

ALPHA WIRE CUSTOMER PRODUCT SPECIFICATION

Part Number: 669384
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Issue: 2
Issue Date: 11/11/2015
Effective Date: 11/25/2015

A. Construction

- | | | <u>Diameters (In)</u> |
|----------------|---|-----------------------|
| 1) Component 1 | 12 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	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: | 2.3 Twists/foot (min) | |
| b) Orientation: | Components to be arranged from OUTSIDE LAYER to INSIDE LAYER | |
| c) Core Wrap | REMY Tape, 25% Overlap, Min. | |
| 3) Shield: | Alum/Mylar Tape, 25% Overlap, Min. | |
| a) Foil Direction | Foil Facing In | |
| b) Drain Wire | 18 (16/30) AWG Tinned Copper | |
| 4) Jacket | 0.065" Wall, Nom., TPE | 0.531 +/- 0.028 |
| a) Color(s) | BLACK | |
| b) Print | ALPHA WIRE- * P/N 669384 12C 18 AWG (0.963mm ²)
PCMC # 30641180 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 _{RMS} |
| b) Overall | TC
PLTC
SUN RES
EXPOSED RUN
OIL RES I/II | 90°C / 600 V _{RMS}
90°C |
| 2) CSA International | AWM I/II A/B
FT4 | 90°C / 600 V _{RMS} |
| 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 <u>RoHS C of C</u> . |
| 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 | 192 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_{RMS}
 - 2) Capacitance 43 pf/ft @1 kHz, Nominal Conductor to Conductor
 - 3) Ground Capacitance 77 pf/ft @1 kHz, Nominal
 - 4) Inductance 0.19 µH/ft, Nominal
 - 5) Conductor DCR 5.7 Ω/1000ft @20°C, Nominal
 - 6) OA Shield DCR 5.4 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 Bunting</i>	Date: <i>11/24/15</i>
Company: <i>Paper Converting Co.</i>	Title: <i>Senior Designer</i>

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