

## ALPHA WIRE CUSTOMER PRODUCT SPECIFICATION

**Part Number: 78331**  
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**Issue: 1**  
**Issue Date: 8/8/2014**  
**Effective Date: 10/3/2014**

### A. Construction

### Diameters (In)

- |                |   |       |
|----------------|---|-------|
| 1) Component 1 | 15 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	6	GREEN	11	WHITE/BLACK
2	BROWN	7	BLUE	12	WHITE/BROWN
3	RED	8	VIOLET	13	WHITE/RED
4	ORANGE	9	SLATE	14	WHITE/ORANGE
5	YELLOW	10	WHITE	15	WHITE/YELLOW

- |                     |   |                    |
|---------------------|---|--------------------|
| 2) Cable Assembly   | 15 Components Cabled  |                    |
| a) Twists:          | 4.8 Twists/foot (min)   |                    |
| b) Core Wrap        | Nonwoven Polyester Tape, 25% Overlap, Min.  |                    |
| 3) Shield:          | A/P/A Tape, 25% Overlap, Min.   |                    |
| a) Drain Wire       | 24 (7/32) AWG Tinned Copper   |                    |
| b) Braid            | Tinned Copper, 70% Coverage, Min.   |                    |
| 4) Jacket           | 0.015" Wall, Nom., Modified Polyphenylene Ether-PE  | 0.244 (0.258 Max.) |
| a) Color(s)         | SLATE   |                    |
| b) Ripcord          | 1 End 810 Denier Nylon  |                    |
| c) Jacket Separator | Nonwoven Polyester Tape, 25% Overlap, Min.  |                    |
| d) Print            | ALPHA WIRE-* P/N 78331 15C 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):  
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 | -40 to 80°C        |
| 2) Bend Radius       | 10X Cable Diameter |
| 3) Pull Tension      | 63 Lbs, Maximum    |

### E. Electrical Properties

- |                       |  |
|-----------------------|--|
| 1) Voltage Rating     | 300 V <sub>RMS</sub>                             |
| 2) Capacitance        | 30 pf/ft @ 1 kHz, Nominal Conductor to Conductor |
| 3) Ground Capacitance | 54 pf/ft @ 1 kHz, Nominal                        |
| 4) Inductance         | 0.17 µH/ft, Nominal                              |
| 5) Conductor DCR      | 24.3 Ω/1000ft @ 20°C, Nominal                    |
| 6) OA Shield DCR      | 3.8 Ω/1000ft @ 20°C, Nominal                     |

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**F. Other**

- |                        |                                     |
|------------------------|-------------------------------------|
| 1) Packaging           | Flange x Traverse x Barrel (inches) |
| a) 1000 FT             | 12 x 12 x 3.5 Continuous length     |
| b) 100 FT              | 12 x 4.5 x 3.5 Continuous length    |
| c) Bulk(Made-to-order) |                                     |
- [Spool dimensions may vary slightly]*

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