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□□□ **SPM1803CY**

## Construction

|                     |       |      |       |      |       | Diameters (In)                                                                                                                                                                                                                                                        |                |
|---------------------|-------|------|-------|------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1) Component 1      |       |      |       |      |       | 3 X 1 COND                                                                                                                                                                                                                                                            |                |
| a) Conductor        |       |      |       |      |       | 18 (19/30) AWG Bare Copper                                                                                                                                                                                                                                            | 0.050          |
| b) Insulation       |       |      |       |      |       | 0.016" Wall, Nom. PVC/ 0.005" Wall NYLON                                                                                                                                                                                                                              | 0.092          |
| (1) Color Code      |       |      |       |      |       | Alpha Wire Color Code F                                                                                                                                                                                                                                               |                |
| Cond                | Color | Cond | Color | Cond | Color |                                                                                                                                                                                                                                                                       |                |
| 1                   | BLACK | 2    | WHITE | 3    | RED   |                                                                                                                                                                                                                                                                       |                |
| 2) Cable Assembly   |       |      |       |      |       | 3 Components Cabled                                                                                                                                                                                                                                                   |                |
| a) Twists:          |       |      |       |      |       | 4.4 Twists/foot (min)                                                                                                                                                                                                                                                 |                |
| b) Orientation:     |       |      |       |      |       | Components to be arranged from INSIDE LAYER to OUTSIDE LAYER                                                                                                                                                                                                          |                |
| c) Core Wrap        |       |      |       |      |       | Clear Mylar Tape, 25% Overlap, Min.                                                                                                                                                                                                                                   |                |
| 3) Shield           |       |      |       |      |       | Tinned Copper BRAID Shield,85% Coverage, Min.                                                                                                                                                                                                                         |                |
| 4) Jacket           |       |      |       |      |       | 0.050" Wall, Nom.,PVC                                                                                                                                                                                                                                                 | 0.329+/- 0.018 |
| a) Color(s)         |       |      |       |      |       | GREEN                                                                                                                                                                                                                                                                 |                |
| b) Jacket Separator |       |      |       |      |       | Tissue Tape, 25% Overlap, Min.                                                                                                                                                                                                                                        |                |
| c) Print            |       |      |       |      |       | ALPHA WIRE-* P/N SPM1803CY 3C 18 AWG (0.963mm2)<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 18 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

|                      |                                     |                                             |
|----------------------|-------------------------------------|---------------------------------------------|
| 1) UL                |                                     |                                             |
| 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 2014/35/EU |                                             |
|                      |                                     |                                             |

## Environmental

|                                                                          |                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1) CE: EU Directive 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3): |                                                                                                                                                                                                                                                             |
|                                                                          | This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011 and the amending Directive 2015/863/EU of 4 June 2015 . No Exemptions are required for RoHS Compliance on this item. |
| 2) REACH Regulation (EC 1907/2006):                                      |                                                                                                                                                                                                                                                             |
|                                                                          | This product does not contain Substances of Very High Concern (SVHC) listed on the European Union's REACH candidate list in excess of 0.1% mass of the item.                                                                                                |
|                                                                          |                                                                                                                                                                                                                                                             |

## 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                  | 50 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                   | 40 pF/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Ground Capacitance            | 72 pF/ft @1 kHz, Nominal                        |
| 4) Inductance                    | 0.19 µH/ft, Nominal                             |
| 5) Conductor DCR                 | 5.6 Ω/1000ft @20°C, Nominal                     |
| 6) OA Shield DCR                 | 4.5 Ω/1000ft @20°C, Nominal                     |
|                                  |                                                 |

## Other

|                        |                                     |
|------------------------|-------------------------------------|
| <b>Packaging</b>       | Flange x Traverse x Barrel (inches) |
| a) Bulk(Made-to-order) |                                     |
|                        |                                     |

[www.alphawire.com](http://www.alphawire.com)

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374

Tel: 1-800-52 ALPHA

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**Alpha** 2011/65/EU RoHS2015/863/EURoHSSJ/T 11364-2014

|                                                              |                           |
|--------------------------------------------------------------|---------------------------|
| Lead                                                         | □□□□□□□□□□0.1% (1000 ppm) |
| Mercury                                                      | □□□□□□□□□□0.1% (1000 ppm) |
| Cadmium                                                      | □□□□□□□□□□0.01% (100 ppm) |
| Hexavalent Chromium                                          | □□□□□□□□□□0.1% (1000 ppm) |
| Polybrominated Biphenyls (PBB)                               | □□□□□□□□□□0.1% (1000 ppm) |
| Polybrominated Diphenyl Ethers (PBDE),<br>Including Deca-BDE | □□□□□□□□□□0.1% (1000 ppm) |
| Bis(2-ethylhexyl) phthalate (DEHP)                           | □□□□□□□□□□0.1% (1000 ppm) |
| Butyl benzyl phthalate (BBP)                                 | □□□□□□□□□□0.1% (1000 ppm) |
| Dibutyl phthalate (DBP)                                      | □□□□□□□□□□0.1% (1000 ppm) |
| Diisobutyl phthalate (DIBP)                                  | □□□□□□□□□□0.1% (1000 ppm) |

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