

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

<b>Part Number: 18-1897</b>	<b>Issue: 1</b>
<b>Page 1 of 2 Pages</b>	<b>Issue Date: 2/27/2019</b>
	<b>Effective Date: 4/15/2019</b>

- A. Construction** Diameters (In)
- 1) Component 1 12 X 1 COND
- a) Conductor 16 (26/30) AWG Bare Copper 0.060
- b) Insulation 0.016" Wall, Nom. PVC/ 0.005" Wall NYLON 0.102
- (1) Print ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED
- (2) Color(s)

Cond	Color	Cond	Color	Cond	Color
1	BLACK #1	5	YELLOW #5	9	SLATE #9
2	BROWN #2	6	GREEN #6	10	WHITE #10
3	RED #3	7	BLUE #7	11	WHITE/BLACK #11
4	ORANGE #4	8	VIOLET #8	12	WHITE/BROWN #12

- 2) Cable Assembly 12 Components Cabled
- a) Twists: 2.1 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 16 (26/30) AWG Tinned Copper
- 4) Jacket 0.065" Wall, Nom., PVC 0.561 +/- 0.028
- a) Color(s) BLACK
- b) Print ALPHA WIRE-\* P/N 18-1897 12C 16 AWG (1.32mm<sup>2</sup>)  
(UL) TC-ER 90C WET/DRY 600V SUN RES  
OIL RES I OR MTW 16 AWG OR (UL) PLTC 90C  
OR CRU AWM I/II A/B 90C 600V FT4  
CE ROHS (DATE CODE) (SEQ FOOTAGE)  
\* = Factory Code

**B. Applicable Specifications**

- 1) UL TC 90°C Dry / 90°C Wet / 600 V<sub>RMS</sub>  
EXPOSED RUN  
SUN RES  
PLTC 90°C  
OIL RES I  
MTW 90°C Dry / 60°C Wet / 600 V<sub>RMS</sub>  
AWM I/II A/B 90°C / 600 V<sub>RMS</sub>  
FT4
- 2) CSA International
- 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


Although Alpha Wire Company ("Alpha") makes every reasonable effort to ensure their 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 has 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. All information contained herein is proprietary. Its use is restricted to Alpha Wire personnel or authorized Distributors and End-Users of Alpha Wire. Under no circumstances shall this document be duplicated in any form or shown to/discussed with unauthorized personnel without the expressed written consent of the Alpha Wire Engineering Department.

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

<b>Part Number: 18-1897</b> <b>Page 2 of 2 Pages</b>	<b>Issue: 1</b> <b>Issue Date: 2/27/2019</b> <b>Effective Date: 4/15/2019</b>
---	---

- 2) Bend Radius                      10X Cable Diameter
- 3) Pull Tension                     265 Lbs, Maximum
- 4) Sunlight Resistance            Yes
- E. Electrical Properties**                      (For Engineering purposes only)
  - 1) Voltage Rating                    600 V<sub>RMS</sub>
  - 2) Capacitance                        49 pF/ft @1 kHz, Nominal Conductor to Conductor
  - 3) Ground Capacitance            88 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                    3.7 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: 2/28/19
Company: PCMC	Title: Engineer IV

Although Alpha Wire Company ("Alpha") makes every reasonable effort to ensure their 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 has 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. All information contained herein is proprietary. Its use is restricted to Alpha Wire personnel or authorized Distributors and End-Users of Alpha Wire. Under no circumstances shall this document be duplicated in any form or shown to/discussed with unauthorized personnel without the expressed written consent of the Alpha Wire Engineering Department.