

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

Part Number: 6398

Issue: 3

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Issue Date: 5/26/2005

Effective Date: 8/1/2005

**A. Construction**

Diameters

- |                |                                    |       |
|----------------|------------------------------------|-------|
| 1) Component 1 | 18 X 1 PAIR                        |       |
| a) Conductor   | 28 (7/36) AWG TC                   |       |
| b) Insulation  | 0.010" Wall, Nom. Polyethylene(PE) | 0.035 |
| (1) Color Code | Alpha Wire Color Code K            |       |

Pair	Color	Pair	Color	Pair	Color
1	BLACK-RED	7	BLACK-ORANGE	13	RED-ORANGE
2	BLACK-WHITE	8	RED-WHITE	14	GREEN-WHITE
3	BLACK-GREEN	9	RED-GREEN	15	GREEN-BLUE
4	BLACK-BLUE	10	RED-BLUE	16	GREEN-YELLOW
5	BLACK-YELLOW	11	RED-YELLOW	17	GREEN-BROWN
6	BLACK-BROWN	12	RED-BROWN	18	GREEN-ORANGE

- |                   |   |                    |
|-------------------|---|--------------------|
| c) Pair           | 2/Cond Cabled Together  |                    |
| (1) Twists:       | 12.0 Twists/foot (min)  |                    |
| 2) Cable Assembly | 18 Components Cabled  |                    |
| a) Twists:        | 2.8 Twists/foot (min)   |                    |
| 3) Shield:        | Alum/Mylar Tape, 25% Overlap, Min.  |                    |
| a) Foil Direction | Foil Facing Out   |                    |
| b) Drain Wire     | 28 (7/36) AWG TC  |                    |
| c) Braid          | TC,90% Coverage, Min.   |                    |
| 4) Jacket         | 0.035" Wall, Nom.,PVC   | 0.383 (0.407 Max.) |
| a) Color(s)       | GRAY  |                    |
| b) Print          | ALPHA WIRE-* P/N 6398 18PR 28 AWG<br>SHIELDED 75C (UL) TYPE CL2 OR AWM 2960<br>LLXXXXXX CSA TYPE CMH FT1 ROHS<br>* = Factory Code |                    |

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

**B. Industry Approvals**

- |                                   |               |            |
|-----------------------------------|---------------|------------|
| 1) UL                             | AWM/STYLE2960 | 60°C / 30V |
|                                   | CL2           | 75°C       |
|                                   | VW-1          |            |
| 2) CSA International              | CMH           | 60°C       |
|                                   | FT1           |            |
| 3) 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.

- 4) California Proposition 65: The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

**C. Physical & Mechanical Properties**

- |                      |                    |
|----------------------|--------------------|
| 1) Temperature Range | -20 to 75°C        |
| 2) Bend Radius       | 10X Cable Diameter |
| 3) Pull Tension      | 60 Lbs, Maximum    |

**D. Electrical Properties**

(For Engineering purposes only)

- |                             |                            |
|-----------------------------|----------------------------|
| 1) Voltage Rating           | 300 V <sub>RMS</sub>       |
| 2) Characteristic Impedance | 100 Ω                      |
| 3) Mutual Capacitance       | 15.5 pf/ft @1 kHz, Nominal |
| 4) Ground Capacitance       | 27.5 pf/ft @1 kHz, Nominal |
| 5) Conductor DCR            | 66 Ω/1000ft @20°C, Nominal |

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6) OA Shield DCR                      2.3  $\Omega$ /1000ft @20°C, Nominal

**E. Other**

- 1) Packaging
  - a) 1000 FT
  - b) 500 FT
  - c) 100 FT

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