

## **Customer Specification**

### **PART NO. 79101**

#### Construction

					Diamete	rs (In)	
1) Component 1	2 X 1 COND	2 X 1 COND					
a) Conductor	20 (10/30) AV	20 (10/30) AWG Tinned Copper			0.036	0.036	
b) Insulation	0.0095" Wall,	0.0095" Wall, Nom. Modified Polyphenylene Ether 0.05			0.055		
(1) Color Code	Alpha Wire Co	olor Code D					
Cond	Color	Cond	Color	Cond		Color	
1	BLACK	2	RED				
2) Cable Assembly	2 Component	2 Components Cabled					
a) Twists:	9.6 Twists/foo	9.6 Twists/foot (min)					
b) Orientation:	Components	Components to be arranged from INSIDE LAYER to OUTSIDE LAYER					
c) Core Wrap	Nonwoven Po	Nonwoven Polyester Tape, 25% Overlap, Min.					
3) Shield	Tinned Coppe	Tinned Copper BRAID Shield,85% Coverage, Min.					
4) Jacket	0.035" Wall, N	0.035" Wall, Nom.,MPPE 0			0.210+/-	0.210+/- 0.010	
a) Color(s)	SLATE						
b) Jacket Separator	Nonwoven Po	Nonwoven Polyester Tape, 25% Overlap, Min.					
c) Print	ECOFLEX(TM) 80C 300V VW 600V 105C CE	ALPHA WIRE-* P/N 79101 2C 20 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	105C°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/E	U(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 190	7/2006):
	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	19 Lbs, Maximum	
Electrical Properties	(For Engineering purposes only)	
1) Voltage Rating	600 V <sub>RMS</sub>	
2) Capacitance	33 pF/ft @1 kHz, Nominal Conductor to Conductor	
3) Ground Capacitance	59 pF/ft @1 kHz, Nominal	
4) Characteristic Impedance	50 Ω	
5) Inductance	0.17 μH/ft, Nominal	
6) Conductor DCR	11.5 Ω/1000ft @20°C, Nominal	
7) OA Shield DCR	6.8 Ω/1000ft @20°C, Nominal	

#### Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 1000 FT	12 x 10.5 x 5 Continuous length	
b) 100 FT	6.5 x 4 x 2.5 Continuous length	
	[Spool dimensions may vary slightly]	

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# **EU/UK/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: 79101

79101, RoHS-Compliant Commencing With 10/22/2012 Production

#### Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials, 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). This product also complies with UK - RoHS. 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 2 per GB/T 26572-2011.

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)

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:

Dave Watson, Director of Engineering 4/29/2024

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