



# Customer Specification

## PART NO. 86506CY

### Construction

|                     |             | Diameters (In)  |             |                |              |
|---------------------|-------------|---|-------------|----------------|--------------|
| 1) Component 1      |             | 6 X 1 PAIR  |             |                |              |
| a) Conductor        |             | 26 (7/34) AWG TC  |             | 0.019          |              |
| b) Insulation       |             | 0.010" Wall, Nom. PVC, Semi Rigid   |             | 0.039          |              |
| (1) Color Code      |             | Alpha Wire Company Color Code A   |             |                |              |
| Pair                | Color       | Pair  | Color       | Pair           | Color        |
| 1                   | BLACK-RED   | 3   | BLACK-GREEN | 5              | BLACK-BROWN  |
| 2                   | BLACK-WHITE | 4   | BLACK-BLUE  | 6              | BLACK-YELLOW |
| c) Pair             |             | 2/Cond Cabled Together  |             |                |              |
| (1) Twists:         |             | 12.0 Twists/foot (min)  |             |                |              |
| 2) Cable Assembly   |             | 6 Components Cabled   |             |                |              |
| a) Twists:          |             | 5.3 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   |             | 0.313+/- 0.017 |              |
| a) Color(s)         |             | SLATE   |             |                |              |
| b) Jacket Separator |             | Tissue Tape, 25% Overlap, Min.  |             |                |              |
| c) Print            |             | ALPHA WIRE-* P/N 86506CY 6PR 26 AWG<br>XTRAGUARD(R) 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<br>* = Factory Code<br><i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i> |             |                |              |

### Applicable Specifications

|                      |                                   |                              |
|----------------------|-----------------------------------|------------------------------|
| 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 |                              |

## 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) California Proposition 65:     | The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.   |

## Properties

|  |   |
|--|---|
| 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  | 35 Lbs, Maximum   |
| 4) Sunlight Resistance                                   | Yes   |
| Electrical Properties<br>(For Engineering purposes only) |   |
| 1) Voltage Rating  | 300 V <sub>RMS</sub>                                    |
| 2) Mutual Capacitance                                    | 21.4 pf/ft @1 kHz, Nominal                              |
| 3) Ground Capacitance                                    | 39 pf/ft @1 kHz, Nominal                                |
| 4) Characteristic Impedance                              | 89  |
| 5) Inductance  | 0.2 µH/ft, Nominal                                      |
| 6) Conductor DCR   | 42 /1000ft @20°C, Nominal                               |
| 7) OA Shield DCR   | 2.6 /1000ft @20°C, Nominal                              |

## Other

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

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Tel: 1-800-52 ALPHA (25742)

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## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:86506CY

86506CY , RoHS-Compliant Commencing With8/1/2005Production

*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.***

| <b>Substance</b>  | <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)                              | 0.1% by weight (1000 ppm)    |
| Polybrominated Diphenyl Ethers (PBDE)<br>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:

A handwritten signature in black ink, appearing to read 'Dave Watson'.

Dave Watson, Director of Engineering &QA

1/23/2011