7x19x23

**Ground Wire Conductor Material:** TC - Tinned Copper

**Ground Wire Insulation Material:** PVC - Polyvinyl Chloride

#### Insulation

**Insulation Material:**

Insulation Material	Wall Thickness (mm)
XLP - Cross Linked Polyolefin	1.524

**Insulation Resistance:** 300 Megaohms/1000 ft.

**Insulation Color Code Chart:**

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 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	100
2		Braid	TC - Tinned Copper	85

**Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire Conductor Material
8 (4x)	133x29	TC - Tinned Copper

#### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	2.362

## 29507 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

### Overall Cable

Overall Nominal Diameter: 33.274 mm

### Mechanical Characteristics (Overall)

Wet Temperature Range: -40°C To +90°C

Dry Temperature Range: -40°C To +90°C

Bulk Cable Weight: 2425.766 Kg/Km

Max. Recommended Pulling Tension: 13736.042 N

Min. Bend Radius/Minor Axis: 273.050 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: TC-ER, Unlisted Singles, WTTC

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): 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

#### Flame Test

UL Flame Test: UL1685 UL Loading

CSA Flame Test: FT4

IEEE Flame Test: 1202

#### Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

Suitability - Burial: Yes

Sunlight Resistance: Yes

Oil Resistance: Yes

#### Plenum/Non-Plenum

Plenum (Y/N): No

### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)

46

#### Nom. Inductance:

Inductance (µH/m)

0.501993

#### Nom. Capacitance Conductor to Conductor:

## METRIC MEASUREMENT VERSION

### 29507 Multi-Conductor - 1000V UL Flexible Motor Supply Cable

#### Capacitance (pF/m)

131.24

#### Nom. Capacitance Cond. to Other Conductor & Shield:

#### Capacitance (pF/m)

236.232

#### Nom. Conductor DC Resistance:

#### DCR @ 20°C (Ohm/km)

0.52496

#### Max. Operating Voltage - UL:

#### Voltage

1000 V RMS (Flexible Motor Supply Cable)

600 V RMS (NEC Type TC)

#### Max. Operating Voltage - Other:

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

#### Max. Recommended Current:

#### Current

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

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29507 0101000	1,000 FT	1,714.000 LB	BLACK	C Z	3 #2 XLPE, #2 PVC SH HMF
29507 0102000	2,000 FT	3,318.000 LB	BLACK	C Z	3 #2 XLPE, #2 PVC SH HMF
29507 010250	250 FT	504.500 LB	BLACK	C Z	3 #2 XLPE, #2 PVC SH HMF
29507 010500	500 FT	891.000 LB	BLACK	C Z	#2 XLPE, #2 PVC SH HMF

#### 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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