

# Customer Specification

## PART NO. 75010

### Construction

|                   |               |  |               | Diameters (In)          |       |
|-------------------|---------------|--|---------------|-------------------------|-------|
| 1) Component 1    |               | 2 X 1 PAIR   |               |                         |       |
| a) Conductor      |               | 24 (SOLID) AWG BC  |               | 0.021                   |       |
| b) Insulation     |               | 0.008" Wall, Nom. Polypropylene (PP)   |               | 0.036                   |       |
| (1) Color(s)      |               |  |               |                         |       |
| Pair              | Color         | Pair   | Color         | Pair                    | Color |
| 1                 | BLU - WHT/BLU | 2  | ORG - WHT/ORG |                         |       |
| c) Pair           |               | 2/Cond Cabled Together   |               |                         |       |
| (1) Lay Length:   |               | Various Lay  |               |                         |       |
| 2) Cable Assembly |               | 2 Components Bunch Cabled  |               |                         |       |
| a) Twists:        |               | 2.4Twists/foot   |               |                         |       |
| 3) Jacket         |               | 0.035" Wall, Nom.,TPE  |               | 0.210 Avg. (0.230 Max.) |       |
| a) Color(s)       |               | BLACK  |               |                         |       |
| b) Ripcord        |               | Nylon  |               |                         |       |
| c) Print          |               | ALPHA WIRE-* P/N 75010 2PR 24 AWG<br>XTRAGUARD(R) INDUSTRIAL ETHERNET (UL) C(UL) TYPE<br>CMR 75C FT4 ANSI/TIA-568-C.2 CAT5E VERIFIED<br>ROHS CE (SEQUENTIAL FOOTAGE MARKING)<br>* = Factory Code |               |                         |       |

### Applicable Specifications

|                      |                                   |       |
|----------------------|-----------------------------------|-------|
| 1) UL                | CMR                               | 105°C |
|                      | FT4                               |       |
| 2) CSA International | C(UL) TYPE CMR                    | 105°C |
|                      | FT4                               |       |
| 3) CE:               | LVD 73/23/EEC Amendment 93/68/EEC |       |

### 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. |

### Properties

| Physical & Mechanical Properties |                       |
|----------------------------------|-----------------------|
| 1) Temperature Range             | -50 to 105°C          |
| 2) Bend Radius                   | 4X Cable Diameter     |
| 3) Pull Tension                  | 12.7 Lbs, Maximum     |
| 4) Sunlight Resistance           | Yes                   |
| Electrical Properties            |                       |
| (For Engineering purposes only)  |                       |
| 1) Voltage Rating                | 300 V <sub>RMS</sub>  |
| 2) Characteristic Impedance      | 100 +/- 15            |
| 3) Mutual Capacitance            | 5.6 nf/100m Max       |
| 4) Velocity of Propagation       | 70 % Nom.             |
| 5) Conductor DCR                 | 9.38 /100m @20°C, Max |
| 6) Skew                          | 45 ns/100m, Max       |
| 7) Pair to Ground Unbalance      | 330 pf/100m, Max      |
| 8) DC Unbalance of a Pair        | 5%, Max               |
| 9) Insertion Loss, Max dB/100m   | 2.4 @ 1 MHz           |
|                                  | 4.9 @ 4 MHz           |
|                                  | 6.9 @ 8 MHz           |
|                                  | 7.8 @ 10 MHz          |
|                                  | 9.9 @ 16 MHz          |
|                                  | 11.1 @ 20 MHz         |
|                                  | 12.5 @ 25 MHz         |
|                                  | 14.1 @ 31.25 MHz      |
|                                  | 20.4 @ 62.5 MHz       |
|                                  | 26.4 @ 100 MHz        |

## 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       |
|            | [Spool dimensions may vary slightly] |

[www.alphawire.com](http://www.alphawire.com)

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# RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:75010

75010, RoHS-Compliant Commencing With3/21/2012Production

*This document certifies that the Alpha part numbers cited above are manufactured in accordancewith 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 hazardousubstances used in the manufacture of electrical and electronic equipment. The reader is referredto these Directives for the specific definitions and extents of these Directives. **No Exemptions arerequired 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                               | 0.01% by weight (100 ppm) |
| Hexavalent Chromium                   | 0.1% by weight (1000 ppm) |
| Polybrominated Biphenyls (PBB)        | 0.1% by weight (1000 ppm) |
| 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

11/1/2012

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