

**ALPHA WIRE
CUSTOMER PRODUCT SPECIFICATION**

Part Number: 669378
Page 1 of 2 Pages

Issue: 2
Issue Date: 11/11/2015
Effective Date: 11/25/2015

A. Construction

- | | | <u>Diameters (In)</u> |
|----------------|---|-----------------------|
| 1) Component 1 | 3 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	2	BROWN #2	3	RED #3

- | | | |
|-------------------|---|----------------|
| 2) Cable Assembly | 3 Components Cabled | |
| a) Twists: | 4.0 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 | 16 (26/30) AWG Tinned Copper | |
| 4) Jacket | 0.050" Wall, Nom., TPE | 0.339+/- 0.018 |
| a) Color(s) | BLACK | |
| b) Print | ALPHA WIRE-* P/N 669378 3C 16 AWG (1.32mm ²)
PCMC # 30641133 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} |
| | MTW | |
| b) Overall | TC | 90°C / 600 V _{RMS} |
| | EXPOSED RUN | |
| | SUN RES | |
| | PLTC | 90°C |
| | OIL RES I/II | |
| 2) CSA International | AWM I/II A/B | 90°C / 600 V _{RMS} |
| | 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 <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 | 82 Lbs, Maximum |
| 4) Sunlight Resistance | Yes |

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**

Part Number: 669378	Issue: 2
Page 2 of 2 Pages	Issue Date: 11/11/2015
	Effective Date: 11/25/2015

- E. Electrical Properties** (For Engineering purposes only)
- 1) Voltage Rating 600 V_{RMS}
 - 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 4 Ω/1000ft @20°C, Nominal
- F. Other**
- 1) Packaging Flange x Traverse x Barrel (inches)
 - a) Bulk(Made-to-order)
 - 2) Notes:
 - a) Only use W30-14 spool per customer request.

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

Accepted By: <i>T. A. Bandy</i>	Date: 11/24/15
Company: Paper Converting Co.	Title: Sensor Designer

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.