

# ALPHA WIRE

## CUSTOMER PRODUCT SPECIFICATION

**Part Number: B963023**  
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**Issue: 1**  
**Issue Date: 9/8/2010**  
**Effective Date: 11/3/2010**

### A. Construction

### Diameters (mm)

- 1) Component 1 2 X 1 PAIR
- a) Conductor 24 (7/32) AWG TC
- b) Insulation 0.25 Wall, Nom. PVC, Semi Rigid
- (1) Color Code Alpha Wire Color Code B

0.61  
1.12

Pair	Color	Pair	Color	Pair	Color
1	WHITE-BLACK	2	WHITE-BROWN		

- c) Pair 2/Cond Cabled Together
- (1) Twists: 31.5 Twists/meter (min)
- 2) Cable Assembly 2 Components Cabled
- a) Twists: 26.2 Twists/meter (min)
- b) Core Wrap Clear Mylar Tape, 25% Overlap, Min.
- 3) Shield TC BRAID Shield, 85% Coverage, Min.
- a) Drain Wire 24 (7/32) AWG TC
- 4) Jacket 0.81 Wall, Nom., PVC 5.92 (6.25 Max.)
- a) Color(s) GREY
- b) Ripcord 1 End 810 Denier Nylon
- c) Print ALPHA WIRE-\* P/N B963023
- 0.23MM2 (24AWG) (UL) TYPE CM 105C OR AWM 2464
- VW-1 CE ROHS (SEQ METERS)
- \* = Factory Code

### B. Applicable Specifications

- 1) UL
  - a) Component 1 AWM/STYLE 10002 105°C / 300 V<sub>RMS</sub>
  - b) Overall AWM/STYLE 2464 80°C / 300 V<sub>RMS</sub>
  - CM 105°C
  - VW-1
- 2) IEC
  - EN 60332-1 Flame Behavior
  - EN 60332-2 Flame Behavior
- 3) CE: LVD 73/23/EEC Amendment 93/68/EEC

### 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. Consult Alpha Wire's web site for compliance Date of Manufacture.
- 2) REACH Regulation (EC 1907/2006):
 

This product does not contain any of the substances listed on the European Union REACH Substance of Very High Concern (SVHC) candidate list, dated 30 March 2010, in excess of a concentration of 0.1% weight/weight.

### D. Physical & Mechanical Properties

- 1) Temperature Range -30 to 105°C
- 2) Bend Radius 10X Cable Diameter
- 3) Pull Tension 22.2 Lbs, Maximum
- 4) Sunlight Resistance Yes

### E. Electrical Properties

(For Engineering purposes only)

- 1) Voltage Rating 300 V<sub>RMS</sub>
- 2) Mutual Capacitance 91.84 pf/m @1 kHz, Nominal
- 3) Ground Capacitance 164 pf/m @1 kHz, Nominal
- 4) Characteristic Impedance 64 Ω
- 5) Inductance 0.6232 μH/m, Nominal
- 6) Conductor DCR 85.28 Ω/Km @20°C, Nominal

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7) OA Shield DCR 12.464  $\Omega$ /Km @20°C, Nominal

**F. Other**

1) Packaging	Flange x Traverse x Barrel (inches)
a) 3280 FT	24 x 14 x 12 Continuous length
b) 1640 FT	16 x 11 x 8 Continuous length
c) 328 FT	12 x 4.5 x 3.5 Continuous length
d) 164 FT	10 x 4 x 3.5 Continuous length

*[Spool dimensions may vary slightly]*

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