



# Customer Specification

## PART NO. 79109

### Construction

		Diameters (In)			
1) Component 1		2 X 1 COND			
a) Conductor		18 (16/30) AWG TC		0.047	
b) Insulation		0.010" Wall, Nom. Modified Polyphenylene Ether		0.067	
(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:		8.0 Twists/foot (min)			
b) Core Wrap		Nonwoven Polyester Tape, 25% Overlap, Min.			
3) Shield		TC BRAID Shield, 85% Coverage, Min.			
4) Jacket		0.035" Wall, Nom., MPPE		0.236+/- 0.010	
a) Color(s)		SLATE			
b) Jacket Separator		Nonwoven Polyester Tape, 25% Overlap, Min.			
c) Print		ALPHA WIRE-* P/N 79109 2C 18 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>
2) CSA International	C(RU) AWM I/II A/B FT1	105°C / 600V V <sub>RMS</sub>
3) CE:	EU Low Voltage Directive 2006/95/EC	

### Environmental

1) CE: EU Directive 2011/65/EU(RoHS2):	
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011. No Exemptions are required for RoHS Compliance on this item. 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.
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 105°C(static), -5 to 105°C (dynamic)
2) Bend Radius	6X Cable Diameter(static), 8X Cable Diameter(dynamic)
3) Pull Tension	29 Lbs, Maximum
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	600 V <sub>RMS</sub>
2) Capacitance	39 pf/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	70 pf/ft @1 kHz, Nominal
4) Characteristic Impedance	42 Ω
5) Inductance	0.16 μH/ft, Nominal
6) Conductor DCR	7.2 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	5.6 Ω/1000ft @20°C, Nominal

## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) 1000 FT	12 x 10 x 5 Continuous length
b) 100 FT	6.5 x 4 x 2.5 Continuous length
	<i>[Spool dimensions may vary slightly]</i>

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# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 79109

79109 , RoHS-Compliant Commencing With 10/23/2012 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.** 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)

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Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering & QA  
Alpha Wire

8/27/2014