

# **Customer Specification**

### **PART NO. 80139**

#### **Construction**

						Diameters (In)	
1) Component 1						18 X 1 COND	
a) Con	ductor					18 (41/34) AWG Tinned Copper	0.043
b) Insu	lation					0.012" Wall, Nom. MPPE	0.067
II(1) Print						ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED	
(2) Col	or Code					Alpha Wire Color Code KX	
Cond	Color	Cond	Color	Cond	Color		
1	GREEN/YELI	7	BLACK#6	13	BLACK#12		
2	BLACK#1	8	BLACK#7	14	BLACK#13		
3	BLACK#2	9	BLACK#8	15	BLACK#14		
4	BLACK#3	10	BLACK#9	16	BLACK#15		
5	BLACK#4	11	BLACK#10	17	BLACK#16		
6	BLACK#5	12	BLACK#11	18	BLACK#17		
2) Cabl	le Assembly					18 Components Cabled	
a) Twis	ts:					3.0 Twists/foot (min)	
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
c) Core	e Wrap					Nonwoven Polyester Tape, 25% Overlap, Min.	
3) Shie	ld					Tinned Copper BRAID Shield,85% Coverage, Min.	
4) Jack	et					0.032" Wall, Nom.,Polyurethane, Zero Halogen (ZH)	0.435+/- 0.018
a) Color(s)						SLATE	
b) Jacket Separator						Tissue Tape, 25% Overlap, Min.	
c) Print						ALPHA WIRE-* P/N 80139 18C 18 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 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	239 Lbs, Maximum		
4) Sunlight Resistance	Yes		
<b>Electrical Properties</b>	(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) Inductance	0.17 μH/ft, Nominal		
5) Conductor DCR	7 Ω/1000ft @20°C, Nominal		
6) OA Shield DCR	2.6 Ω/1000ft @20°C, Nominal		

#### **Other**

Packaging	Flange x Traverse x Barrel (inches)	
a) 100 FT	12 x 5.94 x 5 Continuous length	
b) Bulk(Made-to-order)		
	[Spool dimensions may vary slightly]	

#### www.alphawire.com

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-800-52 ALPHA

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. SpecPDFFooterConfidential



Alpha Wire □□□□80139

80139000RoHS0000 2015/5/18 000000

Lead Mercury □□□□□□□□0.1% (1000 ppm) Cadmium Hexavalent Chromium □□□□□□□□0.1% (1000 ppm) Polybrominated Biphenyls (PBB) □□□□□□□□0.1% (1000 ppm) Polybrominated Diphenyl Ethers (PBDE), □□□□□□□□0.1% (1000 ppm) Including Deca-BDE Bis(2-ethylhexyl) phthalate (DEHP) Butyl benzyl phthalate (BBP) Dibutyl phthalate (DBP) □□□□□□□□0.1% (1000 ppm) Diisobutyl phthalate (DIBP)

Alpha Wire DDDDDDDDD

ППППППП Dave Watson 2025/9/15