# **Detailed Specifications & Technical Data**



METRIC MEASUREMENT VERSION

## 29511 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-14 AWG stranded (41x30) 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 (mm)	
XLPE - Cross Linked Polyethylene 0.762	
Twisted Pair Color Code Chart:	
Number         Color           1         Black and White	
Inner Shield Inner Shield Material:	
	Coverage (%)
Beldfoil® Tape Aluminum Foil-Polyester Tape	
Inner Shield Drain Wire AWG:	
AWG Stranding Conductor Material	
1819x30TC - Tinnec Copper	
Electrical Characteristics	
Nom. Capacitance Conductor to Conductor:	
Capacitance (pF/m) 111.554	
Nom. Conductor DC Resistance:	
DCR @ 20°C (Ohm/km)	
13.124	
Nom. Inner Shield DC Resistance:	
DCR @ 20°C (Ohm/km)	
16.372	
Multi Conductor	
Physical Characteristics	
Conductor AWG:	
# Conductors AWG Stranding Conductor Material	
3 14 41x30 TC - Tinned Copper	
Ground Wire	
Ground Wire (Y/N):	Yes
Ground Wire Material:	
AWG         Stranding         Conductor Material         Insulation Material           14         41x30         TC - Tinned Copper         PVC - Polyvinyl Chloride	
Insulation	
Insulation Material:	
Insulation Material Wall Thickness (mm)	

