

# **Customer Specification**

### **PART NO. 80141**

#### **Construction**

						Diameters	(In)
1) Component	t 1	2 X 1 COND					
· ·		16 (65/34) AWG Tinned Copper			0.056		
b) Insulation 0		0.012" Wall, Nom. MPPE			0.080		
(1) Print		ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED					
(2) Color Code	9	Alpha Wire Color	Code KX				
Cond	Color		Cond	Color	Cond		Color
1	GREEN	I/YELLOW	2	BLACK#1			
2) Cable Assembly 2 Components Cable		bled					
a) Twists: 6.9 Twists/foot (min)		in)					
b) Orientation: Components to b		pe arranged from INSIDE LAYER to OUTSIDE LAYER					
c) Core Wrap Nonw		Nonwoven Polyester Tape, 25% Overlap, Min.					
3) Shield T		Tinned Copper BRAID Shield,85% Coverage, Min.					
4) Jacket		0.032" Wall, Nom.,Polyurethane, Zero Halogen (ZH)				0.256+/- 0	.011
a) Color(s)		SLATE					
b) Jacket Separator Tissue Tape, 25% Ove		Overlap, Min.					
c) Print Cl		ALPHA WIRE-* P/N 80141 2C 16 AWG RU AWM STYLE 21959 90C 600V SUN RES 60C OIL OR CRU AWM I/II A/B 90C 600V FT2 IEC EN 60332-1/2 CE ROHS (SEQ FOOTAGE) * = Factory Code					

## **Applicable Specifications**

1) UL			
a) Component 1	AWM/STYLE 11231	105°C / 600 V <sub>RMS</sub>	
b) Overall	AWM/STYLE 21959	90°C / 600 V <sub>RMS</sub>	
	60C OIL		
	SUN RES		
2) CSA International	C(RU) AWM I/II A/B	90°C / 600 V <sub>RMS</sub>	
	FT2		
3) IEC			
a) Component 1	EN 60228 Conductors, Class 6		
b) Overall	EN 60754-1 Acid Gas Generation		
	EN 60754-2 Acid Gas Generation		
	EN 60332-1 Flame Behavior		
	EN 60332-2 Flame Behavior		
4) Other	NFPA 79 - 2015 Compliant		
5) CE:	EU Low Voltage Directive 2014/35/EU		

## **Environmental**

1) CE: EU Directi	ve 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 Regula	ation (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.

# **Properties**

Physical & Mechanical Properties				
1) Temperature Range	-50 to 90°C(static), -40 to 80°C (dynamic)			
2) Bend Radius	4X Cable Diameter(static), 6X Cable Diameter(dynamic)			
3) Pull Tension	46 Lbs, Maximum			
4) Sunlight Resistance	Yes			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	600 V <sub>RMS</sub>			
2) Capacitance	43 pF/ft @1 kHz, Nominal Conductor to Conductor			
3) Ground Capacitance	77 pF/ft @1 kHz, Nominal			
4) Characteristic Impedance	40 Ω			
5) Inductance	0.16 μH/ft, Nominal			
6) Conductor DCR	4.4 Ω/1000ft @20°C, Nominal			
7) OA Shield DCR	3.7 Ω/1000ft @20°C, Nominal			

#### Other

Packaging	Flange x Traverse x Barrel (inches)
a) 100 FT	10.5 x 5 x 3.5 Continuous length
b) Bulk(Made-to-order)	
	[Spool dimensions may vary slightly]

#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: 80141

80141, RoHS-Compliant Commencing With 5/18/2015 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 "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2014. This product is also 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)

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 5/6/2024

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