

# Customer Specification

## PART NO. 80042

### Construction

		Diameters (In)			
1) Component 1	3 X 1 COND				
a) Conductor	16 (65/34) AWG Tinned Copper				0.056
b) Insulation	0.012" Wall, Nom. MPPE				0.080
(1) Print	ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED				
(2) Color Code	Alpha Wire Color Code KX				
Cond	Color	Cond	Color	Cond	Color
1	GREEN/YELLOW	2	BLACK#1	3	BLACK#2
2) Cable Assembly	3 Components Cabled				
a) Twists:	6.0 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) Jacket	0.032" Wall, Nom., Polyurethane, Zero Halogen (ZH)				0.241 +/- 0.011
a) Color(s)	SLATE				
b) Print	ALPHA WIRE-* P/N 80042 3C 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

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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 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.

## 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	61 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600 V <sub>RMS</sub>
2) Capacitance	22.3 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Inductance	0.16 μH/ft, Nominal
4) Conductor DCR	4.4 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)	
	<i>[Spool dimensions may vary slightly]</i>

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

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# EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 80042

80042, 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 2002/95/EC (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 document extends to amending Directive 2015/863/EU which expanded the list of restricted substances to 10 items (commonly known as RoHS 3). These Directives for the specific definitions and extents of the Directives. **No Exemptions are required for RoHS Compliance on this item** compliance with China RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2014. This product

**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 this document. This document is intended to serve 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 constitute a warranty or specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislative requirements to their product.

Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 4/12/2024

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