

29512 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), drain; 3 cond.(VFD) plus 1 ground wire-12 AWG stranded (65x30) TC cond., XLPE insul., Duofoil® and TC braid Shield (100% a85% c), drain, 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 | Wall Thickness (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 |

Individual Shield

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 |
|--------------|-----|-----------|--------------------|
| 3 | 12 | 65x30 | TC - Tinned Copper |

Ground Wire

Ground Wire (Y/N): Yes

Ground Wire Material:

| AWG | Stranding | Conductor Material | Insulation Material |
|-----|-----------|--------------------|--------------------------|
| 12 | 65x30 | TC - Tinned Copper | PVC - Polyvinyl Chloride |

Insulation

Insulation Material:

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| Insulation Material | Wall Thickness (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 |

Individual Shield

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 |
|-----|-----------|-------------------------------|
| 12 | 65x30 | TC - Tinned Copper |

Electrical Characteristics

Nom. Inductance:

| Inductance (µH/ft) |
|--------------------|
| 0.197 |

Nom. Capacitance Conductor to Shield:

| Capacitance (pF/ft) |
|---------------------|
| 47.000 |

Nom. Capacitance Conductor to Conductor:

| Capacitance (pF/ft) |
|---------------------|
| 26.000 |

Nom. Conductor DC Resistance:

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
| 1.600 |

Physical Characteristics (Overall)

Conductor

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material | Nom. Wall Thickness (in.) |
|--------------------------|---------------------------|
| PVC - Polyvinyl Chloride | 0.080 |

Outer Jacket Ripcord: Yes

Overall Cable

Overall Nominal Diameter: 0.895 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +90°C

Max. Recommended Pulling Tension: 527 lbs.

Min. Bend Radius/Minor Axis: 9 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC(UL) Specification: RHW-2 Singles, TC-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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| | |
|-----------------------------|--------------------------------------|
| 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 |

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 |
|---------------|----------|--------------|-------|-------|------------------------|
| 29512 010100 | 100 FT | 77.300 LB | BLACK | C | COMPOSITE CABLE SH PVC |
| 29512 0101000 | 1,000 FT | 438.000 LB | BLACK | C | COMPOSITE CABLE SH PVC |
| 29512 0104000 | 4,000 FT | 1,680.000 LB | BLACK | C | COMPOSITE CABLE SH PVC |
| 29512 010500 | 500 FT | 226.500 LB | BLACK | C | COMPOSITE CABLE SH PVC |

Notes:

C = CRATE REEL PUT-UP.

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