

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

Part Number: 5271C  
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Issue: 5  
Issue Date: 5/16/2005  
Effective Date: 8/1/2005

**A. Construction**

Diameters

- |                |                                   |       |
|----------------|-----------------------------------|-------|
| 1) Component 1 | 1 X 1 PAIR                        |       |
| a) Conductor   | 24 (7/32) AWG TC                  |       |
| b) Insulation  | 0.010" Wall, Nom. PVC, Semi Rigid | 0.044 |
| (1) Color Code | Alpha Wire Color Code B           |       |

Pair	Color	Pair	Color	Pair	Color
1	WHITE-BLACK				

- |               |   |                    |
|---------------|---|--------------------|
| c) Pair       | 2/Cond Cabled Together                      |                    |
| (1) Twists:   | 9.6 Twists/foot (min)                       |                    |
| 2) Core Wrap  | 0.0010" Clear Mylar Tape, 25% Overlap, Min. |                    |
| 3) Shield:    | A/P/A Tape, 25% Overlap, Min.               |                    |
| a) Drain Wire | 24 (7/32) AWG TC                            |                    |
| b) Braid      | TC, 70% Coverage, Min.                      |                    |
| 4) Jacket     | 0.032" Wall, Nom., PVC                      | 0.183 (0.193 Max.) |
| a) Color(s)   | Gray, Black                                 |                    |
| b) Ripcord    | 1 End 810 Denier Nylon                      |                    |
| c) Print      | ALPHA WIRE-* P/N 5271C 1PR 24 AWG           |                    |

XTRA GUARD 1 SHIELDED 75C (UL) TYPE CM OR AWM 2464  
-- LLXXXXXX CSA TYPE CMG FT4 CE ROHS

\* = Factory Code

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

**B. Industry Approvals**

- |                                   |                |              |
|-----------------------------------|----------------|--------------|
| 1) UL                             |                |              |
| a) Component 1                    | AWM/STYLE10002 | 105°C / 300V |
| b) Overall                        | AWM/STYLE2464  | 80°C / 300V  |
|                                   | CM             | 75°C         |
|                                   | VW-1           |              |
| 2) CSA International              | CMG            | 60°C         |
|                                   | FT4            |              |
| 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. |  |
| 5) CE:                        | LVD 73/23/EEC Amendment 93/68/EEC  |  |

**C. Physical & Mechanical Properties**

- |                      |                    |
|----------------------|--------------------|
| 1) Temperature Range | -20 to 80°C        |
| 2) Bend Radius       | 10X Cable Diameter |
| 3) Pull Tension      | 12.5 Lbs, Maximum  |

**D. Electrical Properties**

(For Engineering purposes only)

- |                             |                            |
|-----------------------------|----------------------------|
| 1) Voltage Rating           | 300 V <sub>RMS</sub>       |
| 2) Mutual Capacitance       | 35 pf/ft @1 kHz, Nominal   |
| 3) Ground Capacitance       | 63 pf/ft @1 kHz, Nominal   |
| 4) Characteristic Impedance | 54 Ω                       |
| 5) Inductance               | 0.19 μH/ft, Nominal        |
| 6) Conductor DCR            | 25 Ω/1000ft @20°C, Nominal |

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7) OA Shield DCR                      6.6  $\Omega$ /1000ft @20°C, Nominal

**E. Other**

- 1) Packaging
  - a) 1000 FT
  - b) 500 FT
  - c) 100 FT
  - d) Bulk(Made-to-order)

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