

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

**Part Number: 6831**  
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**Issue: 1**  
**Issue Date: 5/27/2011**  
**Effective Date: 5/27/2011**

**A. Construction**

**Diameters (In)**

- |                |   |                |
|----------------|---|----------------|
| 1) Component 1 | 1 X 1 HOOKUP  |                |
| a) Conductor   | 10 (19/23) AWG BC   | 0.113          |
| b) Insulation  | 0.017" Wall, Nom. Modified Polyphenylene Ether                        | 0.147+/- 0.002 |
| (1) Print      | ALPHA WIRE ECOWIRE TM P/N 6831  |                |
|                | 10AWG (5.00MM2) 110C 300V ROHS CE                                     |                |
| (2) Color(s)   | WHITE, BLACK, RED, GREEN, YELLOW, BLUE, BROWN<br>ORANGE, GREEN/YELLOW |                |

**B. Applicable Specifications**

- |          |                                       |                     |
|----------|---------------------------------------|---------------------|
| 1) Other | Halogen-Free<br>Suitable for ISO 6722 | 60 V <sub>RMS</sub> |
| 2) CE:   | LVD 73/23/EEC Amendment 93/68/EEC     |                     |

**C. Environmental Compliance**

- |                                     |  |
|-------------------------------------|--|
| 1) EU Directive 2002/95/EC(RoHS):   | All materials used in the manufacture of this part are in compliance with EU Directive 2002/95/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. Consult Alpha Wire's web site for compliance Date of Manufacture. |
| 2) REACH Regulation (EC 1907/2006): | This product does not contain any of the substances listed on the European Union REACH Substance of Very High Concern (SVHC) candidate list, dated 30 March 2010, in excess of a concentration of 0.1% weight/weight.  |

**D. Physical & Mechanical Properties**

- |                      |                    |
|----------------------|--------------------|
| 1) Temperature Range | -40 to 110°C       |
| 2) Bend Radius       | 10X Cable Diameter |
| 3) Pull Tension      | 76 Lbs, Maximum    |
- (For Engineering purposes only)
- |                   |                              |
|-------------------|------------------------------|
| 1) Voltage Rating | 300 V <sub>RMS</sub>         |
| 2) Inductance     | 0.03 µH/ft, Nominal          |
| 3) Conductor DCR  | 1.09 Ω/1000ft @20°C, Nominal |

**F. Other**

- |                        |                                     |
|------------------------|-------------------------------------|
| 1) Packaging           | Flange x Traverse x Barrel (inches) |
| a) 1000 FT             | 12 x 4.5 x 3.5 Continuous length    |
| b) 100 FT              | 6.5 x 3 x 3.25 Continuous length    |
| c) Bulk(Made-to-order) |                                     |

*[Spool dimensions may vary slightly]*

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