

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

Part Number: 6406  
Page 1 of 2 Pages

Issue: 3  
Issue Date: 5/26/2005  
Effective Date: 8/1/2005

**A. Construction**

Diameters

- 1) Component 1                    7 X 1 PAIR
  - a) Conductor                    24 (7/32) AWG TC
  - b) Insulation                    0.016" Wall, Nom. Polyethylene(PE)                    0.056
  - (1) Color Code                Alpha Wire Color Code M

Pair	Color	Pair	Color	Pair	Color
1	BLUE/WHITE - WHITE/BLUE	4	BROWN/WHITE - WHITE/BROWN	7	ORANGE/RED - RED/ORANGE
2	ORANGE/WHITE - WHITE/ORANGE	5	SLATE/WHITE - WHITE/SLATE		
3	GREEN/WHITE - WHITE/GREEN	6	BLUE/RED - RED/BLUE		

- c) Pair                            2/Cond Cabled Together
  - (1) Twists:                    8.0 Twists/foot (min)
- 2) Cable Assembly                7 Components Cabled
  - a) Twists:                        3.0 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
  - c) Braid                         TC,65% Coverage, Min.
- 4) Jacket                         0.035" Wall, Nom.,PVC                    0.373 (0.391 Max.)
  - a) Color(s)                        GRAY
  - b) Print                            ALPHA WIRE-\* P/N 6406 7PR 24 AWG

SHIELDED 75C (UL) TYPE CM OR AWM 2919 LOW VOLTAGE  
COMPUTER CABLE --- LLXXXXXX CSA TYPE CMH FT1  
ROHS

\* = Factory Code

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

**B. Industry Approvals**

- 1) UL                                AWM/STYLE2919                    80°C / 30V  
    CM                                        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 80°C
- 2) Bend Radius                    10X Cable Diameter
- 3) Pull Tension                    58 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                26 Ω/1000ft @20°C, Nominal
- 6) OA Shield DCR                3.1 Ω/1000ft @20°C, Nominal

Although Alpha Wire Company ("Alpha") makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.  
Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Alpha has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

---

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

---

Part Number: 6406  
Page 2 of 2 Pages

Issue: 3  
Issue Date: 5/26/2005  
Effective Date: 8/1/2005

---

**E. Other**

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

Although Alpha Wire Company ("Alpha") makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Alpha has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.