

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207 Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

Request a Sample

# Customer Specification PART NO. 80156

## Construction

				Diameters (In)		
1) Component 1		18 X 1 COND	18 X 1 COND			
a) Conductor		14 (105/34) AWG Tinr	14 (105/34) AWG Tinned Copper		0.070	
b) Insulation		0.013" Wall, Nom. MP	0.013" Wall, Nom. MPPE		0.096	
(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	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:		2.1 Twists/foot (min)				
b) Core Wrap		Nonwoven Polyester Tape, 25% Overlap, Min.				
3) Shield		Tinned Copper BRAID Shield,85% Coverage, Min.				
4) Jacket		0.053" Wall, Nom.,Polyurethane, Zero Halogen (ZH)		0.626+/- 0.022		
a) Color(s)		SLATE				
b) Jacket Separator		Tissue Tape, 25% Overlap, Min.				
c) Print		ALPHA WIRE-* P/N 80156 18C 14 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) CE:	EU Low Voltage Directive 2006/95/EC	

### Environmental

1) CE: EU Directive 2011/65/EU(RoHS2):			
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011. No Exemptions are required for RoHS Compliance on this item. Consult Alpha Wire's web site for RoHS C of C.		
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. For up-to-date information, please see Alpha's REACH SVHC Declaration.		

### **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	605 Lbs, Maximum	
4) Sunlight Resistance	Yes	
Electrical Properties	(For Engineering purposes only)	
1) Voltage Rating	600 V <sub>RMS</sub>	
2) Capacitance	35 pf/ft @1 kHz, Nominal Conductor to Conductor	
3) Ground Capacitance	63 pf/ft @1 kHz, Nominal	
4) Inductance	0.15 μH/ft, Nominal	
5) Conductor DCR	2.8 Ω/1000ft @20°C, Nominal	
6) OA Shield DCR	1.5 Ω/1000ft @20°C, Nominal	

#### Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 100 FT	16 x 11 x 8 Continuous length	
b) Bulk(Made-to-order)		
	[Spool dimensions may vary slightly]	

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# **EU/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: 80156

80156, RoHS-Compliant Commencing With 5/18/2015 Production

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European Parliament, better known as the RoHS Directive, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to this Directive for the specific definitions and extents of this Directive. **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 11364-2006.

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)

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Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering & QA Alpha Wire 711 Lidgerwood Ave. Elizabeth, NJ 07207 Tel: 1-908-925-8000 6/12/2015