

# Customer Specification PART NO. 58421

# Construction

|                   |       |                    |  | i             |                    | $\overline{}$ |
|-------------------|-------|--------------------|--|---------------|--------------------|---------------|
|                   |       |                    |  | Diameters (In | )                  |               |
| 1) Component 1    |       | 2 X 1 COND         | 2 X 1 COND   |               |                    |               |
| a) Conductor      |       | 20 (7/.0121) AW    | 20 (7/.0121) AWG BC  |               |                    |               |
| b) Insulation     |       | 0.008" Wall, Nom   | 0.008" Wall, Nom. PVC, Plenum Rated  |               | 0.052              |               |
| (1) Color Code    |       | Alpha Wire Comp    | Alpha Wire Company Color Code D2   |               |                    |               |
| Cond              | Color | Cond               | Color  | Cond          | Color              |               |
| 1                 | BLACK | 2                  | WHITE  |               |                    |               |
| 2) Cable Assembly |       | 2 Components C     | 2 Components Cabled  |               |                    |               |
| a) Twists:        |       | 6.0 Twists/foot (n | 6.0 Twists/foot (min)  |               |                    |               |
| 3) Shield:        |       | Alum/Mylar Tape    | Alum/Mylar Tape, 25% Overlap, Min.   |               |                    |               |
| a) Foil Direction |       | Foil Facing Out    | Foil Facing Out  |               |                    |               |
| b) Drain Wire     |       | 22 (7/30) AWG      | 22 (7/30) AWG TC   |               |                    |               |
| 4) Jacket         |       | 0.015" Wall, Nor   | 0.015" Wall, Nom.,PVC, Plenum Rated  |               | 0.138 (0.145 Max.) |               |
| a) Color(s)       |       | SLATE              | SLATE  |               |                    |               |
| b) Print          |       | SHIELDED 75C       | ALPHA WIRE-* P/N 58421 2C 20 AWG SHIELDED 75C CMP(UL) C(UL) OR 75C (UL) CL2P ROHS * = Factory Code |               |                    |               |

Applicable Specifications

| 1) UL                | СМР            | 75°C |  |
|----------------------|----------------|------|--|
|                      | CL2P           | 75°C |  |
| 2) CSA International | FT6            |      |  |
|                      | C(UL) TYPE CMP | 75°C |  |

# 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) REACH Regulation (EC 1907/2006): |  |
|                                     | All materials used in the manufacture of this part do not appear on the EU REACH Substance of Very High Concern (SVHC) candiate list.  |

# **Properties**

| Physical &Mechanical Properties |   |  |
|---------------------------------|---|--|
| 1) Temperature Range            | -20 to 75°C                                     |  |
| 2) Bend Radius                  | 10X Cable Diameter                              |  |
| 3) Pull Tension                 | 21.6 Lbs, Maximum                               |  |
| Electrical Properties           | (For Engineering purposes only)                 |  |
| 1) Voltage Rating               | 300 V <sub>RMS</sub>                            |  |
| 2) Capacitance                  | 63 pf/ft @1 kHz, Nominal Conductor to Conductor |  |
| 3) Ground Capacitance           | 113 pf/ft @1 kHz, Nominal                       |  |
| 4) Characteristic Impedance     | 35 O  |  |
| 5) Inductance                   | 0.16 μH/ft, Nominal                             |  |
| 6) Conductor DCR                | 10.4 O/1000ft @20°C, Nominal                    |  |
| 7) OA Shield DCR                | 13.6 O/1000ft @20°C, Nominal                    |  |

### Other

| 1) Packaging            |  |
|-------------------------|--|
| a) 1000 FT              |  |
| a) 1000 FT<br>b) 500 FT |  |

www.alphawire.com

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207 Tel: 1-800-52 ALPHA (25742)

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.



## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:58421

58421, RoHS-Compliant Commencing With7/1/2004Production

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  | <b>Maximum Control Value</b> |
|--|------------------------------|
| 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)    |

The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the date of its release. The information provided is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it will become part of. The intent of this document is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering &QA

1/21/2011