

# Customer Specification

## PART NO. 80139

### Construction

						Diameters (In)		
1) Component 1						18 X 1 COND		
a) Conductor						18 (41/34) AWG Tinned Copper		0.043
b) Insulation						0.012" Wall, Nom. MPPE		0.067
(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/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) Cable Assembly						18 Components Cabled		
a) Twists:						3.0 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)		0.435+/- 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

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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

<b>Physical &amp; Mechanical Properties</b>	
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)	
	<i>[Spool dimensions may vary slightly]</i>

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