

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

Part Number: 58909

Issue: 5

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Issue Date: 4/18/2005

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**A. Construction**

Diameters

- |                |                               |       |
|----------------|-------------------------------|-------|
| 1) Component 1 | 9 X 1 PAIR                    |       |
| a) Conductor   | 24 (7/32) AWG TC              |       |
| b) Insulation  | 0.012" Wall, Nom. Teflon(FEP) | 0.048 |
| (1) Color Code | Alpha Wire Color Code N       |       |

Pair	Color	Pair	Color	Pair	Color
1	BLACK-YELLOW	4	ORANGE-GREEN	7	RED/WHITE-WHITE/RED
2	RED-VIOLET	5	BLACK/WHITE-WHITE/BLACK	8	ORANGE/WHITE-WHITE/ORANGE
3	BLUE-BROWN	6	BROWN/WHITE-WHITE/BROWN	9	YELLOW/WHITE-WHITE/YELLOW

- |                   |                                                                                                                             |                    |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------|
| c) Pair           | 2/Cond Cabled Together                                                                                                      |                    |
| (1) Twists:       | 9.6 Twists/foot (min)                                                                                                       |                    |
| 2) Cable Assembly | 9 Components Cabled                                                                                                         |                    |
| a) Twists:        | 2.8 Twists/foot (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     | 24 (7/32) AWG TC                                                                                                            |                    |
| 4) Jacket         | 0.011" Wall, Nom.,PVDF                                                                                                      | 0.315 (0.332 Max.) |
| a) Color(s)       | GRAY                                                                                                                        |                    |
| b) Print          | ALPHA WIRE-* P/N 58909 9PR 24 AWG<br>SHIELDED 125C (UL) TYPE CL2P ---<br>LLXXXXXX CSA TYPE CMP FT6 ROHS<br>* = Factory Code |                    |

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

**B. Industry Approvals**

- |                                   |      |       |
|-----------------------------------|------|-------|
| 1) UL                             | CL2P | 125°C |
| 2) CSA International              | CMP  | 125°C |
|                                   | FT6  |       |
| 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 | -55 to 125°C       |
| 2) Bend Radius       | 10X Cable Diameter |
| 3) Pull Tension      | 67 Lbs, Maximum    |

**D. Electrical Properties**

(For Engineering purposes only)

- |                             |                            |
|-----------------------------|----------------------------|
| 1) Voltage Rating           | 150 V <sub>RMS</sub>       |
| 2) Characteristic Impedance | 110 Ω                      |
| 3) Mutual Capacitance       | 12.5 pf/ft @1 kHz, Nominal |
| 4) Ground Capacitance       | 23 pf/ft @1 kHz, Nominal   |

**E. Other**

- |              |  |
|--------------|--|
| 1) Packaging |  |
| a) 1000 FT   |  |
| b) 500 FT    |  |

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