

# ALPHA WIRE

## CUSTOMER PRODUCT SPECIFICATION

**Part Number: 5475C**  
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**Issue: 6**  
**Issue Date: 7/16/2010**  
**Effective Date: 7/16/2010**

**A. Construction**

**Diameters (In)**

- |    |                |                                   |       |
|----|----------------|-----------------------------------|-------|
| 1) | Component 1    | 5 X 1 PAIR                        |       |
|    | a) Conductor   | 24 (7/32) AWG TC                  | 0.024 |
|    | b) Insulation  | 0.010" Wall, Nom. PVC, Semi Rigid | 0.044 |
|    | (1) Color Code | Alpha Wire Color Code K           |       |
- 
- | Pair | Color       | Pair | Color       | Pair | Color        |
|------|-------------|------|-------------|------|--------------|
| 1    | BLACK-RED   | 3    | BLACK-GREEN | 5    | BLACK-YELLOW |
| 2    | BLACK-WHITE | 4    | BLACK-BLUE  |      |              |
- 
- |    |                   |  |                    |
|----|-------------------|--|--------------------|
| c) | Pair              | 2/Cond Cabled Together   |                    |
|    | (1) Twists:       | 9.6 Twists/foot (min)  |                    |
| 2) | Cable Assembly    | 5 Components Cabled  |                    |
|    | a) Twists:        | 4.4 Twists/foot (min)  |                    |
| 3) | Shield:           | Alum/Mylar Tape, 25% Overlap, Min.   |                    |
|    | a) Foil Direction | Foil Facing In   |                    |
|    | b) Drain Wire     | 24 (7/32) AWG TC   |                    |
| 4) | Jacket            | 0.035" Wall, Nom.,PVC  | 0.270 (0.286 Max.) |
|    | a) Color(s)       | SLATE  |                    |
|    | b) Print          | ALPHA WIRE-* P/N 5475C 5PR 24 AWG<br>SHIELDED 75C (UL) TYPE CM OR AWM 2464<br>OR C(UL) 60C TYPE CMG FT4 ROHS<br>* = Factory Code |                    |
- [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]*

**B. Applicable Specifications**

- |    |                   |                |                             |
|----|-------------------|----------------|-----------------------------|
| 1) | UL                | AWM/STYLE 2464 | 80°C / 300 V <sub>RMS</sub> |
|    |                   | CM             | 75°C                        |
| 2) | CSA International | C(UL) TYPE CMG | 60°C                        |
|    |                   | FT4            |                             |

**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 | -20 to 80°C        |
| 2) | Bend Radius       | 10X Cable Diameter |
| 3) | Pull Tension      | 39 Lbs, Maximum    |

**E. Electrical Properties**

(For Engineering purposes only)

- |    |                          |                              |
|----|--------------------------|------------------------------|
| 1) | Voltage Rating           | 300 V <sub>RMS</sub>         |
| 2) | Mutual Capacitance       | 25 pf/ft @1 kHz, Nominal     |
| 3) | Ground Capacitance       | 45 pf/ft @1 kHz, Nominal     |
| 4) | Characteristic Impedance | 76 Ω                         |
| 5) | Inductance               | 0.19 μH/ft, Nominal          |
| 6) | Conductor DCR            | 26 Ω/1000ft @20°C, Nominal   |
| 7) | OA Shield DCR            | 15.9 Ω/1000ft @20°C, Nominal |

**F. Other**

- |    |                        |                                     |
|----|------------------------|-------------------------------------|
| 1) | 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      |
|    | d) Bulk(Made-to-order) |                                     |

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*[Spool dimensions may vary slightly]*

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