

# Customer Specification

## PART NO. 461816

### Construction

		Diameters (In)
1) Component 1	1 X 1 HOOKUP	
a) Conductor	18 (16/30) AWG BC	0.047
b) Insulation	0.032" Wall, Nom. PVC	0.111+/- 0.004
(1) Print	ALPHA WIRE-* 18 AWG EXXXXX (UL) MTW OR AWM 1015/1230 105C 600V VW-1 LLXXXXX CSA AWM I A/B 105C 600V FT1 OR TEW 105C 600V FT1 * = Factory Code <i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i>	
(2) Color(s)	WHITE, BLACK, RED, GREEN, YELLOW, BLUE, BROWN ORANGE, SLATE, VIOLET	

### Applicable Specifications

1) UL	AWM/STYLE 1015	105°C / 600 V <sub>RMS</sub>
	AWM/STYLE 1230	105°C / 600 V <sub>RMS</sub>
	MTW	90°C Dry / 60°C Wet / 600 V <sub>RMS</sub>
	VW-1	
2) CSA International	AWM I A/B	80°C / 300 V <sub>RMS</sub>
	FT1	
	TEW-105	105°C / 600 V <sub>RMS</sub>

### Environmental

1) EU Directive 2011/65/EU(RoHS2):	
	All materials used in the manufacture of this part are in compliance with European Directive 2011/65/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. Consult Alpha Wire's web site for RoHS C of C.
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.

### Properties

Physical & Mechanical Properties	
1) Temperature Range	-40 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	12.6 Lbs, Maximum
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	600 V <sub>RMS</sub>
2) Inductance	0.07 µH/ft, Nominal
3) Conductor DCR	6.6 Ω/1000ft @20°C, Nominal

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 5000 FT	12 x 12 x 3.5 Continuous length
b) 1000 FT	12 x 4.5 x 3.5 Continuous length
c) 500 FT	6.5 x 4 x 2.5 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>
<b>Notes:</b>	
a) Certain colors and put-up combinations may only be available by special order, minimums may apply.	

[www.alphawire.com](http://www.alphawire.com)

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## EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 461816

461816 , RoHS-Compliant Commencing With 6/22/2007 Production

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, 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 this Directive for the specific definitions and extents of this Directive. **No Exemptions are required for RoHS Compliance on this item.** It should be noted that this product does not fall within the scope of Directive 2011/65/EU, but this Certificate is offered for cases where this product will be used within EEE that does fit within the Directive's scope. 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 11364-2006.

### 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)

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

4/23/2013