

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207 Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

# Customer Specification PART NO. SPM1604CY

## Construction

|                     |       |  |            | Diameters (In) |       |
|---------------------|-------|--|------------|----------------|-------|
| 1) Component 1      |       | 4 X 1 COND   | 4 X 1 COND |                |       |
| a) Conductor        |       | 16 (26/30) AWG E   | 3C         | 0.060          |       |
| b) Insulation       |       | 0.016" Wall, Nom. PVC/ 0.005" Wall<br>NYLON  |            | 0.102          |       |
| (1) Color Code      |       | Alpha Wire Color Code F  |            |                |       |
| Cond                | Color | Cond   | Color      | Cond           | Color |
| 1                   | BLACK | 3  | RED        |                |       |
| 2                   | WHITE | 4  | GREEN      |                |       |
| 2) Cable Assembly   |       | 4 Components Cabled  |            |                |       |
| a) Twists:          |       | 3.4 Twists/foot (min)  |            |                |       |
| b) Core Wrap        |       | Clear Mylar Tape, 25% Overlap, Min.  |            |                |       |
| 3) Shield           |       | TC BRAID Shield,85% Coverage,<br>Min.  |            |                |       |
| 4) Jacket           |       | 0.050" Wall, Nom.,PVC  |            | 0.378+/- 0.019 |       |
| a) Color(s)         |       | GREEN  |            |                |       |
| b) Jacket Separator |       | Tissue Tape, 25% Overlap, Min.   |            |                |       |
| c) Print            |       | ALPHA WIRE-* P/N SPM1604CY 4C 16 AWG (1.32mm2)<br>SERIES SPM (UL) WTTC 90C DRY/WET 1000V OR<br>(UL) TC-ER 90C DRY/WET 600V DIR BUR SUN RES<br>OR MTW 16 AWG FLEXING C(RU) AWM I/II A/B 105C<br>600V FT1 CE ROHS<br>(DATE CODE) (SEQ FOOTAGE)<br>* = Factory Code |            |                |       |

## **Applicable Specifications**

| N I II |  |
|--------|--|
| ) UL I |  |
| ,      |  |

| a) Component 1       | Unlisted Conductor                  | 90°C Dry / 90°C Wet / 600 V <sub>RMS</sub>  |
|----------------------|-------------------------------------|---|
| b) Overall           | UL 1277 TC                          | 90°C Dry / 90°C Wet / 600 V <sub>RMS</sub>  |
|                      | UL 2277 WTTC                        | 90°C Dry / 90°C Wet / 1000 V <sub>RMS</sub> |
|                      | SUN RES                             |   |
|                      | UL 1685 Vertical Tray Flame Test    |   |
|                      | UL 1063 MTW                         | 90°C Dry / 60°C Wet / 600 V <sub>RMS</sub>  |
|                      | DIRECT BURIAL                       |   |
|                      | EXPOSED RUN                         |   |
|                      | OIL RES I                           |   |
| 2) CSA International | C(RU) AWM I/II A/B FT1              | 105°C / 600 V <sub>RMS</sub>                |
| 3) Other             |                                     |   |
| a) Component 1       | ASTM-B174 Class K                   |   |
| 4) CE:               | EU Low Voltage Directive 2006/95/EC |   |

## Environmental

| 1) CE: EU Directive 2011/65/EU(RoHS2): |  |  |
|--|--|--|
|  | This product complies with European Directive 2011/65/EU (RoHS Directive)<br>of the European Parliament and of the Council of 8 June 2011. No<br>Exemptions are required for RoHS Compliance on this item. Consult Alpha<br>Wire's web site for RoHS C of C. |  |
| 2) REACH Regulation (EC 1907/2006):    |  |  |
|  | This product does not contain Substances of Very High Concern (SVHC)<br>listed on the European Union's REACH candidate list in excess of 0.1%<br>mass of the item. For up-to-date information, please see Alpha's REACH<br>SVHC Declaration.                 |  |

## Properties

| Physical & Mechanical Properties |  |  |
|----------------------------------|--|--|
| 1) Temperature Range             | -40 to 90°C(static), -30 to 90°C (dynamic) |  |
| 2) Bend Radius                   | 10X Cable Diameter                         |  |
| 3) Pull Tension                  | 88 Lbs, Maximum                            |  |
| 4) Sunlight Resistance           | Yes  |  |
| 5) Direct Burial                 | Yes  |  |
| Electrical Properties            | (For Engineering purposes only)            |  |

| 1) Voltage Rating     | 600/1000 V <sub>RMS</sub>                       |
|-----------------------|---|
| 2) Capacitance        | 48 pf/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Ground Capacitance | 86 pf/ft @1 kHz, Nominal                        |
| 4) Inductance         | 0.18 μH/ft, Nominal                             |
| 5) Conductor DCR      | 4.1 Ω/1000ft @20°C, Nominal                     |
| 6) OA Shield DCR      | 3.6 Ω/1000ft @20°C, Nominal                     |

## Other

| Packaging              | Flange x Traverse x Barrel (inches) |
|------------------------|-------------------------------------|
| a) Bulk(Made-to-order) |                                     |

#### www.alphawire.com

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207

Tel: 1-800-52 ALPHA (25742)

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.



### **EU/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: SPM1604CY

SPM1604CY, RoHS-Compliant Commencing With 8/24/2009 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European Parliament, better known as the RoHS Directive (commonly known as RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This certification extends to amending Directive 2015/863/EU which expanded the list of restricted substances to 10 items (commonly known as RoHS 3) The reader is referred to these Directives for the specific definitions and extents of the Directives. **No Exemptions are required for RoHS Compliance on this item**. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2014.

| 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), |                            |
| Including Deca-BDE                     | 0.1% by weight (1000 ppm)  |
| Bis(2-ethylhexyl) phthalate (DEHP)     | 0.1% by weight (1000 ppm)  |
| Butyl benzyl phthalate (BBP)           | 0.1% by weight (1000 ppm)  |
| Dibutyl phthalate (DBP)                | 0.1% by weight (1000 ppm)  |
| Diisobutyl phthalate (DIBP)            | 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:

Dave Watson, Director of Engineering & QA Alpha Wire 711 Lidgerwood Ave. Elizabeth, NJ 07207 Tel: 1-908-925-8000 3/19/2022

#### **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Alpha Wire: SPM1604CY GR001