

**ALPHA WIRE  
CUSTOMER PRODUCT SPECIFICATION**

Part Number: 518078  
Page 1 of 2 Pages

Issue: 2  
Issue Date: 2/21/2012  
Effective Date: 2/21/2012

**A. Construction**

- |                |                          |                       |
|----------------|--------------------------|-----------------------|
| 1) Component 1 | 16 X 1 COND              | <u>Diameters (In)</u> |
| a) Conductor   | 18 (105(7x15)/38) AWG BC | 0.052                 |
| b) Insulation  | 0.016" Wall, Nom. PVC    | 0.084                 |
| (1) Color Code | Alpha Wire Color Code D  |                       |

Cont	Color	Cont	Color	Cont	Color
1	BLACK	7	BROWN	13	RED/GREEN
2	RED	8	YELLOW	14	RED/YELLOW
3	WHITE	9	VIOLET	15	RED/BLACK
4	GREEN	10	SLATE	16	WHITE/BLACK
5	ORANGE	11	PINK		
6	BLUE	12	YAN		

- |                     |   |                |
|---------------------|---|----------------|
| 2) Cable Assembly   | 16 Components Cabled  |                |
| a) Twists:          | 3.0 Twists/foot (min)   |                |
| b) Core Wrap        | REMA Y Tape, 25% Overlap, Min.  |                |
| 3) Jacket           | 0.040" Wall, Nom. PVC, Oil Resistant  | 0.499+/- 0.018 |
| a) Color(s)         | BLACK   |                |
| b) Jacket Separator | Tissue Tape, 25% Overlap, Min.  |                |
| c) Print            | ALPHA WIRE-* P/N 518078 16C 18 AWG<br>RU AWM 2464 80C 300 VOLTS      ROHS<br>* = Factory Code |                |

**B. Applicable Specifications**

- |                |                |                              |
|----------------|----------------|------------------------------|
| 1) UL          |                |                              |
| a) Component 1 | AWM/STYLE 1569 | 105°C / 300 V <sub>RMS</sub> |
| b) Overall     | AWM/STYLE 2464 | 80°C / 300 V <sub>RMS</sub>  |

**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.
- 2) 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 | -40 to 80°C (static), -5 to 80°C (dynamic)              |
| 2) Bend Radius       | 8X Cable Diameter (static), 8X Cable Diameter (dynamic) |
| 3) Pull Tension      | 211 Lbs, Maximum  |
- E. Electrical Properties**  
(For Engineering purposes only)
- |                   |   |
|-------------------|---|
| 1) Voltage Rating | 300 V <sub>RMS</sub>                            |
| 2) Capacitance    | 34 pF/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Inductance     | 0.17 µH/ft, Nominal                             |
| 4) Conductor DCR  | 6.6 Ω/1000ft @20°C, Nominal                     |

**F. Other**

- |                        |                                     |
|------------------------|-------------------------------------|
| 1) Packaging           | Flange x Traverse x Barrel (inches) |
| a) 1000 FT             | 24 x 14 x 12 Continuous length      |
| b) Bulk(Made-to-order) |                                     |

*(Spool dimensions may vary slightly)*

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

Accepted By: 	Date: 3/14/14
Company: FEWC	Title: Planner

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711 Lidgerwood Ave Elizabeth, NJ 07207-0711  
Toll Free 1-800-52 ALPHA • T: 1-908-925-8000 • F: 908-925-5411 • Email: [info@alphawire.com](mailto:info@alphawire.com)  
[www.alphawire.com](http://www.alphawire.com)