

## ALPHA WIRE CUSTOMER PRODUCT SPECIFICATION

**Part Number: 2412C**  
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**Issue: 8**  
**Issue Date: 7/21/2014**  
**Effective Date: 7/21/2014**

### A. Construction

		<u>Diameters (In)</u>
1) Component 1	2 X 1 COND	
a) Conductor	20 (7/28) AWG Tinned Copper	0.038
b) Insulation	0.016" Wall, Nom. FR HDPE	0.070
(1) Color Code	Alpha Wire Color Code D	

Cond	Color	Cond	Color	Cond	Color
1	BLACK	2	RED		

- |                   |  |                    |
|-------------------|--|--------------------|
| 2) Cable Assembly | 2 Components Cabled  |                    |
| a) Twists:        | 6.0 Twists/foot (min)  |                    |
| 3) Shield:        | Alum/Mylar Tape, 25% Overlap, Min.   |                    |
| a) Foil Direction | Foil Facing Out  |                    |
| b) Drain Wire     | 20 (7/28) AWG Tinned Copper  |                    |
| 4) Jacket         | 0.020" Wall, Nom., PVC   | 0.184 (0.194 Max.) |
| a) Color(s)       | SLATE  |                    |
| b) Print          | ALPHA WIRE-* P/N 2412C 2C 20 AWG<br>SHIELDED 75C (UL) TYPE CMG OR AWM 2092 ----<br>C(UL) CMG FT4 CE ROHS<br>* = Factory Code |                    |

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

### B. Applicable Specifications

- |                      |                                     |                             |
|----------------------|-------------------------------------|-----------------------------|
| 1) UL                | AWM/STYLE 2092                      | 60°C / 300 V <sub>RMS</sub> |
|                      | CMG                                 | 75°C                        |
|                      | VW-1                                |                             |
| 2) CSA International | C(UL) TYPE CMG                      | 75°C                        |
|                      | FT4                                 |                             |
| 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 | -20 to 75°C        |
| 2) Bend Radius       | 10X Cable Diameter |
| 3) Pull Tension      | 26 Lbs, Maximum    |

### E. Electrical Properties

- |                                 |   |
|---------------------------------|---|
| (For Engineering purposes only) |   |
| 1) Voltage Rating               | 300 V <sub>RMS</sub>                            |
| 2) Capacitance                  | 26 pf/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Ground Capacitance           | 47 pf/ft @1 kHz, Nominal                        |
| 4) Characteristic Impedance     | 63 Ω  |
| 5) Inductance                   | 0.19 μH/ft, Nominal                             |
| 6) Conductor DCR                | 10.2 Ω/1000ft @20°C, Nominal                    |
| 7) OA Shield DCR                | 8.2 Ω/1000ft @20°C, Nominal                     |

### F. Other

- |              |                                     |
|--------------|-------------------------------------|
| 1) Packaging | Flange x Traverse x Barrel (inches) |
|--------------|-------------------------------------|

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- |               |                                    |
|---------------|------------------------------------|
| a) 1000 FT    | 12 x 6 x 3.5 Continuous length     |
| b) BOX 1000FT | 9-1/2 EASY REEL: Continuous length |
| c) BOX 500FT  | 7-5/8 EASY REEL: Continuous length |
| d) 500 FT     | 12 x 4.5 x 3.5 Continuous length   |
| e) 100 FT     | 6.5 x 4 x 2.5 Continuous length    |
- [Spool dimensions may vary slightly]*

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