

# ALPHA WIRE

## CUSTOMER PRODUCT SPECIFICATION

**Part Number: 25296**  
**Page 1 of 2 Pages**

**Issue: 13**  
**Issue Date: 12/20/2012**  
**Effective Date: 1/4/2013**

### A. Construction

### Diameters (In)

- |                |                         |       |
|----------------|-------------------------|-------|
| 1) Component 1 | 6 X 1 PAIR              |       |
| a) Conductor   | 20 (7/28) AWG TC        | 0.038 |
| b) Insulation  | 0.016" Wall, Nom. PVC   | 0.070 |
| (1) Color Code | Alpha Wire Color Code A |       |

| Pair | Color       | Pair | Color       | Pair | Color        |
|------|-------------|------|-------------|------|--------------|
| 1    | BLACK-RED   | 3    | BLACK-GREEN | 5    | BLACK-BROWN  |
| 2    | BLACK-WHITE | 4    | BLACK-BLUE  | 6    | BLACK-YELLOW |

- |                   |                                                                   |                    |
|-------------------|-------------------------------------------------------------------|--------------------|
| c) Pair           | 2/Cond Cabled Together                                            |                    |
| (1) Twists:       | 6.0 Twists/foot (min)                                             |                    |
| 2) Cable Assembly | 6 Components Cabled                                               |                    |
| a) Twists:        | 3.0 Twists/foot (min)                                             |                    |
| b) Core Wrap      | Nonwoven Polyester Tape, 25% Overlap, Min.                        |                    |
| 3) Shield:        | A/P/A Tape, 25% Overlap, Min.                                     |                    |
| a) Drain Wire     | 20 (7/28) AWG TC                                                  |                    |
| b) Braid          | TC, 70% Coverage, Min.                                            |                    |
| 4) Jacket         | 0.032" Wall, Nom., Polyurethane (TPU)                             | 0.443 (0.461 Max.) |
| a) Color(s)       | Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White |                    |
| b) Ripcord        | 1 End 810 Denier Nylon                                            |                    |
| c) Print          | ALPHA WIRE-* P/N 25296                                            |                    |
|                   | XTRAGUARD(R) 2 RU AWM 20668 VW-1 --- LLXXXXXX CSA                 |                    |
|                   | AWM I/II A/B 90C 300 VOLTS FT1 CE                                 |                    |
|                   | ROHS (SEQ FOOTAGE)                                                |                    |
|                   | * = Factory Code                                                  |                    |

[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]

### B. Applicable Specifications

- |                      |                                     |                              |
|----------------------|-------------------------------------|------------------------------|
| 1) UL                |                                     |                              |
| a) Component 1       | AWM/STYLE 1569                      | 105°C / 300 V <sub>RMS</sub> |
| b) Overall           | AWM/STYLE 20668                     | 90°C / 300 V <sub>RMS</sub>  |
|                      | VW-1                                |                              |
| 2) CSA International | AWM I/II A/B                        | 90°C / 300 V <sub>RMS</sub>  |
|                      | FT1                                 |                              |
| 3) CE:               | EU Low Voltage Directive 2006/95/EC |                              |

### C. Environmental Compliance

- |                                     |                                                                                                                                                                                                                                                                                                         |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1) CE:                              | EU Directive 2011/65/EU(RoHS2):<br>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 <a href="#">RoHS C of C</a> . |
| 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 <a href="#">Alpha's REACH SVHC Declaration</a> .                                                    |
| 3) California Proposition 65:       | The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.                                                                                                                                                                                    |

### D. Physical & Mechanical Properties

- |                        |                    |
|------------------------|--------------------|
| 1) Temperature Range   | -30 to 90°C        |
| 2) Bend Radius         | 10X Cable Diameter |
| 3) Pull Tension        | 120 Lbs, Maximum   |
| 4) Sunlight Resistance | Yes                |

### E. Electrical Properties

- |                       |                                 |
|-----------------------|---------------------------------|
|                       | (For Engineering purposes only) |
| 1) Voltage Rating     | 300 V <sub>RMS</sub>            |
| 2) Mutual Capacitance | 32 pf/ft @1 kHz, Nominal        |

Although Alpha Wire Company ("Alpha") makes every reasonable effort to ensure their accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

**ALPHA WIRE**  
**CUSTOMER PRODUCT SPECIFICATION**

**Part Number: 25296**  
**Page 2 of 2 Pages**

**Issue: 13**  
**Issue Date: 12/20/2012**  
**Effective Date: 1/4/2013**

- |                             |                                      |
|-----------------------------|--------------------------------------|
| 3) Ground Capacitance       | 58 pf/ft @1 kHz, Nominal             |
| 4) Characteristic Impedance | 70 $\Omega$                          |
| 5) Inductance               | 0.19 $\mu$ H/ft, Nominal             |
| 6) Conductor DCR            | 10.4 $\Omega$ /1000ft @20°C, Nominal |
| 7) OA Shield DCR            | 2.28 $\Omega$ /1000ft @20°C, Nominal |

**F. Other**

- |                        |                                     |
|------------------------|-------------------------------------|
| 1) Packaging           | Flange x Traverse x Barrel (inches) |
| a) Bulk(Made-to-order) |                                     |

Although Alpha Wire Company ("Alpha") makes every reasonable effort to ensure their accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.