# **Detailed Specifications & Technical Data**



## METRIC MEASUREMENT VERSION

## 29511 Composite - 1000V UL Flexible Motor Supply Cable

	XLPE - Cross Linked Polyethylene     1.143				
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         Out           1         Duofoil®         Tape         Alur	ter Shield Material minum Foil-Polyester Tape-Aluminum Foil	Coverage (%) 100.000			
	- Tinned Copper	85.000			
Outer Shield Drain Wire AWG:					
AWG Stranding Drain Wire Conductor Mater	rial				
14 41x30 TC - Tinned Copper					
Electrical Characteristics					
Nom. Inductance:					
Inductance (µH/m)					
0.699					
Nom. Capacitance Conductor to Shield:					
Capacitance (pF/m) 137.802					
Nom. Capacitance Conductor to Conductor: Capacitance (pF/m)					
75.463					
Nom. Conductor DC Resistance:					
DCR @ 20°C (Ohm/km)					
8.268					
Physical Characteristics (Overall) Conductor					
Outer Jacket					
Outer Jacket Outer Jacket Material: Outer Jacket Material Nom. Wall Thickness (r	mm)				
Outer Jacket Outer Jacket Material:	mm)				
Outer Jacket Outer Jacket Material: Outer Jacket Material Nom. Wall Thickness (r	mm) Yes				
Outer Jacket Outer Jacket Material: Outer Jacket Material Nom. Wall Thickness (r PVC - Polyvinyl Chloride					
Outer Jacket Outer Jacket Material: Outer Jacket Material PVC - Polyvinyl Chloride Outer Jacket Ripcord:					
Outer Jacket Outer Jacket Material: Outer Jacket Material Nom. Wall Thickness (r PVC - Polyvinyl Chloride   1.905 Outer Jacket Ripcord: Overall Cable Overall Nominal Diameter:	Yes				
Outer Jacket Outer Jacket Material: Outer Jacket Material: Nom. Wall Thickness (n PVC - Polyvinyl Chloride 1.905 Outer Jacket Ripcord: Overall Cable Overall Nominal Diameter: Mechanical Characteristics (Overall)	Yes 20.828 mm				
Outer Jacket Outer Jacket Material: Outer Jacket Material PVC - Polyvinyl Chloride Outer Jacket Ripcord: Overall Cable Overall Nominal Diameter: Mechanical Characteristics (Overall) Max. Recommended Pulling Tension:	Yes 20.828 mm 1636.938 N				
Outer Jacket Outer Jacket Material: Outer Jacket Material: Nom. Wall Thickness (n PVC - Polyvinyl Chloride 1.905 Outer Jacket Ripcord: Overall Cable Overall Nominal Diameter: Mechanical Characteristics (Overall)	Yes 20.828 mm				
Outer Jacket Outer Jacket Material: Outer Jacket Material PVC - Polyvinyl Chloride Outer Jacket Ripcord: Overall Cable Overall Nominal Diameter: Mechanical Characteristics (Overall) Max. Recommended Pulling Tension:	Yes 20.828 mm 1636.938 N 208.280 mm				
Outer Jacket Outer Jacket Material: Outer Jacket Material: Nom. Wall Thickness (r PVC - Polyvinyl Chloride 1.905 Outer Jacket Ripcord: Overall Cable Overall Nominal Diameter: Mechanical Characteristics (Overall) Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis:	Yes 20.828 mm 1636.938 N 208.280 mm ompliance (Overall)				
Outer Jacket Outer Jacket Material: Outer Jacket Material: Nom. Wall Thickness ( PVC - Polyvinyl Chloride 1.905 Outer Jacket Ripcord: Overall Cable Overall Nominal Diameter: Mechanical Characteristics (Overall) Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Commended Pulling Commend	Yes 20.828 mm 1636.938 N 208.280 mm ompliance (Overall)				
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (normal stress of the stress	Yes 20.828 mm 1636.938 N 208.280 mm ompliance (Overall) ams	ER, XHHW-2			
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (n         PVC - Polyvinyl Chloride         1.905         Outer Jacket Ripcord:         Overall Cable         Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         NEC Articles:	Yes 20.828 mm 1636.938 N 208.280 mm ompliance (Overall) ams RHW-2 Singles, TC 335 - ER	-ER, XHHW-2			
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (r         PVC - Polyvinyl Chloride         1.905         Outer Jacket Ripcord:         Overall Cable         Overall Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         NEC Articles:         CEC/C(UL) Specification:	Yes 20.828 mm 1636.938 N 208.280 mm ompliance (Overall) ams RHW-2 Singles, TC 335 - ER 600V Type CIC TC				
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (r         PVC - Polyvinyl Chloride         1.905         Outer Jacket Ripcord:         Overall Cable         Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         CEC/C(UL) Specification:         CEC/C(UL) Specification:	Yes 20.828 mm 1636.938 N 208.280 mm ompliance (Overall) ams RHW-2 Singles, TC 335 - ER 600V Type CIC TC 1000 V AWM I/II A/E				
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (r         PVC - Polyvinyl Chloride         1.305         Outer Jacket Ripcord:         Overall Cable         Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         NEC Articles:         CEC/C(UL) Specification:         CSA Specification:         EU Directive 2011/65/EU (ROHS II):	Yes 20.828 mm 1636.938 N 208.280 mm ompliance (Overall) ams RHW-2 Singles, TC 335 - ER 600V Type CIC TC 1000 V AWM I/II A/E Yes				
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (r         PVC - Polyvinyl Chloride         1.905         Outer Jacket Ripcord:         Overall Cable         Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         CEC/C(UL) Specification:         CEC/C(UL) Specification:	Yes 20.828 mm 1636.938 N 208.280 mm ompliance (Overall) ams RHW-2 Singles, TC 335 - ER 600V Type CIC TC 1000 V AWM I/II A/E				
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (r         PVC - Polyvinyl Chloride         1.305         Outer Jacket Ripcord:         Overall Cable         Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         NEC Articles:         CEC/C(UL) Specification:         CSA Specification:         EU Directive 2011/65/EU (ROHS II):	Yes 20.828 mm 1636.938 N 208.280 mm ompliance (Overall) ams RHW-2 Singles, TC 335 - ER 600V Type CIC TC 1000 V AWM I/II A/E Yes				
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (r         PVC - Polyvinyl Chloride         1.905         Outer Jacket Ripcord:         Overall Cable         Overall Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         CEC/C(UL) Specification:         CSA Specification:         EU Directive 2011/65/EU (ROHS II):         EU CE Mark:	Yes 20.828 mm 1636.938 N 208.280 mm ompliance (Overall) ams RHW-2 Singles, TC 335 - ER 600V Type CIC TC 1000 V AWM I/II A/E Yes Yes				
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (r         PVC - Polyvinyl Chloride       1.905         Outer Jacket Ripcord:         Overall Cable         Overall Cable         Overall Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         CEC/C(UL) Specification:         CEC/C(UL) Specification:         CEC/C(UL) Specification:         EU Directive 2011/65/EU (ROHS II):         EU Directive 2000/53/EC (ELV):	Yes 20.828 mm 1636.938 N 208.280 mm 0mpliance (Overall) ams RHW-2 Singles, TC 335 - ER 600V Type CIC TC 1000 V AWM I/II A/E Yes Yes Yes				
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (r         PVC - Polyvinyl Chloride         1.905         Outer Jacket Ripcord:         Overall Cable         Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         NEC Articles:         CEC/C(UL) Specification:         CSA Specification:         EU Directive 2011/65/EU (ROHS II):         EU Directive 2000/53/EC (ELV):         EU Directive 2002/95/EC (RoHS):	Yes 20.828 mm 1636.938 N 208.280 mm 0mpliance (Overall) ams RHW-2 Singles, TC 335 - ER 600V Type CIC TC 1000 V AWM I/II A/E Yes Yes Yes Yes Yes Yes Yes				
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (r         PVC - Polyvinyl Chloride       1.905         Outer Jacket Ripcord:         Overall Cable         Overall Cable         Overall Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         CEC/(UL) Specification:         CEC/(UL) Specification:         CEC/(UL) Specification:         EU Directive 2011/65/EU (ROHS II):         EU Directive 2000/53/EC (ELV):         EU Directive 2000/53/EC (ROHS):         EU ROHS Compliance Date (mm/dd/yyyy):         EU Directive 2002/96/EC (WEEE):	Yes 20.828 mm  1636.938 N 208.280 mm  ompliance (Overall) ams RHW-2 Singles, TC 335 - ER 600V Type CIC TC 1000 V AWM I/II A/E Yes Yes Yes Yes Yes Yes 09/21/2006 Yes				
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (r         PVC - Polyvinyl Chloride         1.905         Outer Jacket Ripcord:         Overall Cable         Overall Cable         Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         NEC Articles:         CEC/C(UL) Specification:         CSA Specification:         EU Directive 2011/65/EU (ROHS II):         EU Directive 2002/95/EC (RoHS):         EU Directive 2002/95/EC (ROHS):         EU Directive 2002/95/EC (WEEE):         EU Directive 2003/11/EC (BFR):	Yes 20.828 mm 20.828 mm 1636.938 N 208.280 mm 0mpliance (Overall) ams RHW-2 Singles, TC 335 - ER 600V Type CIC TC 1000 V AWM I/II A/E Yes				
Outer Jacket         Outer Jacket Material:         Outer Jacket Material:         Nom. Wall Thickness (r         PVC - Polyvinyl Chloride       1.905         Outer Jacket Ripcord:         Overall Cable         Overall Cable         Overall Characteristics (Overall)         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency C         Applicable Standards & Environmental Progr         NEC/(UL) Specification:         CEC/(UL) Specification:         CEC/(UL) Specification:         CEC/(UL) Specification:         EU Directive 2011/65/EU (ROHS II):         EU Directive 2000/53/EC (ELV):         EU Directive 2000/53/EC (ROHS):         EU ROHS Compliance Date (mm/dd/yyyy):         EU Directive 2002/96/EC (WEEE):	Yes 20.828 mm  1636.938 N 208.280 mm  ompliance (Overall) ams RHW-2 Singles, TC 335 - ER 600V Type CIC TC 1000 V AWM I/II A/E Yes Yes Yes Yes Yes Yes 09/21/2006 Yes				

