

# **Customer Specification**

### **PART NO. 78042**

### **Construction**

|                                       |                               |  |   |      | Diameters | s (In)   |
|---------------------------------------|-------------------------------|--|---|------|-----------|----------|
| 1) Component 1                        | 2 X 1 CO                      | ND   |   |      |           |          |
| · · · · · · · · · · · · · · · · · · · |                               | 2) AWG Tinned Copper   | Finned Copper                               |      | 0.040     |          |
| b) Insulation                         | ulation 0.007" Wall, Nor      |  | . Modified Polyphenylene Ether-PE           |      | 0.054     |          |
| (1) Color Code                        | Alpha W                       | Alpha Wire Color Code D  |   |      | ,         |          |
| Cond                                  | Color                         | Cond   | Color                                       | Cond |           | Color    |
| 1                                     | BLACK                         | 2  | RED   |      |           |          |
| 2) Cable Assemb                       | ly 2 Compo                    | onents Cabled  |   |      |           |          |
| a) Twists:                            | 8.0 Twists/foot (min)         |  |   |      |           |          |
| b) Orientation: Components to be a    |                               | ents to be arranged from   | arranged from INSIDE LAYER to OUTSIDE LAYER |      |           |          |
| c) Core Wrap Nonwoven Polyes          |                               | en Polyester Tape, 25% C   | ter Tape, 25% Overlap, Min.                 |      |           |          |
| 3) Jacket 0.015" Wal                  |                               | all, Nom.,Modified Polyp   | Nom.,Modified Polyphenylene Ether-PE        |      |           | 19 Max.) |
| a) Color(s)                           | Slate, Bla                    | ick  |   |      |           |          |
| b) Ripcord                            | 1 End 810 Denier Nylon        |  |   |      |           |          |
| c) Print                              | ECOCAB<br>C(RU) A\<br>CE ROHS | ALPHA WIRE-* P/N 78042 2C 20 AWG ECOCABLE(R) MINI RU AWM 21460 80C 300V VW-1 C(RU) AWM I A/B FT1 80C 300V CE ROHS (SEQ FOOTAGE) * = Factory Code |   |      |           |          |

## **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             |                             |
|  | NFPA 79 - 2015 Compliant |                             |
| 4) CE: EU Low Voltage Directive 2014/35/EU |                          |                             |
|  |                          |                             |

### **Environmental**

| 1) CE: EU Directive | 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3):   |
|---------------------|--|
|                     | This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011 and the amending Directive 2015/863/EU of 4 June 2015. No Exemptions are required for RoHS Compliance on this item. |
| 2) REACH Regulati   | ion (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.   |

## **Properties**

| Physical & Mechanical Properties |   |  |  |
|----------------------------------|---|--|--|
| 1) Temperature Range             | -40 to 80°C                                       |  |  |
| 2) Bend Radius                   | 10X Cable Diameter                                |  |  |
| 3) Pull Tension                  | 19.1 Lbs, Maximum                                 |  |  |
| Electrical Properties            | (For Engineering purposes only)                   |  |  |
| 1) Voltage Rating                | 300 V <sub>RMS</sub>                              |  |  |
| 2) Capacitance                   | 21.5 pF/ft @1 kHz, Nominal Conductor to Conductor |  |  |
| 3) Characteristic Impedance      | 69 Ω  |  |  |
| 4) Inductance                    | 0.15 μH/ft, Nominal                               |  |  |
| 5) Conductor DCR                 | 9.4 Ω/1000ft @20°C, Nominal                       |  |  |

### Other

| Packaging   | Flange x Traverse x Barrel (inches)  |  |  |
|---|--------------------------------------|--|--|
| a) 1000 FT  | 10.5 x 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] |  |  |
| Notes:  |                                      |  |  |
| a) Certain colors and put-up combinations may only be available by special order, minimums may apply. |                                      |  |  |
|   |                                      |  |  |

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## **EU/UK/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: 78042

78042, RoHS-Compliant Commencing With 7/22/2014 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials, is manufactured in accordance with Directive 2011/65/EU of the European Parliament, better known as the RoHS Directive (commonly known as RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This certification extends to amending Directive 2015/863/EU which expanded the list of restricted substances to 10 items (commonly known as RoHS 3). This product also complies with UK - RoHS. The reader is referred to these Directives for the specific definitions and extents of the Directives. **No Exemptions are required for RoHS Compliance on this item**. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2014. This product is also in compliance with China RoHS 2 per GB/T 26572-2011.

| Substance                              | Maximum Control Value      |
|--|----------------------------|
| Lead                                   | 0.1% by weight (1000 ppm)  |
| Mercury                                | 0.1% by weight (1000 ppm)  |
| Cadmium                                | 0.01% by weight (100 ppm)  |
| Hexavalent Chromium                    | 0.1% by weight (1000 ppm ) |
| Polybrominated Biphenyls (PBB)         | 0.1% by weight (1000 ppm)  |
| Polybrominated Diphenyl Ethers (PBDE), |                            |
| Including Deca-BDE                     | 0.1% by weight (1000 ppm)  |
| Bis(2-ethylhexyl) phthalate (DEHP)     | 0.1% by weight (1000 ppm)  |
| Butyl benzyl phthalate (BBP)           | 0.1% by weight (1000 ppm)  |
| Dibutyl phthalate (DBP)                | 0.1% by weight (1000 ppm)  |
| Diisobutyl phthalate (DIBP)            | 0.1% by weight (1000 ppm)  |

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 5/3/2024

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