

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

**Part Number: 5478C**  
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**Issue: 5**  
**Issue Date: 5/23/2005**  
**Effective Date: 8/1/2005**

**A. Construction**

**Diameters (In)**

- 1) Component 1 8 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 Company Color Code K

Pair	Color	Pair	Color	Pair	Color
1	BLACK-RED	4	BLACK-BLUE	7	BLACK-ORANGE
2	BLACK-WHITE	5	BLACK-YELLOW	8	RED-WHITE
3	BLACK-GREEN	6	BLACK-BROWN		

- c) Pair 2/Cond Cabled Together
  - (1) Twists: 9.6 Twists/foot (min)
- 2) Cable Assembly 8 Components Cabled
  - a) Twists: 3.4 Twists/foot (min)
- 3) Shield: Alum/Mylar Tape, 25% Overlap, Min.
  - a) Foil Direction Foil Facing In
  - b) Drain Wire 24 (7/32) AWG TC
- 4) Jacket 0.035" Wall, Nom.,PVC 0.316 (0.334 Max.)
  - a) Color(s) SLATE
  - b) Print ALPHA WIRE-\* P/N 5478C 8PR 24 AWG  
SHIELDED 75C (UL) TYPE CM OR AWM 2464 --- LLXXXXXX  
CSA TYPE CMG FT4 ROHS  
\* = Factory Code

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

**B. Industry Approvals**

- 1) UL AWM/STYLE 2464 80°C / 300 V<sub>RMS</sub>  
CM 75°C
- 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.

**C. Physical & Mechanical Properties**

- 1) Temperature Range -20 to 80°C
- 2) Bend Radius 10X Cable Diameter
- 3) Pull Tension 60 Lbs, Maximum

**D. Electrical Properties**

(For Engineering purposes only)

- 1) Voltage Rating 300 V<sub>RMS</sub>
- 2) Mutual Capacitance 23.1 pf/ft @1 kHz, Nominal
- 3) Ground Capacitance 42 pf/ft @1 kHz, Nominal
- 4) Characteristic Impedance 82 Ω
- 5) Inductance 0.19 μH/ft, Nominal
- 6) Conductor DCR 26 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
  - c) 100 FT
  - d) Bulk(Made-to-order)

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