

## **Customer Specification**

#### **PART NO. 55292**

#### **Construction**

|                   |  |                             |                              | Dia     | ameters (In)  |             |
|-------------------|--|-----------------------------|------------------------------|---------|---------------|-------------|
| 1) Component 1    | 2 X 1 PAIR   |                             |                              |         |               |             |
| a) Conductor      | 20 (7/28) AWG Tinr   | 20 (7/28) AWG Tinned Copper |                              |         | 38            |             |
| b) Insulation     | 0.010" Wall, Nom. FEP  |                             |                              | 0.0     | 58            |             |
| (1) Color Code    | Alpha Wire Color C   | ode A                       |                              |         |               |             |
| Pair              | Color  | Pair                        | Color                        |         | Pair          | Color       |
| 1                 | BLACK-RED  | 2                           | BLACK-WHITE                  |         |               |             |
| c) Pair           | 2/Cond Cabled Tog  | ether                       |                              |         |               |             |
| (1) Twists:       | 8.0 Twists/foot (min)  |                             |                              |         |               |             |
| 2) Cable Assembly | 2 Components Cabled  |                             |                              |         |               |             |
| a) Twists:        | 4.4 Twists/foot (min)  |                             |                              |         |               |             |
| b) Orientation:   | Components to be arranged from INSIDE LAYER to OUTSIDE LAYER                           |                             |                              | 2       |               |             |
| c) Core Wrap      | PTFE(skived) 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         | 0.027" Wall, Nom.,FEP  |                             |                              | 0.2     | 78 (0.291 Max | <b>c.</b> ) |
| a) Tint Color(s)  | Natural Tan, Slate, I  | Black, Yellow, Ora          | nge, Blue, Green, Red, White |         |               |             |
| b) Ripcord        | Para-Aramid fiber(Kevlar, Twaron or equal)   |                             |                              |         |               |             |
| c) Marker Tape    | ALPHA WIRE-* XTRAGUARD(R) 5 - OR AWM 20229 CE ROHS * = Factory Code [Note: Product may | LLXXXXXX CSA CI             | , ,                          | nt of m | anufacture.]  |             |

## **Applicable Specifications**

| 1) UL                | CMP  | 150°C                        |  |
|----------------------|--|------------------------------|--|
|                      | AWM/STYLE 20229                                  | 150°C / 300 V <sub>RMS</sub> |  |
|                      | UL-910/NFPA 262 (Steiner Tunnel) Flame Test      |                              |  |
| 2) CSA International | СМР  | 150°C                        |  |
|                      | FT6  |                              |  |
| 3) IEC               | EN 50356 Spark Testing                           |                              |  |
|                      | EN 50395, Section 10, Faults in Insulation       |                              |  |
|                      | EN 50396, Section 4, Test Methods for Dimensions |                              |  |
|                      | EN 60228 Conductors, Class 2                     |                              |  |
|                      | EN 60332-1 Flame Behavior                        |                              |  |
|                      | EN 60332-2 Flame Behavior                        |                              |  |
| 4) Other             | ICEA T-29-520 210,000 BTU/Hr. Flame Test         |                              |  |
| 5) CE:               | EU Low Voltage Directive 2014/35/EU              |                              |  |

## **Environmental**

| 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. |
| )7/2006):  |
| 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.   |
| This product may contain substances known to the State of California to cause Cancer or Reproductive Harm, but is exempt from labeling based on the Consent Judgement. See the Alpha Wire website for more information.                                    |
| )  |

# **Properties**

| Physical & Mechanical Properties |                                 |  |  |  |
|----------------------------------|---------------------------------|--|--|--|
| 1) Temperature Range             | -80 to 200°C                    |  |  |  |
| 2) Bend Radius                   | 10X Cable Diameter              |  |  |  |
| 3) Pull Tension                  | 48 Lbs, Maximum                 |  |  |  |
| <b>Electrical Properties</b>     | (For Engineering purposes only) |  |  |  |
| 1) Voltage Rating                | 300 V <sub>RMS</sub>            |  |  |  |
| 2) Mutual Capacitance            | 21.3 pF/ft @1 kHz, Nominal      |  |  |  |
| 3) Ground Capacitance            | 38 pF/ft @1 kHz, Nominal        |  |  |  |
| 4) Characteristic Impedance      | 65 Ω                            |  |  |  |
| 5) Inductance                    | 0.17 μH/ft, Nominal             |  |  |  |
| 6) Conductor DCR                 | 10.3 Ω/1000ft @20°C, Nominal    |  |  |  |
| 7) OA Shield DCR                 | 3 Ω/1000ft @20°C, Nominal       |  |  |  |

#### Other

| Packaging              | Flange x Traverse x Barrel (inches) |
|------------------------|-------------------------------------|
| a) Bulk(Made-to-order) |                                     |
|                        |                                     |

#### www.alphawire.com

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

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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: 55292

55292, RoHS-Compliant Commencing With 8/1/2005 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 4/27/2024

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-908-925-8000