

## Customer Specification

# PART NO. 79121

## Construction

						Diameters (In)	
1) Component 1						2 X 1 COND	
a) Conductor						14 (41/30) AWG Tinned Copper	0.074
b) Insulation						0.011" Wall, Nom. Modified Polyphenylene Ether	0.096
(1) Color Code						Alpha Wire Color Code D	
Cond	Color	Cond	Color	Cond	Color		
1	BLACK	2	RED				
2) Cable Assembly						2 Components Cabled	
a) Twists:						5.3 Twists/foot (min)	
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
c) Core Wrap						Nonwoven Polyester Tape, 25% Overlap, Min.	
3) Shield						Tinned Copper BRAID Shield, 85% Coverage, Min.	
4) Jacket						0.035" Wall, Nom., MPPE	0.294 +/- 0.011
a) Color(s)						SLATE	
b) Jacket Separator						Nonwoven Polyester Tape, 25% Overlap, Min.	
c) Print						ALPHA WIRE-* P/N 79121 2C 14 AWG ECOFLEX(TM) RU AWM 21819 105C 600V OR 21492 80C 300V VW-1 CLASS K C(RU) AWM I/II A/B FT1 600V 105C CE ROHS (SEQ FOOTAGE) * = Factory Code	

## Applicable Specifications

1) UL	AWM/STYLE 21819	105°C / 600 V <sub>RMS</sub>
	AWM/STYLE 21492	80°C / 300 V <sub>RMS</sub>
	VW-1	
2) CSA International	C(RU) AWM I/II A/B FT1	105°C / 600V V <sub>RMS</sub>
3) Other	Halogen-Free	
	NFPA 79 - 2015 Compliant	
4) CE:	EU Low Voltage Directive 2014/35/EU	

# Environmental

1) CE: EU Directive 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3):	
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011 and the amending Directive 2015/863/EU of 4 June 2015 . No Exemptions are required for RoHS Compliance on this item.
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.
3) California Proposition 65:	This product may contain substances known to the State of California to cause Cancer or Reproductive Harm, but is exempt from labeling based on the Consent Judgement. See the Alpha Wire website for more information.

# Properties

Physical & Mechanical Properties	
1) Temperature Range	-40 to 105°C(static), -5 to 105°C (dynamic)
2) Bend Radius	6X Cable Diameter(static), 8X Cable Diameter(dynamic)
3) Pull Tension	70 Lbs, Maximum
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600 V <sub>RMS</sub>
2) Capacitance	48 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	86 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	34 Ω
5) Inductance	0.15 μH/ft, Nominal
6) Conductor DCR	2.8 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	4.4 Ω/1000ft @20°C, Nominal

# Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	18 x 9 x 8 Continuous length
b) 100 FT	10.5 x 5 x 3.5 Continuous length
	[Spool dimensions may vary slightly]

[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: 79121

79121, RoHS-Compliant Commencing With 23/10/2012 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 Union (2011/65/EU), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. 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 **Compliance on this item**. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control"

### Substance

Lead  
Mercury  
Cadmium  
Hexavalent Chromium  
Polybrominated Biphenyls (PBB)  
Polybrominated Diphenyl Ethers (PBDE) ,  
Including Deca-BDE  
Bis(2-ethylhexyl) phthalate (DEHP)  
Butyl benzyl phthalate (BBP)  
Dibutyl phthalate (DBP)  
Diisobutyl phthalate (DIBP)

### Maximum Control Value

0.1% by weight (1000 ppm)  
0.1% by weight (1000 ppm)  
0.01% by weight (100 ppm)  
0.1% by weight (1000 ppm)  
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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 issuance. This document is intended to provide guidance 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 provide a warranty or guarantee of any kind. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory requirements. Authorized Signatory for the Alpha Wire:

A handwritten signature in blue ink, appearing to read 'QBW', with a long horizontal line extending to the right.

Dave Watson, Director of Engineering & QA 16/09/2025

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