

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

**Part Number: 45096**  
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**Issue: 15**  
**Issue Date: 1/19/2015**  
**Effective Date: 1/31/2015**

**A. Construction**

**Diameters (In)**

- |    |                |                             |       |
|----|----------------|-----------------------------|-------|
| 1) | Component 1    | 6 X 1 COND                  |       |
|    | a) Conductor   | 24 (7/32) AWG Tinned Copper | 0.024 |
|    | b) Insulation  | 0.016" Wall, Nom. TPE       | 0.056 |
|    | (1) Color Code | Alpha Wire Color Code E     |       |

Cond	Color	Cond	Color	Cond	Color
1	BLACK	3	RED	5	YELLOW
2	BROWN	4	ORANGE	6	GREEN

- |    |                   |   |                    |
|----|-------------------|---|--------------------|
| 2) | Cable Assembly    | 6 Components Cabled   |                    |
|    | a) Twists:        | 6.0 Twists/foot (min)   |                    |
|    | b) Core Wrap      | Nonwoven Polyester Tape, 25% Overlap, Min.                        |                    |
| 3) | Shield:           | Alum/Mylar Tape, 25% Overlap, Min.                                |                    |
|    | a) Foil Direction | Foil Facing In  |                    |
|    | b) Drain Wire     | 24 (7/32) AWG Tinned Copper                                       |                    |
| 4) | Jacket            | 0.042" Wall, Nom., TPE  | 0.261 (0.274 Max.) |
|    | a) Color(s)       | Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White |                    |
|    | b) Ripcord        | 1 End 810 Denier Nylon  |                    |
|    | c) Print          | ALPHA WIRE-* P/N 45096  |                    |
|    |                   | XTRAGUARD(R) 4 RU AWM 20237/21918 125C 300V SUN                   |                    |
|    |                   | RES OR CRU AWM I/II A/B 125C 300 VOLTS FT1                        |                    |
|    |                   | P-07-KA140023-MSHA CE ROHS  |                    |
|    |                   | (SEQ FOOTAGE)   |                    |
|    |                   | * = Factory Code  |                    |

**B. Applicable Specifications**

- |    |                   |   |                              |
|----|-------------------|---|------------------------------|
| 1) | UL                | AWM/STYLE 20237                             | 125°C / 300 V <sub>RMS</sub> |
|    |                   | AWM/STYLE 21918                             | 125°C / 300 V <sub>RMS</sub> |
|    |                   | SUN RES                                     |                              |
| 2) | CSA International | C(RU) AWM I/II A/B FT1                      | 125°C / 300 V <sub>RMS</sub> |
|    |                   | SUN RES (Black only)                        |                              |
| 3) | Other             | PENNSYLVANIA BUREAU OF MINE SAFETY APPROVED |                              |
| 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) | California Proposition 65: | The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.  |

**D. Physical & Mechanical Properties**

- |    |                     |                    |
|----|---------------------|--------------------|
| 1) | Temperature Range   | -50 to 125°C       |
| 2) | Bend Radius         | 10X Cable Diameter |
| 3) | Pull Tension        | 24.6 Lbs, Maximum  |
| 4) | Sunlight Resistance | Yes                |

**E. Electrical Properties**

- |                                 |                    |   |
|---------------------------------|--------------------|---|
| (For Engineering purposes only) |                    |   |
| 1)                              | Voltage Rating     | 300 V <sub>RMS</sub>                              |
| 2)                              | Capacitance        | 18.1 pf/ft @1 kHz, Nominal Conductor to Conductor |
| 3)                              | Ground Capacitance | 33 pf/ft @1 kHz, Nominal                          |
| 4)                              | Inductance         | 0.22 µH/ft, Nominal                               |
| 5)                              | Conductor DCR      | 26 Ω/1000ft @20°C, Nominal                        |
| 6)                              | OA Shield DCR      | 15.9 Ω/1000ft @20°C, Nominal                      |

**F. Other**

- |    |           |                                     |
|----|-----------|-------------------------------------|
| 1) | Packaging | Flange x Traverse x Barrel (inches) |
|----|-----------|-------------------------------------|

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- a) 1000 FT                      12 x 12 x 3.5   Continuous length
- b) 500 FT                        12 x 6 x 3.5   Continuous length
- c) Bulk(Made-to-order)

*[Spool dimensions may vary slightly]*

2) Notes:

- a) Print legend will contain CSA SUN RES on black cables only.

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