## **Detailed Specifications & Technical Data**



ENGLISH MEASUREMENT VERSION

### 29501X Multi-Conductor - Marine VFD Cable



For more Information please call

1-800-Belden1



#### **General Description:**

4-cond. (3) stranded tinned copper circuit conductors plus(1) ground wire, XLPE insulation, overall Duofoil® (100% coverage) plus a tinned copper braid shield (85% coverage), tinned copper 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 14 41x30 TC - Tinned Copper			
Total Number of Conductors:	3		
Ground Wire			
Ground Wire (Y/N):	Y		
Ground Wire AWG:	14		
Ground Wire Stranding:	41x30		
Ground Wire Conductor Material:	C - Tinned Copper		
Ground Wire Insulation Material:	XLPE - Cross Linked Polyethylene		
Insulation			
Insulation Material: Insulation Material Wall Thickness (in.)			
XLP - Cross-Linked Polyolefin 0.045			
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			
3 Green/Yellow			
Outer Shield			
Outer Shield Material:			
Layer # Outer Shield Trade Name Type Outer Shield Material	Coverage (%)		
1         Duofoil®         Tape         Aluminum Foil-Polyester           2         Braid         TC - Tinned Copper	Tape         100           85		
Outer Shield Drain Wire AWG:			
AWG Stranding Drain Wire Conductor Material			
14 41x30 TC - Tinned Copper			
Outer Jacket			
Outer Jacket Material:			
Outer Jacket Material         Nom. Wall Thickness (in.)           PVC - Polyvinyl Chloride         0.073			
Overall Cable			
Overall Nominal Diameter:	0.604 in.		
Mechanical Characteristics (Overall)			
Mechanical Characteristics (Overall) Wet Temperature Range:	-40°C To +90°C		
Dry Temperature Range:	-40°C To +90°C		
Bulk Cable Weight:	190 lbs/1000 ft.		

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#### ENGLISH MEASUREMENT VERSION

Voltage

Current

1000 V RMS (Flexible Motor Supply Cable)

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

600 V RMS (NEC Type TC) Max. Operating Voltage - Other: Voltage Description 1000 V RMS CSA AWM I/II A/B Max. Recommended Current:

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Max. Recommended Pulling Tension:	212 lbs.				
Min. Bend Radius/Minor Axis:	4.800 in.				
Applicable Specifications and Agency Compliance (C	Overall)				
Applicable Standards & Environmental Programs					
NEC/(UL) Specification:	TC-ER, Unlisted Singles, WTTC				
NEC Articles:	336 - ER				
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):	10/24/2013				
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-KA14008				
Other Specification:	1000V UL Flexible Motor Supply Cable, UL 1309 Marine Cable, IEEE 1580-2010 Type P				
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. Characteristic Impedance:					
Impedance (Ohm) 80					
Nom. Inductance:					
Inductance (µH/ft) .213					
Nom. Capacitance Conductor to Conductor:					
Capacitance (pF/ft) 23					
Nom. Capacitance Cond. to Other Conductor & Shield:					
Capacitance (pF/ft) 42					
Nom. Conductor DC Resistance:					
DCR @ 20°C (Ohm/1000 ft) 2.52					
Max. Operating Voltage - UL:					

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#### 29501X Multi-Conductor - Marine VFD Cable

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
29501X 0105000	5,000 FT	1,240.000 LB	BLACK	CZ	4 #14 XLPO SH XL-LSZH

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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