

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

**Part Number: B954402**  
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**Issue: 1**  
**Issue Date: 8/23/2010**  
**Effective Date: 10/18/2010**

**A. Construction**

**Diameters (mm)**

- |                |                                 |      |
|----------------|---------------------------------|------|
| 1) Component 1 | 40 X 1 COND                     |      |
| a) Conductor   | 22 (7/30) AWG TC                | 0.76 |
| b) Insulation  | 0.25 Wall, Nom. PVC, Semi Rigid | 1.27 |
| (1) Color Code | Alpha Wire Color Code E         |      |

Cond	Color	Cond	Color	Cond	Color
1	BLACK	15	WHITE/YELLOW	29	WHITE/BROWN/ORANGE
2	BROWN	16	WHITE/GREEN	30	WHITE/BROWN/YELLOW
3	RED	17	WHITE/BLUE	31	WHITE/BROWN/GREEN
4	ORANGE	18	WHITE/VIOLET	32	WHITE/BROWN/BLUE
5	YELLOW	19	WHITE/SLATE	33	WHITE/BROWN/VIOLET
6	GREEN	20	WHITE/BLACK/BROWN	34	WHITE/BROWN/SLATE
7	BLUE	21	WHITE/BLACK/RED	35	WHITE/RED/ORANGE
8	VIOLET	22	WHITE/BLACK/ORANGE	36	WHITE/RED/YELLOW
9	SLATE	23	WHITE/BLACK/YELLOW	37	WHITE/RED/GREEN
10	WHITE	24	WHITE/BLACK/GREEN	38	WHITE/RED/BLUE
11	WHITE/BLACK	25	WHITE/BLACK/BLUE	39	WHITE/RED/VIOLET
12	WHITE/BROWN	26	WHITE/BLACK/VIOLET	40	WHITE/RED/SLATE
13	WHITE/RED	27	WHITE/BLACK/SLATE		
14	WHITE/ORANGE	28	WHITE/BROWN/RED		

- |                   |   |                    |
|-------------------|---|--------------------|
| 2) Cable Assembly | 40 Components Cabled                          |                    |
| a) Twists:        | 9.3 Twists/meter (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     | 22 (7/30) AWG TC                              |                    |
| 4) Jacket         | 0.81 Wall, Nom.,PVC                           | 11.10 (11.68 Max.) |
| a) Color(s)       | GREY  |                    |
| b) Ripcord        | 1 End 810 Denier Nylon                        |                    |
| c) Print          | ALPHA WIRE-* P/N B954402                      |                    |
|                   | 0.35MM2 (22AWG) (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 225 Lbs, Maximum
- 4) Sunlight Resistance Yes

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- E. Electrical Properties** (For Engineering purposes only)
- 1) Voltage Rating 300 V<sub>RMS</sub>
  - 2) Capacitance 118.08 pf/m @1 kHz, Nominal Conductor to Conductor
  - 3) Ground Capacitance 213.2 pf/m @1 kHz, Nominal
  - 4) Inductance 0.5904  $\mu$ H/m, Nominal
  - 5) Conductor DCR 54.448  $\Omega$ /Km @20°C, Nominal
  - 6) OA Shield DCR 34.112  $\Omega$ /Km @20°C, Nominal
- F. Other**
- 1) Packaging Flange x Traverse x Barrel (inches)
    - a) 3280 FT 36 x 14 x 12 Continuous length
    - b) 1640 FT 30 x 14 x 12 Continuous length
    - c) 328 FT 16 x 11 x 8 Continuous length
    - d) 164 FT 12 x 10 x 5 Continuous length
- [Spool dimensions may vary slightly]*

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