

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

**Part Number: 9316**  
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**Issue: 5**  
**Issue Date: 10/6/2009**  
**Effective Date: 10/6/2009**

**A. Construction**

- |                |                                | <u>Diameters (In)</u> |
|----------------|--------------------------------|-----------------------|
| 1) Component 1 | 1 X 1 COAX                     |                       |
| a) Conductor   | 25 (7/.0067) AWG SCW           | 0.020                 |
| b) Insulation  | 0.020" Wall, Nom. Teflon(PTFE) | 0.060                 |
| (1) Color(s)   |                                |                       |

Cond	Color	Cond	Color
1	CLEAR		

- |             |   |                    |
|-------------|---|--------------------|
| 2) Shield   | SPC BRAID Shield,94% Coverage, Min.         |                    |
| 3) Jacket   | 0.010" Wall, Nom.,Teflon(FEP)               | 0.098 (0.102 Max.) |
| a) Color(s) | NATURAL TAN                                 |                    |
| b) Print    | ALPHA WIRE-* P/N 9316                       |                    |
|             | MIL-DTL-17 M17/113-RG 316 27478 RU AWM 1971 |                    |
|             | EXXXXX 1C 26 AWG SHIELDED 150C              |                    |
|             | LLXXXXXX CSA TYPE CMG 60C FT4 ROHS          |                    |
|             | * = Factory Code                            |                    |

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

**B. Industry Approvals**

- |                      |                       |                              |
|----------------------|-----------------------|------------------------------|
| 1) UL                | AWM/STYLE 1971        | 150°C / 125 V <sub>RMS</sub> |
| 2) CSA International | CMG<br>FT4            | 60°C                         |
| 3) Military          | MIL-C-17/113 RG 316/U | 200°C / 900 V <sub>RMS</sub> |

**C. Environmental Approvals**

- 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) 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 -55 to 200°C
- 2) Bend Radius 10X Cable Diameter
- 3) Pull Tension 2.11 Lbs, Maximum

**E. Electrical Properties**

- (For Engineering purposes only)
- 1) Voltage Rating 900 V<sub>RMS</sub>
  - 2) Characteristic Impedance 50 Ω +/- 2
  - 3) Ground Capacitance 29.3 pf/ft @1 kHz, Nominal
  - 4) Velocity of Propagation 70 %
  - 5) Conductor DCR 85.8 Ω/1000ft @20°C, Nominal
  - 6) OA Shield DCR 8.5 Ω/1000ft @20°C, Nominal
  - 7) Voltage Withstanding 2 kV, Minimum
  - 8) Corona Extinction 1.2 kV, Minimum
  - 9) SRL, db Minimum
 

30 @ 50 Mhz
30 @ 100 Mhz
23 @ 400 Mhz
21 @ 1Ghz
17 @ 3 Ghz
  - 10) Attenuation, Max dB/100ft
 

7.5 @ 50 MHz
11 @ 100 MHz
21 @ 400 MHz
58 @ 1 GHz

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**F. Other**

- 1) Packaging
  - a) 1000 FT
  - b) 500 FT
  - c) 100 FT
  - d) Bulk(Made-to-order)

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