

## **Customer Specification**

### PART NO. 58912

#### Construction

|                |                  |      |                     |       |      |                          | Diameters (In)  |                    |
|----------------|------------------|------|---------------------|-------|------|--------------------------|---|--------------------|
| 1) Component 1 |                  |      |                     |       |      |                          | 12 X 1 PAIR   |                    |
| a) Conductor   |                  |      |                     |       |      |                          | 24 (7/32) AWG TC  | 0.024              |
| b) Insulation  |                  |      |                     |       |      |                          | 0.012" Wall, Nom. FEP   | 0.048              |
| (1) Co         | olor Code        |      |                     |       |      |                          | Alpha Wire Color Code N   |                    |
| Pair           | Color            | Pair | Color               | Pai   | ir C | olor                     |   |                    |
| 1              | BLACK-<br>YELLOW | 5    | BLACK/V<br>WHITE/BI |       |      | YELLOW/Wł<br>VHITE/YELL( |   |                    |
| 2              | RED-VIOLET       | 6    | BROWN/<br>WHITE/BI  | 110   |      | GREEN/WHI<br>VHITE/GREE  |   |                    |
| 3              | BLUE-<br>BROWN   | 7    | RED/WH<br>WHITE/RI  |       |      | BLUE/WHITI<br>VHITE/BLUE |   |                    |
| 4              | ORANGE-<br>GREEN | 8    | ORANGE<br>WHITE/O   |       |      | /IOLET/WH<br>VHITE/VIOL  |   |                    |
| c) Pair        | r                |      |                     |       |      |                          | 2/Cond Cabled Together  |                    |
| (1) Tw         | vists:           |      |                     |       |      |                          | 9.6 Twists/foot (min)   |                    |
| 2) Coi         | mponent 2        |      |                     |       |      |                          | 1 X 1 COND  |                    |
| a) Cor         | nductor          |      |                     |       |      |                          | 24 (7/32) AWG TC  | 0.024              |
| b) Insulation  |                  |      |                     |       |      |                          | 0.012" Wall, Nom. FEP   | 0.048              |
| (1) Color(s)   |                  |      |                     |       |      |                          |   |                    |
| Cond           | l Color          |      | Cond                | Color | Con  | d Color                  |   |                    |
| 1              | GREEN/YEL        | LOW  |                     |       |      |                          |   |                    |
| 3) Cal         | ble Assembly     |      |                     |       |      |                          | 13 Components Cabled  |                    |
| a) Twi         | ists:            |      |                     |       |      |                          | 2.4 Twists/foot (min)   |                    |
| b) Co          | re Wrap          |      |                     |       |      |                          | Clear Mylar Tape, 25% Overlap, Min.   |                    |
| 4) Shield:     |                  |      |                     |       |      |                          | Alum/Mylar Tape, 25% Overlap, Min.  |                    |
| a) Foi         | l Direction      |      |                     |       |      |                          | Foil Facing In  |                    |
| b) Drain Wire  |                  |      |                     |       |      |                          | 24 (7/32) AWG TC  |                    |
| 5) Jacket      |                  |      |                     |       |      |                          | 0.011" Wall, Nom.,PVDF  | 0.367 (0.391 Max.) |
| a) Color(s)    |                  |      |                     |       |      |                          | SLATE   | _                  |
| b) Print       |                  |      |                     |       |      |                          | ALPHA WIRE-* P/N 58912 12PR / 1C 24 AWG<br>SHIELDED 125C (UL) TYPE CMP OR C(UL) TYPE CMP FT6<br>CE ROHS<br>* = Factory Code<br>[Note: Product may have c(UL) or CSA markings depending<br>upon plant of manufacture.] |                    |

## Applicable Specifications

| 1) UL                | СМР                                 | 125°C |
|----------------------|-------------------------------------|-------|
| 2) CSA International | FT6                                 |       |
|                      | C(UL) TYPE CMP                      | 125°C |
| 3) CE:               | EU Low Voltage Directive 2006/95/EC |       |
|                      |                                     |       |

### Environmental

| 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 <u>RoHS C of C</u> . |  |
| 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 <u>Alpha's REACH SVHC Declaration</u> .                 |  |
| 3) California Proposition 65:          | The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.  |  |
|  | ·   |  |

## Properties

| Physical & Mechanical Properties |                                 |  |
|----------------------------------|---------------------------------|--|
| 1) Temperature Range             | -25 to 125°C                    |  |
| 2) Bend Radius                   | 10X Cable Diameter              |  |
| 3) Pull Tension                  | 91 Lbs, Maximum                 |  |
| Electrical Properties            | (For Engineering purposes only) |  |
| 1) Voltage Rating                | 150 V <sub>RMS</sub>            |  |
| 2) Component 1                   |                                 |  |
| a) Characteristic Impedance      | 104 ω +/- 10                    |  |
| b) Inductance                    | 0.2 μH/ft, Nominal              |  |
| c) Mutual Capacitance            | 16 pF/ft @1 kHz, Nominal        |  |
| d) Ground Capacitance            | 27 pF/ft @1 kHz, Nominal        |  |
| e) Conductor DCR                 | 26 ω/1000ft @20°C, Nominal      |  |
| 3) Component 2                   |                                 |  |
| a) Conductor DCR                 | 26 ω/1000ft @20°C, Nominal      |  |
| b) OA Shield DCR                 | 13.4 ω/1000ft @20°C, Nominal    |  |

#### Other

| Packaging   | Flange x Traverse x Barrel (inches)  |  |
|---|--------------------------------------|--|
| a) 1000 FT 20 x 11 x 8 Max. 3 separate pieces; Min length/piece 250 FT. |                                      |  |
| b) 500 FT   | 16 x 11 x 8 Continuous length        |  |
|   | [Spool dimensions may vary slightly] |  |
|   |                                      |  |

#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: 58912

58912, RoHS-Compliant Commencing With 01/05/2005 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                               | 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)  |

The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the d guide 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 c Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and reg Authorized Signatory for the Alpha Wire:

Q AI to

Dave Watson, Director of Engineering & QA 13/08/2025

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