



# Customer Specification

## PART NO. V16010

### Construction

				Diameters (In)	
1) Component 1		4 X 1 COND			
a) Conductor		10 (105/30) AWG TC			
b) Insulation		0.047" Wall, Nom. XLPE		0.217	
(1) Separator		Paper Tape, 10% Overlap, Min.			
(2) Color(s)					
Cond	Color	Cond	Color	Cond	Color
1	BLACK#1	3	BLACK#3		
2	BLACK#2	4	GREEN OR GREEN/YELLOW		
2) Cable Assembly		4 Components Cabled			
a) Twists:		1.5 Twists/foot (min)			
3) Shield:		A/P/A Tape, 25% Overlap, Min.			
a) Drain Wire		10 (105/30) AWG TC			
b) Braid		TC,85% Coverage, Min.			
4) Jacket		0.085" Wall, Nom.,PVC		0.746+/- 0.023	
a) Color(s)		BLACK			
b) Jacket Separator		Tissue Tape, 25% Overlap, Min.			
c) Print		ALPHA WIRE- EXXXXX SERIES V P/N V16010 VFD CABLE 4C10 SHIELDED 1000V FLEXIBLE MOTOR SUPPLY CABLE 600V TYPE TC-ER (UL) RHW-2 CDRS XLPE/PVC 90C DRY/ WET SUN RES DIR BUR --- LLXXXXXX CSA AWM I/II A/B 1000V 90C FT4 CE ROHS <i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i>			

### Applicable Specifications

1) UL		
a) Component 1	RHW-2Wet/Dry	90°C / 600 V <sub>RMS</sub>
	XHHW-2Wet/Dry	90°C / 600 V <sub>RMS</sub>
b) Overall	TC	90°C / 600 V <sub>RMS</sub>
	EXPOSED RUN	
	DIRECT BURIAL	
	SUN RES	
	1000V Flexible Motor Supply Cable	
2) CSA International	AWM I/II A/B	90°C / 1000 V <sub>RMS</sub>
	FT4	
3) Other	PMSHA Specification	
4) CE:	LVD 73/23/EEC Amendment 93/68/EEC	

## Environmental

1) EU Directive 2002/95/EC(RoHS):	All materials used in the manufacture of this part are in compliance with EU Directive 2002/95/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. Consult Alpha Wire's web site for compliance Date of Manufacture.
2) California Proposition 65:	The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-40 to 90°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	428 Lbs, Maximum
4) Sunlight Resistance	Yes
5) Direct Burial	Yes
6) Copper Weight	213 Lbs/1000Ft
7) Cable Weight	410 Lbs/1000Ft
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	600 V <sub>RMS</sub>
2) Characteristic Impedance	63
3) Inductance	0.184 μH/ft, Nominal
4) Mutual Capacitance	29 pf/ft @ 1 kHz, Nominal
5) Ground Capacitance	53 pf/ft @ 1 kHz, Nominal
6) Conductor DCR	1.09 /1000ft @20°C, Nominal
7) OA Shield DCR	0.61 /1000ft @20°C, Nominal
8) Current	32 amps per conductor @30°C, Maximum
9) Insulation Resistance	300 M/MFt (Est.)

## Other

1) Packaging	
a) Bulk(Made-to-order)	

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## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:V16010

V16010 , RoHS-Compliant Commencing With10/1/2005Production

*This document certifies that the Alpha part numbers cited above are manufactured in accordance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003, better known as the RoHS Directives, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to these Directives for the specific definitions and extents of these Directives. **No Exemptions are required for RoHS Compliance on this item.***

Substance	Maximum Control Value
Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.1% by weight (100 ppm)
Hexavalent Chromium	0.1% by weight (1000 ppm)
Polybrominated Biphenyls (PBB)	0.1% by weight (1000 ppm)
Polybrominated Diphenyl Ethers (PBDE) Including Deca-BDE	0.1% by weight (1000 ppm)

*The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the date of its release. The information provided is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it will become part of. The intent of this document is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.*

Authorized Signatory for the Alpha Wire Company:

A handwritten signature in black ink, appearing to read 'Dave Watson'.

Dave Watson, Director of Engineering & QA

1/20/2011