

**ALPHA WIRE  
CUSTOMER PRODUCT SPECIFICATION**

Part Number: 669380  
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Issue: 2  
Issue Date: 11/11/2015  
Effective Date: 11/25/2015

**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 REMAY 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., TPE 0.573+/- 0.028  
 a) Color(s) BLACK  
 b) Print ALPHA WIRE-\* P/N 669380 12C 16 AWG (1.32mm<sup>2</sup>)  
 PCMC # 30641 171 TFFN SERIES P (UL) TYPE TC-ER 90C  
 600V OIL RES I/II SUN RES OR TYPE PLTC 90C  
 --- LLXXXXXX CSA AWM I/II A/B 90C 600V FT4  
 CE ROHS (DATE CODE) (SEQ FOOTAGE)  
 \* = Factory Code

*(Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.)*

**B. Applicable Specifications**

- 1) UL  
 a) Component 1 TFFN 90°C / 600 V<sub>RMS</sub>  
 b) Overall TC 90°C / 600 V<sub>RMS</sub>  
 EXPOSED RUN  
 SUN RES  
 PLTC 90°C  
 OIL RES I/II  
 2) CSA International AWM I/II A/B 90°C / 600 V<sub>RMS</sub>  
 FT4  
 3) CE: EU Low Voltage Directive 2006/95/EC

**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. No Exemptions are required for RoHS Compliance on this item. Consult Alpha Wire's web site for RoHS C of C.  
 2) California Proposition 65: The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

**D. Physical & Mechanical Properties**

- 1) Temperature Range -25 to 90°C  
 2) Bend Radius 10X Cable Diameter  
 3) Pull Tension 265 Lbs, Maximum

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- 4) Sunlight Resistance Yes  
 E. **Electrical Properties** (For Engineering purposes only)  
 1) Voltage Rating 600 V<sub>RMS</sub>  
 2) Capacitance 48 pf/ft @1 kHz, Nominal Conductor to Conductor  
 3) Ground Capacitance 86 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)  
 2) Notes:  
 a) Use W30-14 spool per customer request.  
 b) Insulated conductor print and stripe will intersect periodically.

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

Accepted By: <i>TAT Bandy</i>	Date: 11/24/15
Company: Paper Converting Co.	Title: Senior Designer

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