

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

Part Number: 6304  
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Issue: 3  
Issue Date: 5/26/2005  
Effective Date: 8/1/2005

**A. Construction**

Diameters

- 1) Component 1                    12 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	5	SLATE/WHITE - WHITE/SLATE	9	BROWN/RED - RED/BROWN
2	ORANGE/WHITE - WHITE/ORANGE	6	BLUE/RED - RED/BLUE	10	SLATE/RED - RED/SLATE
3	GREEN/WHITE - WHITE/GREEN	7	ORANGE/RED - RED/ORANGE	11	BLUE/BLACK - BLACK/BLUE
4	BROWN/WHITE - WHITE/BROWN	8	GREEN/RED - RED/GREEN	12	ORANGE/BLACK - BLACK/ORANGE

- c) Pair                            2/Cond Cabled Together  
         (1) Twists:                2 - 6 Twists/foot (approx.)
- 2) Component 2                    1 X 1 COND  
     a) Conductor                24 (7/32) AWG TC  
     b) Insulation                0.016" Wall, Nom. Polyethylene(PE)                    0.056  
         (1) Color(s)

Cond	Color	Cond	Color	Cond	Color
1	GREEN/BLACK				

- 3) Cable Assembly                13 Components Cabled  
     a) Twists:                    2.2 Twists/foot (min)
- 4) Shield:                        Alum/Mylar Tape, 25% Overlap, Min.  
     a) Foil Direction            Foil Facing Out  
     b) Drain Wire                24 (7/32) AWG TC
- 5) Jacket                         0.035" Wall, Nom.,PVC                                    0.455 (0.477 Max.)  
     a) Color(s)                    GRAY  
     b) Print                        ALPHA WIRE-\* P/N 6304 12PR 24 AWG 1/C 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                91 Lbs, Maximum

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**D. Electrical Properties** (For Engineering purposes only)

- 1) Voltage Rating 300 V<sub>RMS</sub>
- 2) Component 1
  - a) Mutual Capacitance 12.8 pf/ft @1 kHz, Nominal
  - b) Ground Capacitance 23 pf/ft @1 kHz, Nominal
  - c) Characteristic Impedance 120 Ω
  - d) Inductance 0.22 μH/ft, Nominal
  - e) Conductor DCR 26 Ω/1000ft @20°C, Nominal
  - f) OA Shield DCR 11.5 Ω/1000ft @20°C, Nominal
- 2) Component 2
  - a) Ground Capacitance 43 pf/ft @1 kHz, Nominal
  - b) Inductance 0.07 μH/ft, Nominal
  - c) Conductor DCR 26 Ω/1000ft @20°C, Nominal
  - d) OA Shield DCR 11.6 Ω/1000ft @20°C, Nominal

**E. Other**

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

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