

# **Customer Specification**

#### **PART NO. 78439**

#### Construction

|                   |              |  |  | Diamete            | ers (In)     |  |
|-------------------|--------------|--|--|--------------------|--------------|--|
| 1) Component 1    |              | 25 X 1 PAIR  |  |                    |              |  |
| a) Conductor      |              | 22 (19/34) AWG Tinned Copper                                 |  | 0.032              |              |  |
| b) Insulation     |              | 0.007" Wall, Nom. Modified Polyphenylene<br>Ether-PE         |  | 0.046              |              |  |
| (1) Color Code    |              | Alpha Wi   | re Color Code B  | `                  |              |  |
| Pair              | Color        | Pair   | Color  | Pair               | Color        |  |
| 1                 | WHITE-BLACK  | 10   | BLACK-BROWN  | 19                 | BROWN-ORANGE |  |
| 2                 | WHITE-BROWN  | 11   | BLACK-RED  | 20                 | BROWN-YELLOW |  |
| 3                 | WHITE-RED    | 12   | BLACK-ORANGE   | 21                 | BROWN-GREEN  |  |
| 4                 | WHITE-ORANGE | 13   | BLACK-YELLOW   | 22                 | BROWN-BLUE   |  |
| 5                 | WHITE-YELLOW | 14   | BLACK-GREEN  | 23                 | BROWN-VIOLET |  |
| 6                 | WHITE-GREEN  | 15   | BLACK-BLUE   | 24                 | BROWN-SLATE  |  |
| 7                 | WHITE-BLUE   | 16   | BLACK-VIOLET   | 25                 | RED-ORANGE   |  |
| 8                 | WHITE-VIOLET | 17   | BLACK-SLATE  |                    |              |  |
| 9                 | WHITE-SLATE  | 18   | BROWN-RED  |                    |              |  |
| c) Pair           |              | 2/Cond Cabled Together                                       |  |                    |              |  |
| (1) Twists:       |              | 9.6 Twists/foot (min)  |  |                    |              |  |
| 2) Cable Assembly |              | 25 Components Cabled   |  |                    |              |  |
| a) Twists:        |              | 1.8 Twists/foot (min)  |  |                    |              |  |
| b) Orientation:   |              | Components to be arranged from INSIDE LAYER to OUTSIDE LAYER |  |                    |              |  |
| c) Core Wrap      |              | Nonwoven Polyester Tape, 25% Overlap,<br>Min.                |  |                    |              |  |
| 3) Jacket         |              | 0.015" Wall, Nom.,Modified Polyphenylene<br>Ether-PE         |  | 0.487 (0.514 Max.) |              |  |
| a) Color(s)       |              | SLATE  |  |                    |              |  |
| b) Ripcord        |              | 1 End 810  | 1 End 810 Denier Nylon   |                    |              |  |
| c) Print          |              | ECOCABL<br>C(RU) AW<br>CE ROHS                               | ALPHA WIRE-* P/N 78439 25PR 22 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**

|                         | 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 Regulation (EG | 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      |  |  |  |  |
|---------------------------------------|--|--|--|--|
| -40 to 80°C                           |  |  |  |  |
| 10X Cable Diameter                    |  |  |  |  |
| 296 Lbs, Maximum                      |  |  |  |  |
| (For Engineering purposes only)       |  |  |  |  |
| 300 V <sub>RMS</sub>                  |  |  |  |  |
| 20.3 pF/ft @1 kHz, Nominal            |  |  |  |  |
| 74 Ω                                  |  |  |  |  |
| 0.16 μH/ft, Nominal                   |  |  |  |  |
| 15.5 Ω/1000ft @20°C, Nominal          |  |  |  |  |
| · · · · · · · · · · · · · · · · · · · | -40 to 80°C  10X Cable Diameter  296 Lbs, Maximum  (For Engineering purposes only)  300 V <sub>RMS</sub> 20.3 pF/ft @1 kHz, Nominal  74 Ω  0.16 μH/ft, Nominal |  |  |  |

### Other

| Packaging              | Flange x Traverse x Barrel (inches)  |
|------------------------|--------------------------------------|
| a) 1000 FT             | 24 x 14 x 12 Continuous length       |
| b) 100 FT              | 18 x 9 x 8 Continuous length         |
| c) Bulk(Made-to-order) |                                      |
|                        | [Spool dimensions may vary slightly] |
|                        |                                      |

#### www.alphawire.com

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-800-52 ALPHA

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

To Whom It May Concern:

Alpha Wire Part Number: 78439

78439, 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 5/6/2024

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-908-925-8000