

# Customer Specification

## PART NO. 5158C

### Construction

|                   |       | <b>Diameters (In)</b>   |        |                    |        |
|-------------------|-------|---|--------|--------------------|--------|
| 1) Component 1    |       | 8 X 1 COND  |        |                    |        |
| a) Conductor      |       | 20 (7/28) AWG Tinned Copper   |        | 0.038              |        |
| b) Insulation     |       | 0.016" Wall, Nom. PVC   |        | 0.070              |        |
| (1) Color Code    |       | Alpha Wire Color Code D   |        |                    |        |
| Cond              | Color | Cond  | Color  | Cond               | Color  |
| 1                 | BLACK | 4   | GREEN  | 7                  | BROWN  |
| 2                 | RED   | 5   | ORANGE | 8                  | YELLOW |
| 3                 | WHITE | 6   | BLUE   |                    |        |
| 2) Cable Assembly |       | 8 Components Cabled   |        |                    |        |
| a) Twists:        |       | 3.4 Twists/foot (min)   |        |                    |        |
| b) Orientation:   |       | Components to be arranged from INSIDE LAYER to OUTSIDE LAYER  |        |                    |        |
| c) Core Wrap      |       | Nonwoven Polyester Tape, 25% Overlap, Min.  |        |                    |        |
| 3) Shield:        |       | A/P/A Tape, 25% Overlap, Min.   |        |                    |        |
| a) Drain Wire     |       | 20 (7/28) AWG Tinned Copper   |        |                    |        |
| b) Braid          |       | Tinned Copper, 70% Coverage, Nom.   |        |                    |        |
| 4) Jacket         |       | 0.032" Wall, Nom., PVC  |        | 0.330 (0.344 Max.) |        |
| a) Color(s)       |       | Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White   |        |                    |        |
| b) Ripcord        |       | 1 End 810 Denier Nylon  |        |                    |        |
| c) Print          |       | ALPHA WIRE-* P/N 5158C 8C 20 AWG<br>XTRAGUARD(R) 1 SHIELDED (UL) TYPE CM 105C SUN RES<br>OR AWM 2464 80C 300V OR AWM 2517 105C 300V<br>VW-1 OR C(UL) TYPE CMG 105C FT4 CE ROHS<br>OIL RESISTANT (SEQ FOOTAGE)<br>* = Factory Code<br><i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i> |        |                    |        |

### Applicable Specifications

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|                      |                                     |                              |
|----------------------|-------------------------------------|------------------------------|
| 1) UL                |                                     |                              |
| a) Component 1       | AWM/STYLE 1569                      | 105°C / 300 V <sub>RMS</sub> |
| b) Overall           | AWM/STYLE 2517                      | 105°C / 300 V <sub>RMS</sub> |
|                      | SUN RES                             |                              |
|                      | AWM/STYLE 2464                      | 80°C / 300 V <sub>RMS</sub>  |
|                      | CM                                  | 105°C                        |
|                      | VW-1                                |                              |
| 2) CSA International | C(UL) TYPE CMG                      | 105°C                        |
|                      | FT4                                 |                              |
| 3) IEC               | EN 60332-1 Flame Behavior           |                              |
|                      | EN 60332-2 Flame Behavior           |                              |
| 4) Other             | Oil Resistant                       |                              |
| 5) 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.  |
| 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

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| <b>Physical &amp; Mechanical Properties</b> |   |
|---|---|
| 1) Temperature Range                        | -30 to 105°C                                    |
| 2) Bend Radius                              | 10X Cable Diameter                              |
| 3) Pull Tension                             | 84 Lbs, Maximum                                 |
| 4) Sunlight Resistance                      | Yes   |
| <b>Electrical Properties</b>                |   |
| (For Engineering purposes only)             |   |
| 1) Voltage Rating                           | 300 V <sub>RMS</sub>                            |
| 2) Capacitance                              | 39 pF/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Ground Capacitance                       | 70 pF/ft @1 kHz, Nominal                        |
| 4) Inductance                               | 0.19 μH/ft, Nominal                             |
| 5) Conductor DCR                            | 10.2 Ω/1000ft @20°C, Nominal                    |
| 6) OA Shield DCR                            | 2.49 Ω/1000ft @20°C, Nominal                    |

## Other

| <b>Packaging</b>                    | Flange x Traverse x Barrel (inches)         |
|-------------------------------------|---|
| a) 1000 FT                          | 18 x 14.25 x 8 Continuous length            |
| b) 500 FT                           | 12 x 10.5 x 5 Continuous length             |
| c) 100 FT                           | 10.5 x 5 x 3.5 Continuous length            |
| d) Bulk(Made-to-order)              |   |
|                                     | <i>[Spool dimensions may vary slightly]</i> |
| <b>Notes:</b>                       |   |
| a) Oil Resistant Jacket (7d @ 60C). |   |

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

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