

# ALPHA WIRE

## CUSTOMER PRODUCT SPECIFICATION

**Part Number: 78343**  
**Page 1 of 2 Pages**

**Issue: 1**  
**Issue Date: 8/7/2014**  
**Effective Date: 10/2/2014**

### A. Construction

### Diameters (In)

- |                |   |       |
|----------------|---|-------|
| 1) Component 1 | 3 X 1 COND  |       |
| a) Conductor   | 20 (19/32) AWG Tinned Copper                      | 0.040 |
| b) Insulation  | 0.007" Wall, Nom. Modified Polyphenylene Ether-PE | 0.054 |
| (1) Color Code | Alpha Wire Color Code D                           |       |

Cond	Color	Cond	Color	Cond	Color
1	BLACK	2	RED	3	WHITE

- |                     |  |                    |
|---------------------|--|--------------------|
| 2) Cable Assembly   | 3 Components Cabled  |                    |
| a) Twists:          | 8.0 Twists/foot (min)  |                    |
| b) Core Wrap        | Nonwoven Polyester Tape, 25% Overlap, Min.   |                    |
| 3) Shield:          | A/P/A Tape, 25% Overlap, Min.  |                    |
| a) Drain Wire       | 20 (7/28) AWG Tinned Copper  |                    |
| b) Braid            | Tinned Copper, 70% Coverage, Min.  |                    |
| 4) Jacket           | 0.015" Wall, Nom., Modified Polyphenylene Ether-PE   | 0.181 (0.189 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 78343 3C 20 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      | 40 Lbs, Maximum    |

### E. Electrical Properties

- |                       |   |
|-----------------------|---|
|                       | (For Engineering purposes only)                 |
| 1) Voltage Rating     | 300 V <sub>RMS</sub>                            |
| 2) Capacitance        | 37 pf/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Ground Capacitance | 67 pf/ft @1 kHz, Nominal                        |
| 4) Inductance         | 0.15 µH/ft, Nominal                             |
| 5) Conductor DCR      | 9.4 Ω/1000ft @20°C, Nominal                     |
| 6) OA Shield DCR      | 4 Ω/1000ft @20°C, Nominal                       |

### F. Other

- |              |                                     |
|--------------|-------------------------------------|
| 1) Packaging | Flange x Traverse x Barrel (inches) |
| a) 1000 FT   | 12 x 6 x 3.5 Continuous length      |

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**Page 2 of 2 Pages**

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- b) 100 FT                      6.5 x 2 x 1.9   Continuous length  
c) Bulk(Made-to-order)                      *[Spool dimensions may vary slightly]*

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