

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

**Part Number: 86312CY**  
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**Issue: 9**  
**Issue Date: 7/7/2009**  
**Effective Date: 7/21/2009**

**A. Construction**

**Diameters (In)**

- |                |                                   |       |
|----------------|-----------------------------------|-------|
| 1) Component 1 | 12 X 1 COND                       |       |
| 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 D   |       |

Cond	Color	Cond	Color	Cond	Color
1	BLACK	5	ORANGE	9	VIOLET
2	RED	6	BLUE	10	SLATE
3	WHITE	7	BROWN	11	PINK
4	GREEN	8	YELLOW	12	TAN

- |                     |  |                |
|---------------------|--|----------------|
| 2) Cable Assembly   | 12 Components Cabled   |                |
| a) Twists:          | 4.0 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) Single Serve     | TC,90% Coverage, Min.  |                |
| 4) Jacket           | 0.040" Wall, Nom.,PVC  | 0.367+/- 0.018 |
| a) Color(s)         | SLATE  |                |
| b) Jacket Separator | Tissue Tape, 25% Overlap, Min.   |                |
| c) Print            | ALPHA WIRE-* P/N 86312CY 12C 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         | 8X Cable Diameter(static), 8X Cable Diameter(dynamic) |
| 3) Pull Tension        | 79 Lbs, Maximum                                       |
| 4) Sunlight Resistance | Yes   |

**E. Electrical Properties**

- |                       |   |
|-----------------------|---|
|                       | (For Engineering purposes only)                 |
| 1) Voltage Rating     | 300 V <sub>RMS</sub>                            |
| 2) Capacitance        | 38 pf/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Ground Capacitance | 68 pf/ft @1 kHz, Nominal                        |
| 4) Inductance         | 0.17 µH/ft, Nominal                             |

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- 5) Conductor DCR                      15.5  $\Omega$ /1000ft @20°C, Nominal
- 6) OA Shield DCR                    2.8  $\Omega$ /1000ft @20°C, Nominal

**F. Other**

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

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