

## **Customer Specification**

### **PART NO. 45180/25**

### **Construction**

|                   |         |      |           |      |                      | Diameters (In)   |                    |
|-------------------|---------|------|-----------|------|----------------------|--|--------------------|
| 1) Component 1    |         |      |           |      |                      | 25 X 1 COND  |                    |
| a) Conductor      |         |      |           |      |                      | 16 (19/.0117) AWG Tinned Copper  | 0.059              |
| b) Insu           | lation  |      |           |      |                      | 0.016" Wall, Nom. TPE  | 0.091              |
| (1) Col           | or Code |      |           |      |                      | Alpha Wire Color Code D  |                    |
| Cond              | Color   | Cond | Color     | Cond | Color                |  |                    |
| 1                 | BLACK   | 10   | SLATE     | 19   | WHITE/YEL            |  |                    |
| 2                 | RED     | 11   | PINK      | 20   | WHITE/BLL            |  |                    |
| 3                 | WHITE   | 12   | TAN       | 21   | WHITE/BR(            |  |                    |
| 4                 | GREEN   | 13   | RED/GREEN | 22   | WHITE/OR.            |  |                    |
| 5                 | ORANGE  | 14   | RED/YELLC | 23   | WHITE/SLA            |  |                    |
| 6                 | BLUE    | 15   | RED/BLACk | 24   | WHITE/VIC            |  |                    |
| 7                 | BROWN   | 16   | WHITE/BLA | 25   | WHITE/BLA            |  |                    |
| 8                 | YELLOW  | 17   | WHITE/REE |      |                      |  |                    |
| 9                 | VIOLET  | 18   | WHITE/GRI |      |                      |  |                    |
| 2) Cable Assembly |         |      |           |      | 25 Components Cabled |  |                    |
| a) Twis           | ts:     |      |           |      |                      | 1.5 Twists/foot (min)  |                    |
| b) Orientation:   |         |      |           |      |                      | Components to be arranged from INSIDE LAYER to OUTSIDE LAYER   |                    |
| c) Core           | Wrap    |      |           |      |                      | Nonwoven Polyester Tape, 20% Overlap, Min.   |                    |
| 3) Shie           | ld:     |      |           |      |                      | A/P/A Tape, 20% Overlap, Min.  |                    |
| a) Draii          | n Wire  |      |           |      |                      | 16 (19/.0117) AWG Tinned Copper  |                    |
| b) Braid          | t       |      |           |      |                      | Tinned Copper,70% Coverage, Nom.   |                    |
| 4) Jack           | et      |      |           |      |                      | 0.065" Wall, Nom.,TPE  | 0.714 (0.739 Max.) |
| a) Color(s)       |         |      |           |      |                      | Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige,<br>White   |                    |
| b) Ripc           | ord     |      |           |      |                      | 1 End 810 Denier Nylon   |                    |
| c) Print          |         |      |           |      |                      | ALPHA WIRE-* P/N 45180/25 25C 16 AWG XTRAGUARD(R) 4 (UL) TYPE PLTC 105C SUN RES OR AWM 20237/21918 125C 300 V OR CRU AWM I/II A/B 125C 300 V FT1 P-07-KA140023-MSHA CE ROHS (SEQ FOOTAGE) * = Factory Code |                    |

# **Applicable Specifications**

| 1) UL                | AWM/STYLE 20237                             | 125°C / 300 V <sub>RMS</sub> |
|----------------------|---|------------------------------|
|                      | PLTC  | 105°C                        |
|                      | AWM/STYLE 21918                             | 125°C / 300 V <sub>RMS</sub> |
|                      | SUN RES                                     |                              |
| 2) CSA International | C(RU) AWM I/II A/B FT1                      | 125°C / 300 V <sub>RMS</sub> |
|                      | SUN RES (Black only)                        |                              |
| 3) Other             | PENNSYLVANIA BUREAU OF MINE SAFETY APPROVED |                              |
| 4) CE:               | EU Low Voltage Directive 2014/35/EU         |                              |
|                      |   | <del></del>                  |

## **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.   |
| 3) California Proposition 65:  | This product may contain substances known to the State of California to cause Cancer or Reproductive Harm, but is exempt from labeling based on the Consent Judgement. See the Alpha Wire website for more information.                                    |

## **Properties**

| Physical & Mechanical Properties |   |  |  |
|----------------------------------|---|--|--|
| 1) Temperature Range             | -50 to 125°C                                    |  |  |
| 2) Bend Radius                   | 10X Cable Diameter                              |  |  |
| 3) Pull Tension                  | 546 Lbs, Maximum                                |  |  |
| 4) Sunlight Resistance           | Yes   |  |  |
| Electrical Properties            | (For Engineering purposes only)                 |  |  |
| 1) Voltage Rating                | 300 V <sub>RMS</sub>                            |  |  |
| 2) Capacitance                   | 29 pF/ft @1 kHz, Nominal Conductor to Conductor |  |  |
| 3) Ground Capacitance            | 52 pF/ft @1 kHz, Nominal                        |  |  |
| 4) Inductance                    | 0.17 μH/ft, Nominal                             |  |  |
| 5) Conductor DCR                 | 4.4 Ω/1000ft @20°C, Nominal                     |  |  |
| 6) OA Shield DCR                 | 1 Ω/1000ft @20°C, Nominal                       |  |  |
|                                  |   |  |  |

#### Other

| Packaging  | Flange x Traverse x Barrel (inches) |
|--|-------------------------------------|
| a) Bulk(Made-to-order)   |                                     |
| Notes:   |                                     |
| a) Print legend will contain CSA SUN RES on black cables only. |                                     |
|  |                                     |

#### www.alphawire.com

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-800-52 ALPHA

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Alpha Wire □□□□45180/25

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

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