

Customer Specification

PART NO. 80101

Construction

						Diameters (In)	
1) Component 1						2 X 1 COND	
a) Conductor						28 (19/40) AWG Tinned Copper	0.016
b) Insulation						0.010" Wall, Nom. MPPE	0.036
(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:						16.0 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) Shield						Tinned Copper BRAID Shield,85% Coverage, Min.	
4) Jacket						0.032" Wall, Nom.,Polyurethane, Zero Halogen (ZH)	0.168+/- 0.010
a) Color(s)						SLATE	
b) Jacket Separator						Tissue Tape, 25% Overlap, Min.	
c) Print						ALPHA WIRE-* P/N 80101 2C 28 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 _{RMS}
b) Overall	AWM/STYLE 21959	90°C / 600 V _{RMS}
	60C OIL	
	SUN RES	
2) CSA International	C(RU) AWM I/II A/B	90°C / 600 V _{RMS}
	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	5.5 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	600 V _{RMS}
2) Capacitance	23.2 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	42 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	73 Ω
5) Inductance	0.21 μH/ft, Nominal
6) Conductor DCR	63 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	7.5 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 100 FT	6.5 x 2 x 1.9 Continuous length
b) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>
Notes:	
a) Products manufactured before 08/01/2016 will have the Alphawire KX color code. Please refer to http://www.alphawire.com/en/ResourceCenter/Tools/PartNoColorCodes for KX color code.	

www.alphawire.com

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 80101

80101, 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

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 12/12/2024

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Mouser Electronics

Authorized Distributor

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