# **Detailed Specifications & Technical Data**



### METRIC MEASUREMENT VERSION

### 29511 Composite - 1000V UL Flexible Motor Supply Cable

PMSHA Specification:	P-07-KA070003	P-07-KA070003				
Other Specification:	ner Specification: 1000V UL Flexible Motor Supply Cable					
lame Test						
UL Flame Test:	Test: UL1685 UL Loading					
CSA Flame Test:	FT4					
IEEE Flame Test:	1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU)					
uitability						
Suitability - Indoor:	Yes					
Suitability - Outdoor:	Yes					
Suitability - Burial:	: Yes					
Sunlight Resistance:	Yes					
lenum/Non-Plenum						
Plenum (Y/N):	No	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
29511 010100	100 FT	67.500 LB	BLACK	С	COMPOSITE CABLE SH PVC
29511 0101000	1,000 FT	340.000 LB	BLACK	С	COMPOSITE CABLE SH PVC
29511 010500	500 FT	177.500 LB	BLACK	С	COMPOSITE CABLE SH PVC
29511 0105000	5,000 FT	1,565.000 LB	BLACK	С	COMPOSITE CABLE SH PVC

Notes: C = CRATE REEL PUT-UP.

Revision Date: 08-20-2013 Revision Number: 1

## © 2015 Belden, Inc All Rights Reserved

All Rights Reserved. Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU ROHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information and belief at the date of its publication. The information provided in this Product Disclosure is designed only as general guide for the safe handling, storage, and any other operation of the product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product. Belden belcares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.