

ALPHA WIRE
CUSTOMER PRODUCT SPECIFICATION

Part Number: 80159
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Issue: 1
Issue Date: 3/27/2015
Effective Date: 5/22/2015

A. Construction

Diameters (In)

- | | | | |
|----|----------------|---|-------|
| 1) | Component 1 | 4 X 1 COND | |
| | a) Conductor | 12 (168(7x24)/34) AWG Tinned Copper | 0.104 |
| | b) Insulation | 0.015" Wall, Nom. MPPE | 0.134 |
| | (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: | 3.2 Twists/foot (min) | |
| | b) 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) | 0.421+/- 0.013 |
| | a) Color(s) | SLATE | |
| | b) Jacket Separator | Tissue Tape, 25% Overlap, Min. | |
| | c) Print | ALPHA WIRE-* P/N 80159 4C 12 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 | |

B. Applicable Specifications

- | | | | |
|----|-------------------|--|------------------------------|
| 1) | UL | | |
| | a) Component 1 | AWM/STYLE 11231 | 105°C / 600 V _{RMS} |
| | b) Overall | AWM/STYLE 21959
60C OIL
SUN RES | 90°C / 600 V _{RMS} |
| 2) | CSA International | C(RU) AWM I/II A/B
FT2 | 90°C / 600 V _{RMS} |
| 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 | |

C. Environmental Compliance

- | | | |
|----|----------------------------------|---|
| 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 . |

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 | 218 Lbs, Maximum |
| 4) | Sunlight Resistance | Yes |

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- E. Electrical Properties** (For Engineering purposes only)
- 1) Voltage Rating 600 V_{RMS}
 - 2) Capacitance 35 pf/ft @1 kHz, Nominal Conductor to Conductor
 - 3) Ground Capacitance 63 pf/ft @1 kHz, Nominal
 - 4) Inductance 0.15 μ H/ft, Nominal
 - 5) Conductor DCR 1.76 Ω /1000ft @20°C, Nominal
 - 6) OA Shield DCR 2.5 Ω /1000ft @20°C, Nominal
- F. Other**
- 1) Packaging Flange x Traverse x Barrel (inches)
 - a) 100 FT 12 x 10 x 5 Continuous length
 - b) Bulk(Made-to-order)
- [Spool dimensions may vary slightly]*

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