

Customer Specification

PART NO. 80102

Construction

						Diameters (In)	
1) Component 1						3 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	3	WHITE		
2) Cable Assembly						3 Components Cabled	
a) Twists:						13.7 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)	0.174 +/- 0.010
a) Color(s)						SLATE	
b) Jacket Separator						Tissue Tape, 25% Overlap, Min.	
c) Print						ALPHA WIRE-* P/N 80102 3C 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

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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	7 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600 V _{RMS}
2) Capacitance	21.5 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	39 pF/ft @1 kHz, Nominal
4) Inductance	0.21 µH/ft, Nominal
5) Conductor DCR	63 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	7.9 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/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 80102

80102, RoHS-Compliant Commencing With 18/05/2015 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European Union (RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This document also certifies that the listed part number is in compliance with the list of restricted substances to 10 items (commonly known as RoHS 3). The reader is referred to these Directives for the specific definitions and restrictions. **Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control" requirements.

Substance

Lead
Mercury
Cadmium
Hexavalent Chromium
Polybrominated Biphenyls (PBB)
Polybrominated Diphenyl Ethers (PBDE),
Including Deca-BDE
Bis(2-ethylhexyl) phthalate (DEHP)
Butyl benzyl phthalate (BBP)
Dibutyl phthalate (DBP)
Diisobutyl phthalate (DIBP)

Maximum Control Value

0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.01% by weight (100 ppm)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
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Dave Watson, Director of Engineering & QA 31/03/2025

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