

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

Part Number: 6411  
Page 1 of 2 Pages

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

**A. Construction**

**Diameters**

- |                |                                    |       |
|----------------|------------------------------------|-------|
| 1) Component 1 | 25 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	10	SLATE/RED - RED/SLATE	19	BROWN/YELLOW - YELLOW/BROWN
2	ORANGE/WHITE - WHITE/ORANGE	11	BLUE/BLACK - BLACK/BLUE	20	SLATE/YELLOW - YELLOW/SLATE
3	GREEN/WHITE - WHITE/GREEN	12	ORANGE/BLACK - BLACK/ORANGE	21	BLUE/VIOLET - VIOLET/BLUE
4	BROWN/WHITE - WHITE/BROWN	13	GREEN/BLACK - BLACK/GREEN	22	ORANGE/VIOLET - VIOLET/ORANGE
5	SLATE/WHITE - WHITE/SLATE	14	BROWN/BLACK - BLACK/BROWN	23	GREEN/VIOLET - VIOLET/GREEN
6	BLUE/RED - RED/BLUE	15	SLATE/BLACK - BLACK/SLATE	24	BROWN/VIOLET - VIOLET/BROWN
7	ORANGE/RED - RED/ORANGE	16	BLUE/YELLOW - YELLOW/BLUE	25	SLATE/VIOLET - VIOLET/SLATE
8	GREEN/RED - RED/GREEN	17	ORANGE/YELLOW - YELLOW/ORANGE		
9	BROWN/RED - RED/BROWN	18	GREEN/YELLOW - YELLOW/GREEN		

- |                   |  |                    |
|-------------------|--|--------------------|
| c) Pair           | 2/Cond Cabled Together   |                    |
| (1) Twists:       | 8.0 Twists/foot (min)  |                    |
| 2) Cable Assembly | 25 Components Cabled   |                    |
| a) Twists:        | 1.5 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         | 0.047" Wall, Nom.,PVC  | 0.671 (0.701 Max.) |
| a) Color(s)       | GRAY   |                    |
| b) Print          | ALPHA WIRE-* P/N 6411 25PR 24 AWG<br>SHIELDED 75C (UL) TYPE CM OR AWM 2919 LOW VOLTAGE<br>COMPUTER CABLE --- LLXXXXXX CSA TYPE CMH FT1<br>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      | 188 Lbs, Maximum   |

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

- |                             |                      |
|-----------------------------|----------------------|
| 1) Voltage Rating           | 300 V <sub>RMS</sub> |
| 2) Characteristic Impedance | 100 Ω                |

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**Page 2 of 2 Pages**

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- 3) Mutual Capacitance      15.5 pf/ft @1 kHz, Nominal
- 4) Ground Capacitance    27.5 pf/ft @1 kHz, Nominal
- 5) Conductor DCR          26  $\Omega$ /1000ft @20°C, Nominal
- 6) OA Shield DCR          2.2  $\Omega$ /1000ft @20°C, Nominal

**E. Other**

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

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