

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

**Part Number: 5160/40C**  
**Page 1 of 2 Pages**

**Issue: 10**  
**Issue Date: 1/29/2008**  
**Effective Date: 3/1/2008**

**A. Construction**

**Diameters**

- |                |                         |       |
|----------------|-------------------------|-------|
| 1) Component 1 | 40 X 1 COND             |       |
| a) Conductor   | 20 (7/28) AWG TC        |       |
| b) Insulation  | 0.016" Wall, Nom. PVC   | 0.070 |
| (1) Color Code | Alpha Wire Color Code D |       |

Cond	Color	Cond	Color	Cond	Color
1	BLACK	15	RED/BLACK	29	WHITE/BLACK/BROWN
2	RED	16	WHITE/BLACK	30	WHITE/BLACK/ORANGE
3	WHITE	17	WHITE/RED	31	WHITE/BLACK/GRAY
4	GREEN	18	WHITE/GREEN	32	WHITE/BLACK/VIOLET
5	ORANGE	19	WHITE/YELLOW	33	WHITE/BLACK/BLACK
6	BLUE	20	WHITE/BLUE	34	WHITE/RED/BLACK
7	BROWN	21	WHITE/BROWN	35	WHITE/RED/RED
8	YELLOW	22	WHITE/ORANGE	36	WHITE/RED/GREEN
9	VIOLET	23	WHITE/GRAY	37	WHITE/RED/BLUE
10	GRAY	24	WHITE/VIOLET	38	WHITE/RED/BROWN
11	PINK	25	WHITE/BLACK/RED	39	WHITE/RED/VIOLET
12	TAN	26	WHITE/BLACK/GREEN	40	WHITE/GREEN/BLACK
13	RED/GREEN	27	WHITE/BLACK/YELLOW		
14	RED/YELLOW	28	WHITE/BLACK/BLUE		

- |                   |  |                    |
|-------------------|--|--------------------|
| 2) Cable Assembly | 40 Components Cabled   |                    |
| a) Twists:        | 2.0 Twists/foot (min)  |                    |
| b) Core Wrap      | Nonwoven Polyester Tape, 25% Overlap, Min.   |                    |
| 3) Shield:        | A/P/A Tape, 25% Overlap, Min.  |                    |
| a) Drain Wire     | 20 (7/28) AWG TC   |                    |
| b) Braid          | TC, 70% Coverage, Min.   |                    |
| 4) Jacket         | 0.053" Wall, Nom., PVC   | 0.656 (0.683 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 5160/40C 40C 20 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        | 373 Lbs, Maximum   |
| 4) Sunlight Resistance | Yes                |

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- D. Electrical Properties** (For Engineering purposes only)
- 1) Voltage Rating 300 V<sub>RMS</sub>
  - 2) Capacitance 44 pf/ft @1 kHz, Nominal Conductor to Conductor
  - 3) Ground Capacitance 79 pf/ft @1 kHz, Nominal
  - 4) Inductance 0.19 μH/ft, Nominal
  - 5) Conductor DCR 10.4 Ω/1000ft @20°C, Nominal
  - 6) OA Shield DCR 1.14 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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