

# ALPHA WIRE

## CUSTOMER PRODUCT SPECIFICATION

**Part Number: 78022**  
**Page 1 of 1 Pages**

**Issue: 1**  
**Issue Date: 7/11/2014**  
**Effective Date: 9/5/2014**

### A. Construction

### Diameters (In)

- |                |   |       |
|----------------|---|-------|
| 1) Component 1 | 2 X 1 COND  |       |
| a) Conductor   | 24 (19/36) AWG Tinned Copper                      | 0.025 |
| b) Insulation  | 0.007" Wall, Nom. Modified Polyphenylene Ether-PE | 0.039 |
| (1) Color Code | Alpha Wire Color Code E                           |       |

Cond	Color	Cond	Color	Cond	Color
1	BLACK	2	BROWN		

- |                   |  |                    |
|-------------------|--|--------------------|
| 2) Cable Assembly | 2 Components Cabled  |                    |
| a) Twists:        | 12.0 Twists/foot (min)   |                    |
| b) Core Wrap      | Nonwoven Polyester Tape, 25% Overlap, Min.   |                    |
| 3) Jacket         | 0.015" Wall, Nom., Modified Polyphenylene Ether-PE   | 0.112 (0.119 Max.) |
| a) Color(s)       | SLATE  |                    |
| b) Ripcord        | 1 End 810 Denier Nylon   |                    |
| c) Print          | ALPHA WIRE-* P/N 78022 2C 24 AWG<br>ECOCABLE(R) MINI RU AWM 21460 80C 300V VW-1<br>C(RU) AWM I A/B FT1 80C 300V<br>CE ROHS (SEQ FOOTAGE)<br>* = Factory Code |                    |

### B. Applicable Specifications

- |                      |                                     |                             |
|----------------------|-------------------------------------|-----------------------------|
| 1) UL                | AWM/STYLE 21460                     | 80°C / 300 V <sub>RMS</sub> |
|                      | VW-1                                |                             |
| 2) CSA International | C(RU) AWM I A/B FT1                 | 80°C / 300 V <sub>RMS</sub> |
| 3) Other             | Halogen-Free                        |                             |
| 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 | -40 to 80°C        |
| 2) Bend Radius       | 10X Cable Diameter |
| 3) Pull Tension      | 7.5 Lbs, Maximum   |

### E. Electrical Properties

- |                             |   |
|-----------------------------|---|
|                             | (For Engineering purposes only)                   |
| 1) Voltage Rating           | 300 V <sub>RMS</sub>                              |
| 2) Capacitance              | 18.9 pF/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Characteristic Impedance | 82 Ω  |
| 4) Inductance               | 0.17 μH/ft, Nominal                               |
| 5) Conductor DCR            | 24.1 Ω/1000ft @20°C, Nominal                      |

### F. Other

- |                        |                                     |
|------------------------|-------------------------------------|
| 1) Packaging           | Flange x Traverse x Barrel (inches) |
| a) 1000 FT             | 12 x 4.5 x 3.5 Continuous length    |
| b) 100 FT              | 6.5 x 2 x 1.9 Continuous length     |
| c) Bulk(Made-to-order) |                                     |

*[Spool dimensions may vary slightly]*

Although Alpha Wire Company ("Alpha") makes every reasonable effort to ensure their accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability. Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.