

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

**Part Number: 58431**  
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**Issue: 5**  
**Issue Date: 5/26/2005**  
**Effective Date: 8/1/2005**

**A. Construction**

**Diameters**

- |    |                |                                     |       |
|----|----------------|-------------------------------------|-------|
| 1) | Component 1    | 2 X 1 COND                          |       |
|    | a) Conductor   | 18 (7/.0152) AWG BC                 |       |
|    | b) Insulation  | 0.009" Wall, Nom. PVC, Plenum Rated | 0.064 |
|    | (1) Color Code | Alpha Wire Color Code D2            |       |

Cond	Color	Cond	Color	Cond	Color
1	BLACK	2	WHITE		

- |    |                   |  |                    |
|----|-------------------|--|--------------------|
| 2) | Cable Assembly    | 2 Components Cabled  |                    |
|    | a) Twists:        | 4.8 Twists/foot (min)  |                    |
| 3) | Shield:           | Alum/Mylar Tape, 25% Overlap, Min.   |                    |
|    | a) Foil Direction | Foil Facing Out  |                    |
|    | b) Drain Wire     | 22 (7/30) AWG TC   |                    |
| 4) | Jacket            | 0.015" Wall, Nom., PVC, Plenum Rated   | 0.162 (0.170 Max.) |
|    | a) Color(s)       | GRAY   |                    |
|    | b) Print          | ALPHA WIRE-* P/N 58431 2/C 18 AWG<br>SHIELDED (UL) TYPE CL2P --- LLXXXXXX CSA TYPE CMP<br>FT6 ROHS |                    |

\* = Factory Code

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

**B. Industry Approvals**

- |    |                                |  |      |
|----|--------------------------------|--|------|
| 1) | UL                             | CL2P   | 60°C |
| 2) | CSA International              | CMP<br>FT6   | 60°C |
| 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 60°C        |
| 2) | Bend Radius       | 10X Cable Diameter |
| 3) | Pull Tension      | 31 Lbs, Maximum    |

**D. Electrical Properties**

(For Engineering purposes only)

- |    |                          |   |
|----|--------------------------|---|
| 1) | Voltage Rating           | 150 V <sub>RMS</sub>                            |
| 2) | Capacitance              | 67 pf/ft @1 kHz, Nominal Conductor to Conductor |
| 3) | Ground Capacitance       | 121 pf/ft @1 kHz, Nominal                       |
| 4) | Characteristic Impedance | 32 Ω  |
| 5) | Inductance               | 0.15 μH/ft, Nominal                             |
| 6) | Conductor DCR            | 6.6 Ω/1000ft @20°C, Nominal                     |
| 7) | OA Shield DCR            | 11.7 Ω/1000ft @20°C, Nominal                    |

**E. Other**

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

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