

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

**Part Number: 86703CY**  
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**Issue: 10**  
**Issue Date: 7/7/2009**  
**Effective Date: 7/21/2009**

**A. Construction**

**Diameters (In)**

- |    |                |                                   |       |
|----|----------------|-----------------------------------|-------|
| 1) | Component 1    | 3 X 1 PAIR                        |       |
|    | a) Conductor   | 22 (19/34) AWG TC                 |       |
|    | b) Insulation  | 0.010" Wall, Nom. PVC, Semi Rigid | 0.052 |
|    | (1) Color Code | Alpha Wire Company Color Code A   |       |
- 
- | Pair | Color     | Pair | Color       | Pair | Color       |
|------|-----------|------|-------------|------|-------------|
| 1    | BLACK-RED | 2    | BLACK-WHITE | 3    | BLACK-GREEN |
- 
- |    |                     |  |                |
|----|---------------------|--|----------------|
| c) | Pair                | 2/Cond Cabled Together   |                |
|    | (1) Twists:         | 9.6 Twists/foot (min)  |                |
| 2) | Cable Assembly      | 3 Components Cabled  |                |
|    | a) Twists:          | 6.0 Twists/foot (min)  |                |
|    | b) Core Wrap        | Nonwoven Polyester Tape, 25% Overlap, Min.   |                |
| 3) | Shield:             | Flex Alum/Mylar Tape, 25% Overlap, Min.  |                |
|    | a) Foil Direction   | Foil Facing Out  |                |
|    | b) Drain Wire       | 26 (7/34) AWG TC   |                |
|    | c) Braid            | TC, 85% Coverage, Min.   |                |
| 4) | Jacket              | 0.040" Wall, Nom., PVC   | 0.301+/- 0.014 |
|    | a) Color(s)         | SLATE  |                |
|    | b) Jacket Separator | Tissue Tape, 25% Overlap, Min.   |                |
|    | c) Print            | ALPHA WIRE-* P/N 86703CY 3PR 22 AWG<br>XTRAGUARD CONTINUOUS FLEX DATA CABLE<br>(UL) 105C TYPE CM --- C(UL) CMG OR AWM 2661<br>105C 300V --- LLXXXXXX CSA AWM I/II A/B FT4 105C<br>300V CE ROHS <SEQ FOOTAGE><br>* = Factory Code |                |

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

**B. Industry Approvals**

- |    |                   |                                   |                              |
|----|-------------------|-----------------------------------|------------------------------|
| 1) | UL                |                                   |                              |
|    | a) Component 1    | AWM/STYLE 10002                   | 105°C / 300 V <sub>RMS</sub> |
|    | b) Overall        | AWM/STYLE 2661                    | 105°C / 300 V <sub>RMS</sub> |
|    |                   | CM                                | 105°C                        |
| 2) | CSA International | AWM I/II A/B                      | 105°C / 300 V <sub>RMS</sub> |
|    |                   | C(UL) TYPE CMG                    | 105°C                        |
|    |                   | FT4                               |                              |
| 3) | CE:               | LVD 73/23/EEC Amendment 93/68/EEC |                              |

**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: -10 to 105°C(static), +5 to 105°C (dynamic)
- 2) Bend Radius: 10X Cable Diameter(static), 15X Cable Diameter(dynamic)
- 3) Pull Tension: 43 Lbs, Maximum
- 4) Sunlight Resistance: Yes

**E. Electrical Properties**

- (For Engineering purposes only)
- 1) Voltage Rating: 300 V<sub>RMS</sub>
  - 2) Mutual Capacitance: 29 pf/ft @1 kHz, Nominal
  - 3) Ground Capacitance: 52 pf/ft @1 kHz, Nominal

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- 4) Characteristic Impedance 67  $\Omega$
- 5) Inductance 0.17  $\mu\text{H}/\text{ft}$ , Nominal
- 6) Conductor DCR 15.6  $\Omega/1000\text{ft}$  @20°C, Nominal
- 7) OA Shield DCR 3.6  $\Omega/1000\text{ft}$  @20°C, Nominal

**F. Other**

- 1) Packaging
  - a) 1000 FT
  - b) 500 FT
  - c) 100 FT

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