

**ALPHA WIRE**  
**CUSTOMER PRODUCT SPECIFICATION**

**Part Number: 80016**  
**Page 1 of 2 Pages**

**Issue: 1**  
**Issue Date: 3/24/2015**  
**Effective Date: 5/19/2015**

**A. Construction**

**Diameters (In)**

- |    |                |   |       |
|----|----------------|---|-------|
| 1) | Component 1    | 4 X 1 COND  |       |
|    | a) Conductor   | 22 (19/34) AWG Tinned Copper                          | 0.032 |
|    | b) Insulation  | 0.010" Wall, Nom. MPPE                                | 0.052 |
|    | (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 | 3    | BLACK#2 |      |       |
| 2    | BLACK#1      | 4    | BLACK#3 |      |       |
- 
- |    |                |   |                |
|----|----------------|---|----------------|
| 2) | Cable Assembly | 4 Components Cabled   |                |
|    | a) Twists:     | 8.0 Twists/foot (min)   |                |
|    | b) Core Wrap   | Nonwoven Polyester Tape, 25% Overlap, Min.  |                |
| 3) | Jacket         | 0.032" Wall, Nom., Polyurethane, Zero Halogen (ZH)  | 0.195+/- 0.011 |
|    | a) Color(s)    | SLATE   |                |
|    | b) Print       | ALPHA WIRE-* P/N 80016 4C 22 AWG<br>RU AWM STYLE 21959 90C 600V SUN RES 60C OIL OR<br>CRU AWM I/II A/B 90C 600V FT2 --- IEC EN 60332-1/2<br>CE ROHS (SEQ FOOTAGE)<br>* = Factory Code |                |

**B. 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<br>EN 60754-2 Acid Gas Generation<br>EN 60332-1 Flame Behavior<br>EN 60332-2 Flame Behavior |                              |
| 4) | CE:               | EU Low Voltage Directive 2006/95/EC  |                              |

**C. Environmental Compliance**

- |    |                                  |   |
|----|----------------------------------|---|
| 1) | CE:                              | EU Directive 2011/65/EU(RoHS2):<br>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 <a href="#">RoHS C of C</a> . |
| 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 <a href="#">Alpha's REACH SVHC Declaration</a> .  |

**D. 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        | 23.7 Lbs, Maximum                                     |
| 4) | Sunlight Resistance | Yes   |

**E. Electrical Properties**

- |    |                |   |
|----|----------------|---|
|    |                | (For Engineering purposes only)                 |
| 1) | Voltage Rating | 600 V <sub>RMS</sub>                            |
| 2) | Capacitance    | 17 pf/ft @1 kHz, Nominal Conductor to Conductor |

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- 3) Inductance 0.17  $\mu$ H/ft, Nominal
- 4) Conductor DCR 15.3  $\Omega$ /1000ft @20°C, Nominal

**F. Other**

- 1) Packaging Flange x Traverse x Barrel (inches)
  - a) 100 FT 6.5 x 4 x 2.5 Continuous length
  - b) Bulk(Made-to-order)

*[Spool dimensions may vary slightly]*

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