

**ALPHA WIRE**  
**CUSTOMER PRODUCT SPECIFICATION**

**Part Number: 18-1899**  
**Page 1 of 2 Pages**

**Issue: 1**  
**Issue Date: 2/27/2019**  
**Effective Date: 4/15/2019**

**A. 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) Print     | ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED |       |
|    | (2) Color(s)  |   |       |

Cond	Color	Cond	Color	Cond	Color
1	BLACK #1	2	BROWN #2	3	RED #3

- |    |                   |   |                |
|----|-------------------|---|----------------|
| 2) | Cable Assembly    | 3 Components Cabled   |                |
|    | a) Twists:        | 4.4 Twists/foot (min)   |                |
|    | b) Orientation:   | Components to be arranged from OUTSIDE LAYER to INSIDE LAYER  |                |
|    | c) Core Wrap      | Clear Mylar Tape, 25% Overlap, Min.   |                |
| 3) | Shield:           | Alum/Mylar Tape, 25% Overlap, Min.  |                |
|    | a) Foil Direction | Foil Facing In  |                |
|    | b) Drain Wire     | 18 (19/30) AWG Tinned Copper  |                |
| 4) | Jacket            | 0.050" Wall, Nom.,PVC   | 0.305+/- 0.018 |
|    | a) Color(s)       | BLACK   |                |
|    | b) Print          | ALPHA WIRE-* P/N 18-1899 3C 18 AWG (0.963mm2)<br>(UL) TC-ER 90C WET/DRY 600V SUN RES<br>OIL RES I OR MTW 18 AWG OR (UL) PLTC 90C<br>OR CRU AWM I/II A/B 90C 600V FT4<br>CE ROHS (DATE CODE) (SEQ FOOTAGE)<br>* = Factory Code |                |

**B. Applicable Specifications**

- |    |                   |  |  |
|----|-------------------|--|--|
| 1) | UL                | TC<br>PLTC<br>SUN RES<br>EXPOSED RUN<br>OIL RES I<br>MTW | 90°C Dry / 90°C Wet / 600 V <sub>RMS</sub><br>90°C<br>90°C Dry / 60°C Wet / 600 V <sub>RMS</sub> |
| 2) | CSA International | AWM I/II A/B<br>FT4                                      | 90°C / 600 V <sub>RMS</sub>  |
| 3) | CE:               | EU Low Voltage Directive 2014/35/EU                      |  |

**C. Environmental Compliance**

- 1) CE: EU Directive 2011/65/EU(RoHS2):  
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. Consult Alpha 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) listed on the European Union's REACH candidate list in excess of 0.1% mass of the item. For up-to-date information, please see [Alpha's REACH SVHC Declaration](#).
- 3) California Proposition 65: Exempt from warning labels based on the Consent Judgment. Please see Alpha's CA Prop 65 Statement for more information.

**D. Physical & Mechanical Properties**

- 1) Temperature Range -25 to 90°C
- 2) Bend Radius 10X Cable Diameter
- 3) Pull Tension 60 Lbs, Maximum

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- 4) Sunlight Resistance Yes
- 5) Direct Burial Yes

**E. Electrical Properties** (For Engineering purposes only)

- 1) Voltage Rating 600 V<sub>RMS</sub>
- 2) Capacitance 44 pF/ft @1 kHz, Nominal Conductor to Conductor
- 3) Ground Capacitance 79 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 5.2 Ω/1000ft @20°C, Nominal

**F. Other**

- 1) Packaging Flange x Traverse x Barrel (inches)
  - a) Bulk(Made-to-order) W36-14: 36 x 14 x 12 Only
- 2) Notes:
  - a) Only use 36" spool per customer request.

**This Design is custom, Made-To-Order & once accepted, the order is NON-CANCELLABLE & NON-RETURNABLE.**

Accepted By:	Date:
Company:	Title:

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