

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

**Part Number: 669346**  
**Page 1 of 2 Pages**

**Issue: 4**  
**Issue Date: 5/3/2019**  
**Effective Date: 5/3/2019**

**A. Construction**

**Diameters (In)**

- |                |                               |       |
|----------------|-------------------------------|-------|
| 1) Component 1 | 23 X 1 COND                   |       |
| a) Conductor   | 16 (19/.0117) AWG Bare Copper | 0.059 |
| b) Insulation  | 0.0225" Wall, Nom. PVC        | 0.104 |
| (1) Color Code | Alpha Wire Color Code F       |       |

Cond	Color	Cond	Color	Cond	Color
1	BLACK	9	GREEN/BLACK	17	WHITE/RED
2	WHITE	10	ORANGE/BLACK	18	ORANGE/RED
3	RED	11	BLUE/BLACK	19	BLUE/RED
4	GREEN	12	BLACK/WHITE	20	RED/GREEN
5	ORANGE	13	RED/WHITE	21	ORANGE/GREEN
6	BLUE	14	GREEN/WHITE	22	BLACK/WHITE/RED
7	WHITE/BLACK	15	BLUE/WHITE	23	WHITE/BLACK/RED
8	RED/BLACK	16	BLACK/RED		

- |                   |  |                |
|-------------------|--|----------------|
| 2) Cable Assembly | 23 Components Cabled   |                |
| a) Twists:        | 1.7 Twists/foot (min)  |                |
| b) Orientation:   | Components to be arranged from INSIDE LAYER to OUTSIDE LAYER |                |
| c) Core Wrap      | Clear Mylar Tape, 25% Overlap, Min.                          |                |
| 3) Jacket         | 0.070" Wall, Nom.,PVC  | 0.731+/- 0.025 |
| a) Color(s)       | BLACK  |                |

**B. Applicable Specifications**

- |          |                     |                            |
|----------|---------------------|----------------------------|
| 1) Other | SAE, J1128 Type GPT | 105°C / 50 V <sub>DC</sub> |
|----------|---------------------|----------------------------|

**C. Environmental Compliance**

- 1) RoHS Directive (2011/65/EU): All materials used in the manufacture of this part meet the requirements of European Directive 2011/65/EU and the amending Directive 2015/863/EU of 4 June 2015 regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. No Exemptions are required for RoHS Compliance on this item. Consult Alpha Wire's web site for [RoHS C of C](#).
- 2) California Proposition 65: Exempt from warning labels based on the Consent Judgment. Please see Alpha's CA Prop 65 Statement for more information.

**D. Physical & Mechanical Properties**

- |                      |                    |
|----------------------|--------------------|
| 1) Temperature Range | -20 to 105°C       |
| 2) Bend Radius       | 10X Cable Diameter |
| 3) Pull Tension      | 470 Lbs, Maximum   |

**E. Electrical Properties**

- (For Engineering purposes only)
- |                   |   |
|-------------------|---|
| 1) Voltage Rating | 50 V <sub>DC</sub>                              |
| 2) Capacitance    | 33 pF/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Inductance     | 0.18 µH/ft, Nominal                             |
| 4) Conductor DCR  | 4.2 Ω/1000ft @20°C, Nominal                     |

**F. Other**

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

**This Design is custom, Made-To-Order & once accepted, the order is NON-CANCELLABLE & NON-RETURNABLE.**

Accepted By:	Date:
Company:	Title:

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PROPRIETARY

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