

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

**Part Number: 5478C**  
**Page 1 of 2 Pages**

**Issue: 5**  
**Issue Date: 5/23/2005**  
**Effective Date: 8/1/2005**

**A. Construction**

**Diameters**

- |                |                                   |       |
|----------------|-----------------------------------|-------|
| 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 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  | 0.314 (0.332 Max.) |
| a) Color(s)       | GRAY   |                    |
| b) Print          | ALPHA WIRE-* P/N 5478C 8PR 24 AWG<br>SHIELDED 75C (UL) TYPE CM OR AWM 2464 --- LLXXXXXX<br>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/STYLE2464 | 80°C / 300V |
|                                   | 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

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.

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

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