

# Customer Specification PART NO. 1749C

## Construction

|                   |       |  |  | Diameters (In) | )                  |  |
|-------------------|-------|--|--|----------------|--------------------|--|
| 1) Component 1    |       | 3 X 1 COND                                       |  |                |                    |  |
| a) Conductor      |       | 16 (19/.0117) AWG TC                             |  | 0.059          | 0.059              |  |
| b) Insulation     |       | 0.016" Wall, Nom. PVC                            |  | 0.091          | 0.091              |  |
| (1) Color Code    |       | Alpha Wire Color Code D                          |  |                |                    |  |
| Cond              | Color | Cond   | Color  | Cond           | Color              |  |
| 1                 | BLACK | 2  | RED  | 3              | WHITE              |  |
| 2) Cable Assembly |       | 3 Components                                     | 3 Components Cabled  |                |                    |  |
| a) Twists:        |       | 4.4 Twists/foot (                                | 4.4 Twists/foot (min)  |                |                    |  |
| b) Core Wrap      |       | Clear Mylar Tap                                  | Clear Mylar Tape, 25% Overlap, Min.  |                |                    |  |
| 3) Shield         |       | BC BRAID Shie                                    | BC BRAID Shield,75% Coverage, Min.   |                |                    |  |
| 4) Jacket         |       | 0.020" Wall, No                                  | 0.020" Wall, Nom.,PVC  |                | 0.261 (0.272 Max.) |  |
| a) Color(s)       |       | SLATE  | SLATE  |                |                    |  |
| b) Print          |       | SHIELDED 75C<br>C(UL) 60C TYP<br>* = Factory Cod | ALPHA WIRE-* P/N 1749C 3C 16 AWG SHIELDED 75C (UL) TYPE CM OR AWM 2095 OR C(UL) 60C TYPE CMG FT4 ROHS * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.] |                |                    |  |

Applicable Specifications

| 1) UL                | AWM/STYLE 2095 | 80°C / 300 V <sub>RMS</sub> |
|----------------------|----------------|-----------------------------|
|                      | СМ             | 75°C                        |
|                      | VW-1           |                             |
| 2) CSA International | C(UL) TYPE CMG | 60°C                        |
|                      | FT4            |                             |

# Environmental

| 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.   |  |  |  |

# **Properties**

| Physical &Mechanical Properties |   |  |  |  |
|---------------------------------|---|--|--|--|
| 1) Temperature Range            | -20 to 80°C                                     |  |  |  |
| 2) Bend Radius                  | 10X Cable Diameter                              |  |  |  |
| 3) Pull Tension                 | 66 Lbs, Maximum                                 |  |  |  |
| Electrical Properties           | (For Engineering purposes only)                 |  |  |  |
| 1) Voltage Rating               | 300 V <sub>RMS</sub>                            |  |  |  |
| 2) Capacitance                  | 57 pf/ft @1 kHz, Nominal Conductor to Conductor |  |  |  |
| 3) Ground Capacitance           | 103 pf/ft @1 kHz, Nominal                       |  |  |  |
| 4) Inductance                   | 0.17 μH/ft, Nominal                             |  |  |  |
| 5) Conductor DCR                | 4.4 /1000ft @20°C, Nominal                      |  |  |  |
| 6) OA Shield DCR                | 4.1 /1000ft @20°C, Nominal                      |  |  |  |

#### Other

| Packaging  | Flange x Traverse x Barrel (inches)  |
|------------|--------------------------------------|
| a) 1000 FT | 12 x 12 x 3.5 Continuous length      |
| b) 500 FT  | 12 x 6 x 3.5 Continuous length       |
| c) 100 FT  | 10 x 4 x 3.5 Continuous length       |
|            | [Spool dimensions may vary slightly] |

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## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:1749C

1749C, RoHS-Compliant Commencing With11/1/2004Production

This document certifies that the Alpha part numbers cited above are manufactured in accordance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003, better known as the RoHS Directives, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to these Directives for the specific definitions and extents of these Directives. **No Exemptions are required for RoHS Compliance on this item.** 

| Substance  | Maximum Control Value     |
|--|---------------------------|
| Lead   | 0.1% by weight (1000 ppm) |
| Mercury  | 0.1% by weight (1000 ppm) |
| Cadmium  | 0.1% by weight (100 ppm)  |
| Hexavalent Chromium  | 0.1% by weight (1000 ppm) |
| Polybrominated Biphenyls (PBB) Polybrominated Diphenyl Ethers (PBDE) | 0.1% by weight (1000 ppm) |
| Including Deca-BDE   | 0.1% by weight (1000 ppm) |

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Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering &QA

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