

ALPHA WIRE CUSTOMER PRODUCT SPECIFICATION

Part Number: 518377
Page 1 of 2 Pages

Issue: 1
Issue Date: 4/11/2014
Effective Date: 6/6/2014

A. Construction

Diameters (In)

- | | | | |
|----|---------------|-------------------------------------|-------|
| 1) | Component 1 | 4 X 1 PAIR | |
| | a) Conductor | 24 (SOLID) AWG Bare Copper | 0.022 |
| | b) Insulation | 0.012" Wall, Nom. Polypropylene(PP) | 0.046 |
| | (1) Color(s) | | |

Pair	Color	Pair	Color	Pair	Color
1	BLUE - WHITE/BLUE	3	GREEN - WHITE/GREEN		
2	ORANGE - WHITE/ORANGE	4	BROWN - WHITE/BROWN		

- | | | | |
|----|-------------------|---|--------------------|
| c) | Pair | 2/Cond Cabled Together | |
| | (1) Twists: | 13.7 Twists/foot (approx.) | |
| 2) | Cable Assembly | 4 Components Cabled | |
| | a) Twists: | 3.0 Twists/foot (min) | |
| | b) 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 | 24 (7/32) AWG Tinned Copper | |
| 4) | Jacket | 0.032" Wall, Nom., TPE | 0.265 (0.280 Max.) |
| | a) Color(s) | BLACK | |
| | b) Ripcord | 1 End 810 Denier Nylon | |
| | c) Print | ALPHA WIRE-* P/N 518377 4PR 24 AWG
RU AWM STYLE 20626 80C 600V OR
ANSI/TIA-568-C.2 CAT5E ROHS CE
(SEQ FOOTAGE) (LOT #) (DATE CODE)
* = Factory Code | |

B. Applicable Specifications

- | | | | |
|----|----------------|-------------------------------------|-----------------------------|
| 1) | UL | | |
| | a) Component 1 | AWM/STYLE 10866 | 80°C / 600 V _{RMS} |
| | b) Overall | AWM/STYLE 20626 | 80°C / 600 V _{RMS} |
| 2) | 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) | 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 . | |

D. Physical & Mechanical Properties

- | | | | |
|----|---------------------|-------------------|--|
| 1) | Temperature Range | -50 to 80°C | |
| 2) | Bend Radius | 8X Cable Diameter | |
| 3) | Pull Tension | 29 Lbs, Maximum | |
| 4) | Sunlight Resistance | Yes | |
| 5) | Cable Weight | 39 Lbs/1000Ft | |

E. Electrical Properties

(For Engineering purposes only)

- | | | | |
|----|--------------------------|----------------------|--|
| 1) | Voltage Rating | 600 V _{RMS} | |
| 2) | Characteristic Impedance | 100 Ω +/- 15 | |
| 3) | Mutual Capacitance | 5.6 nF/100m Max | |
| 4) | Velocity of Propagation | 70 % Nom. | |

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: 518377
Page 2 of 2 Pages

Issue: 1
Issue Date: 4/11/2014
Effective Date: 6/6/2014

- | | |
|-----------------------------|---------------------------------|
| 5) Conductor DCR | 9.38 Ω/100m Max |
| 6) Skew | 45 ns/100m Max |
| 7) Pair to Ground Unbalance | 330 pF/100m Max |
| 8) DC Unbalance of a Pair | 5% Max |
| 9) Insertion Loss | 2.4 (Max dB/100m) @ 1 MHz |
| | 4.9 (Max dB/100m) @ 4 MHz |
| | 6.9 (Max dB/100m) @ 8 MHz |
| | 7.8 (Max dB/100m) @ 10 MHz |
| | 9.9 (Max dB/100m) @ 16 MHz |
| | 11.1 (Max dB/100m) @ 20 MHz |
| | 12.5 (Max dB/100m) @ 25 MHz |
| | 14.1 (Max dB/100m) @ 31.25 MHz |
| | 20.4 (Max dB/100m) @ 62.5 MHz |
| | 26.4 (Max dB/100m) @ 100 MHz |

F. Other

- | | |
|--------------|--|
| 1) Packaging | Flange x Traverse x Barrel (inches) |
| a) 1000 FT | 12 x 12 x 3.5 Continuous length
<i>[Spool dimensions may vary slightly]</i> |

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

Accepted By:	Date:
Company:	Title:

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.