

# Customer Specification

## PART NO. VF16010

### Construction

				Diameters (In)	
1) Component 1		4 X 1 COND			
a) Conductor		10 (105/30) AWG TC		0.120	
b) Insulation		0.047" Wall, Nom. XLPE		0.219	
(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.,TPE		0.750+/- 0.023	
a) Color(s)		BLACK			
b) Jacket Separator		Tissue Tape, 25% Overlap, Min.			
c) Print		ALPHA WIRE-L VF16010 VFD CABLE 4C10 SHIELDED (UL) 1000V FLEXIBLE MOTOR SUPPLY CABLE 600V TYPE TC-ER -40C RHW-2 CDRS XLPE/TPE 90C DRY/WET SUN RES OIL I/II OR 10 AWG C(UL) CIC CONTROL/TC -40C SUN RES 90C WET/DRY XLPE INS FT4 CE ROHS (DATE CODE) (SEQ FOOTAGE) [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]			

## Applicable Specifications

1) UL		
a) Component 1	RHW-2Wet/Dry	90°C Dry / 90°C Wet / 600 V <sub>RMS</sub>
	XHHW-2Wet/Dry	90°C Dry / 90°C Wet / 600 V <sub>RMS</sub>
b) Overall	TC	90°C / 600 V <sub>RMS</sub>
	EXPOSED RUN	
	SUN RES	
	1000V Flexible Motor Supply Cable	
	OIL RES I/II	
2) CSA International	C(UL) -40C	
	C(UL) CIC CONTROL	
	C(UL) TC	
	C(UL) FT4	
3) CE:	EU Low Voltage Directive 2006/95/EC	

## 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) REACH Regulation (EC 1907/2006):	
	This product does not contain Substances of Very High Concern (SVHC) listed on the European Union's REACH candidate list in excess of 0.1% mass of the item. For up-to-date information, please see Alpha's REACH SVHC Declaration.
3) 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) Copper Weight	213 Lbs/1000Ft
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	1000 V <sub>RMS</sub>
2) Characteristic Impedance	63 Ω
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 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	0.61 Ω/1000ft @20°C, Nominal
8) Current	32 amps per conductor @30°C, Maximum
9) Insulation Resistance	300 MΩ/MFt (Est.)

## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) Bulk(Made-to-order)	

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## EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: VF16010

VF16010, RoHS-Compliant Commencing With 5/16/2012 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European Parliament, better known as the RoHS Directive (commonly known as RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This certification extends to amending Directive 2015/863/EU which expanded the list of restricted substances to 10 items (commonly known as RoHS 3). The reader is referred to these Directives for the specific definitions and extents of the Directives. **No Exemptions are required for RoHS Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2014.

Substance	Maximum Control Value
Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.01% 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)
Bis(2-ethylhexyl) phthalate (DEHP)	0.1% by weight (1000 ppm)
Butyl benzyl phthalate (BBP)	0.1% by weight (1000 ppm)
Dibutyl phthalate (DBP)	0.1% by weight (1000 ppm)
Diisobutyl phthalate (DIBP)	0.1% by weight (1000 ppm)

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Authorized Signatory for the Alpha Wire:

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

Dave Watson, Director of Engineering & QA

10/16/2020

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# Mouser Electronics

Authorized Distributor

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