

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

**Part Number: 5168C**  
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**Issue: 10**  
**Issue Date: 1/29/2008**  
**Effective Date: 3/1/2008**

**A. Construction**

**Diameters**

- |                |                         |       |
|----------------|-------------------------|-------|
| 1) Component 1 | 8 X 1 COND              |       |
| a) Conductor   | 18 (16/30) AWG TC       |       |
| b) Insulation  | 0.016" Wall, Nom. PVC   | 0.079 |
| (1) Color Code | Alpha Wire Color Code D |       |

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

- |                   |  |                    |
|-------------------|--|--------------------|
| 2) Cable Assembly | 8 Components Cabled  |                    |
| a) Twists:        | 4.0 Twists/foot (min)  |                    |
| b) Core Wrap      | Nonwoven Polyester Tape, 25% Overlap, Min.   |                    |
| 3) Shield:        | A/P/A Tape, 25% Overlap, Min.  |                    |
| a) Drain Wire     | 18 (16/30) AWG TC  |                    |
| b) Braid          | TC, 70% Coverage, Min.   |                    |
| 4) Jacket         | 0.032" Wall, Nom., PVC   | 0.360 (0.374 Max.) |
| a) Color(s)       | Gray, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White   |                    |
| b) Ripcord        | 1 End 810 Denier Nylon   |                    |
| c) Print          | ALPHA WIRE-* P/N 5168C 8C 18 AWG<br>XTRAGUARD 1 XTREME PERFORMANCE FOR XTREME<br>ENVIRONMENTS - SHIELDED 105C (UL) TYPE CM OR AWM<br>2464 VW-1 --- LLXXXXXX CSA 105C TYPE CMG FT4<br>CE ROHS <SEQ FOOTAGE><br>* = 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/STYLE1569 | 105°C / 300V |
| b) Overall                        | AWM/STYLE2464 | 80°C / 300V  |
|                                   | CM            | 105°C        |
|                                   | VW-1          |              |
| 2) CSA International              | CMG           | 105°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 105°C       |
| 2) Bend Radius         | 10X Cable Diameter |
| 3) Pull Tension        | 118 Lbs, Maximum   |
| 4) Sunlight Resistance | Yes                |

**D. Electrical Properties**

(For Engineering purposes only)

- |                       |   |
|-----------------------|---|
| 1) Voltage Rating     | 300 V <sub>RMS</sub>                            |
| 2) Capacitance        | 51 pf/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Ground Capacitance | 92 pf/ft @1 kHz, Nominal                        |
| 4) Inductance         | 0.18 µH/ft, Nominal                             |
| 5) Conductor DCR      | 7.2 Ω/1000ft @20°C, Nominal                     |
| 6) OA Shield DCR      | 2.32 Ω/1000ft @20°C, Nominal                    |

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**E. Other**

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

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