

ALPHA WIRE
CUSTOMER PRODUCT SPECIFICATION

Part Number: 518079
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Issue: 1
Issue Date: 11/1/2010
Effective Date: 11/2/2010

A. Construction

Diameters (In)

- | | | | |
|----|---------------|--|-------|
| 1) | Component 1 | 4 X 1 COND | |
| | a) Conductor | 14 (41/30) AWG BC | 0.074 |
| | b) Insulation | 0.016" Wall, Nom. PVC/ 0.005" Wall NYLON | 0.116 |
| | (1) Color(s) | | |

Cond	Color	Cond	Color	Cond	Color
1	RED	3	BLUE		
2	WHITE	4	GREEN		

- | | | | |
|----|---------------|--|-------|
| 2) | Component 2 | 2 X 1 PAIR | |
| | a) Conductor | 18 (16/30) AWG BC | 0.047 |
| | b) Insulation | 0.016" Wall, Nom. PVC/ 0.005" Wall NYLON | 0.089 |
| | (1) Color(s) | | |

Pair	Color	Pair	Color	Pair	Color
1	BLACK-ORANGE	2	BLACK/WHITE-ORANGE/BLACK		

- | | | | |
|----|-----------------------|--|--------------------|
| c) | Pair | 2/Cond Cabled Together | |
| | (1) Twists: | 4.4 Twists/foot (min) | |
| | Individually Applied: | | |
| | d) Shield: | Foil Free Alum/Mylar Tape, 25% Overlap, Min. | |
| | (1) Foil Direction | Foil Facing In | |
| | (2) Drain Wire | 18 (16/30) AWG TC | |
| 3) | Cable Assembly | 6 Components Cabled | |
| | a) Twists: | 2.2 Twists/foot (min) | |
| | b) Core Wrap | Clear Mylar Tape, 25% Overlap, Min. | |
| 4) | Shield: | A/P/A Tape, 25% Overlap, Min. | |
| | a) Drain Wire | 16 (26/30) AWG TC | |
| | b) Braid | TC, 70% Coverage, Min. | |
| 5) | Jacket | 0.065" Wall, Nom., PVC | 0.560 (0.586 Max.) |
| | a) Color(s) | BLACK | |
| | b) Print | ALPHA WIRE-* P/N 518079 | |

4C 14 AWG 2PR 18 AWG (UL) TYPE TC 90C DRY 75C WET
600V --- LLXXXXXX CSA AWM I/II A/B 90C 600V FT4
* = Factory Code

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

B. Applicable Specifications

- | | | | |
|----|-------------------|---------------------|--|
| 1) | UL | TC | 90°C Dry / 75°C Wet / 600 V _{RMS} |
| 2) | CSA International | AWM I/II A/B
FT4 | 90°C / 600 V _{RMS} |

C. Environmental Compliance

- 1) EU Directive 2002/95/EC(RoHS):
All materials used in the manufacture of this part are in compliance with EU Directive 2002/95/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment.

D. Physical & Mechanical Properties

- | | | |
|----|-------------------|--------------------|
| 1) | Temperature Range | -25 to 90°C |
| 2) | Bend Radius | 10X Cable Diameter |
| 3) | Pull Tension | 234 Lbs, Maximum |

E. Electrical Properties

- (For Engineering purposes only)
- | | | |
|----|-----------------------|---|
| 1) | Voltage Rating | 600 V _{RMS} |
| 2) | Component 1 | |
| | a) Capacitance | 53 pf/ft @1 kHz, Nominal Conductor to Conductor |
| | b) Ground Capacitance | 95 pf/ft @1 kHz, Nominal |

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- c) Inductance 0.17 μ H/ft, Nominal
- d) Conductor DCR 2.6 Ω /1000ft @20°C, Nominal
- e) OA Shield DCR 1.33 Ω /1000ft @20°C, Nominal
- 3) Component 2
 - a) Mutual Capacitance 46 pf/ft @1 kHz, Nominal
 - b) Ground Capacitance 83 pf/ft @1 kHz, Nominal
 - c) Characteristic Impedance 47 Ω
 - d) Inductance 0.19 μ H/ft, Nominal
 - e) Conductor DCR 6.8 Ω /1000ft @20°C, Nominal
 - f) Component Shield DCR 6.2 Ω /1000ft @20°C, Nominal
 - g) OA Shield DCR 1.33 Ω /1000ft @20°C, Nominal

F. Other

- 1) Packaging Flange x Traverse x Barrel (inches)
 - a) Bulk(Made-to-order)

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

Accepted By:	Date:
Company:	Title:

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