

# **Customer Specification**

#### **PART NO. 78308**

#### **Construction**

|                     |            |      |        |      |        | Diameters (In)   |                    |
|---------------------|------------|------|--------|------|--------|--|--------------------|
| 1) Component 1      |            |      |        |      |        | 8 X 1 COND   |                    |
| a) Cond             | ductor     |      |        |      |        | 28 (19/40) AWG Tinned Copper   | 0.016              |
| b) Insulation       |            |      |        |      |        | 0.007" Wall, Nom. Modified Polyphenylene Ether-PE  | 0.030              |
| (1) Color Code      |            |      |        |      |        | Alpha Wire Color Code E  |                    |
| Cond                | Color      | Cond | Color  | Cond | Color  | ]  |                    |
| 1                   | BLACK      | 4    | ORANGE | 7    | BLUE   | 1  |                    |
| 2                   | BROWN      | 5    | YELLOW | 8    | VIOLET | 1  |                    |
| 3                   | RED        | 6    | GREEN  |      |        | ]  |                    |
| 2) Cabl             | e Assembly |      | •      | •    | ·      | 8 Components Cabled  |                    |
| a) Twist            | ts:        |      |        |      |        | 8.0 Twists/foot (min)  |                    |
| b) Orientation:     |            |      |        |      |        | Components to be arranged from INSIDE LAYER to OUTSIDE LAYER   |                    |
| c) Core Wrap        |            |      |        |      |        | Nonwoven Polyester Tape, 25% Overlap, Min.   |                    |
| 3) Shield:          |            |      |        |      |        | A/P/A Tape, 25% Overlap, Min.  |                    |
| a) Drain Wire       |            |      |        |      |        | 28 (7/36) AWG Tinned Copper  |                    |
| b) Braid            |            |      |        |      |        | Tinned Copper,70% Coverage, Min.   |                    |
| 4) Jacket           |            |      |        |      |        | 0.015" Wall, Nom.,Modified Polyphenylene Ether-PE  | 0.165 (0.175 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 78308 8C 28 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 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.  |

# **Properties**

| Physical & Mechanical Properties |   |  |
|----------------------------------|---|--|
| 1) Temperature Range             | -40 to 80°C                                       |  |
| 2) Bend Radius                   | 10X Cable Diameter                                |  |
| 3) Pull Tension                  | 15.5 Lbs, Maximum                                 |  |
| Electrical Properties            | (For Engineering purposes only)                   |  |
| 1) Voltage Rating                | 300 V <sub>RMS</sub>                              |  |
| 2) Capacitance                   | 23.9 pF/ft @1 kHz, Nominal Conductor to Conductor |  |
| 3) Ground Capacitance            | 43 pF/ft @1 kHz, Nominal                          |  |
| 4) Inductance                    | 0.19 μH/ft, Nominal                               |  |
| 5) Conductor DCR                 | 63 Ω/1000ft @20°C, Nominal                        |  |
| 6) OA Shield DCR                 | 5.9 Ω/1000ft @20°C, Nominal                       |  |

## Other

| Packaging              | Flange x Traverse x Barrel (inches)  |  |
|------------------------|--------------------------------------|--|
| a) 1000 FT             | 12 x 5.94 x 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] |  |

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

To Whom It May Concern:

Alpha Wire Part Number: 78308

78308, RoHS-Compliant Commencing With 22/07/2014 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. T the list of restricted substances to 10 items (commonly known as RoHS 3) The reader is referred to these Directives for the specific definitio **Compliance on this item**. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control c

| Substance                              | <b>Maximum Control Value</b> |
|--|------------------------------|
| 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)    |

The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the diguide for the safe handling, storage, and any other operation of the product itself or the one that it will become part of. The intent of this context Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA 01/09/2025

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