

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

**Part Number: 58416**  
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**Issue: 8**  
**Issue Date: 1/30/2009**  
**Effective Date: 2/6/2009**

**A. Construction**

**Diameters (In)**

- 1) Component 1                      6 X 1 PAIR
- a) Conductor                    22 (7/30) AWG BC
- b) Insulation                    0.008" Wall, Nom. PVC, Plenum Rated                      0.046
- (1) Color Code              Alpha Wire Company Color Code A1

Pair	Color	Pair	Color	Pair	Color
1	BLACK-RED	3	BLACK-GREEN	5	BLACK-YELLOW
2	BLACK-WHITE	4	BLACK-BLUE	6	BLACK-BROWN

- c) Pair                            2/Cond Cabled Together
- (1) Twists:                    8.0 Twists/foot (min)
- 2) Cable Assembly                    6 Components Cabled
- a) Twists:                        3.7 Twists/foot (min)
- 3) Shield:                            Alum/Mylar Tape, 25% Overlap, Min.
- a) Foil Direction                Foil Facing Out
- b) Drain Wire                    24 (7/32) AWG TC
- 4) Jacket                            0.015" Wall, Nom.,PVC, Plenum Rated                      0.261 (0.275 Max.)
- a) Color(s)                        SLATE
- b) Print                            ALPHA WIRE-\* P/N 58416 6PR 22 AWG  
SHIELDED 75C CMP(UL) C(UL) OR 75C (UL) CL2P ROHS  
\* = Factory Code

**B. Industry Approvals**

- 1) UL                                  CMP                                  75°C  
    CL2P                                 75°C
- 2) CSA International                FT6  
    C(UL) TYPE CMP                75°C
- 3) Other                                REACH Regulation (EC 1907/2006)
- 4) 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.
- 5) 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                      69 Lbs, Maximum

**D. Electrical Properties**

- (For Engineering purposes only)
- 1) Voltage Rating                    300 V<sub>RMS</sub>
- 2) Mutual Capacitance              34 pf/ft @1 kHz, Nominal
- 3) Ground Capacitance              61 pf/ft @1 kHz, Nominal
- 4) Characteristic Impedance        63 Ω
- 5) Inductance                        0.17 μH/ft, Nominal
- 6) Conductor DCR                    15.4 Ω/1000ft @20°C, Nominal
- 7) OA Shield DCR                    15.9 Ω/1000ft @20°C, Nominal

**E. Other**

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

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