

**ALPHA WIRE**  
**CUSTOMER PRODUCT SPECIFICATION**

**Part Number: B963043**  
**Page 1 of 2 Pages**

**Issue: 1**  
**Issue Date: 9/10/2010**  
**Effective Date: 11/5/2010**

**A. Construction**

**Diameters (mm)**

- |    |                |                                 |      |
|----|----------------|---------------------------------|------|
| 1) | Component 1    | 4 X 1 PAIR                      |      |
|    | a) Conductor   | 24 (7/32) AWG TC                | 0.61 |
|    | b) Insulation  | 0.25 Wall, Nom. PVC, Semi Rigid | 1.12 |
|    | (1) Color Code | Alpha Wire Color Code B         |      |
- 
- | Pair | Color       | Pair | Color        | Pair | Color |
|------|-------------|------|--------------|------|-------|
| 1    | WHITE-BLACK | 3    | WHITE-RED    |      |       |
| 2    | WHITE-BROWN | 4    | WHITE-ORANGE |      |       |
- 
- |    |                |   |                  |
|----|----------------|---|------------------|
| c) | Pair           | 2/Cond Cabled Together                        |                  |
|    | (1) Twists:    | 31.5 Twists/meter (min)                       |                  |
| 2) | Cable Assembly | 4 Components Cabled                           |                  |
|    | a) Twists:     | 19.7 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                          | 6.71 (7.08 Max.) |
|    | a) Color(s)    | GREY  |                  |
|    | b) Ripcord     | 1 End 810 Denier Nylon                        |                  |
|    | c) Print       | ALPHA WIRE-* P/N B963043                      |                  |
|    |                | 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        | 37 Lbs, Maximum    |  |
| 4) | Sunlight Resistance | Yes                |  |

**E. Electrical Properties**

- |                                 |                          |                            |  |
|---------------------------------|--------------------------|----------------------------|--|
| (For Engineering purposes only) |                          |                            |  |
| 1)                              | Voltage Rating           | 300 V <sub>RMS</sub>       |  |
| 2)                              | Mutual Capacitance       | 82 pf/m @1 kHz, Nominal    |  |
| 3)                              | Ground Capacitance       | 147.6 pf/m @1 kHz, Nominal |  |
| 4)                              | Characteristic Impedance | 76 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                      11.48  $\Omega$ /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                              18 x 12 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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