

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

**Part Number: 5120/50C**  
**Page 1 of 1 Pages**

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

**A. Construction**

**Diameters (In)**

- |                |                                   |       |
|----------------|-----------------------------------|-------|
| 1) Component 1 | 50 X 1 COND                       |       |
| 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 E   |       |

Cond	Color	Cond	Color	Cond	Color
1	BLACK	18	WHITE/VIOLET	35	WHITE/RED/ORANGE
2	BROWN	19	WHITE/SLATE	36	WHITE/RED/YELLOW
3	RED	20	WHITE/BLACK/BROWN	37	WHITE/RED/GREEN
4	ORANGE	21	WHITE/BLACK/RED	38	WHITE/RED/BLUE
5	YELLOW	22	WHITE/BLACK/ORANGE	39	WHITE/RED/VIOLET
6	GREEN	23	WHITE/BLACK/YELLOW	40	WHITE/RED/SLATE
7	BLUE	24	WHITE/BLACK/GREEN	41	WHITE/ORANGE/YELLOW
8	VIOLET	25	WHITE/BLACK/BLUE	42	WHITE/ORANGE/GREEN
9	SLATE	26	WHITE/BLACK/VIOLET	43	WHITE/ORANGE/BLUE
10	WHITE	27	WHITE/BLACK/SLATE	44	WHITE/ORANGE/VIOLET
11	WHITE/BLACK	28	WHITE/BROWN/RED	45	WHITE/ORANGE/SLATE
12	WHITE/BROWN	29	WHITE/BROWN/ORANGE	46	WHITE/YELLOW/GREEN
13	WHITE/RED	30	WHITE/BROWN/YELLOW	47	WHITE/YELLOW/BLUE
14	WHITE/ORANGE	31	WHITE/BROWN/GREEN	48	WHITE/YELLOW/VIOLET
15	WHITE/YELLOW	32	WHITE/BROWN/BLUE	49	WHITE/YELLOW/SLATE
16	WHITE/GREEN	33	WHITE/BROWN/VIOLET	50	WHITE/GREEN/BLUE
17	WHITE/BLUE	34	WHITE/BROWN/SLATE		

- |                   |   |                    |
|-------------------|---|--------------------|
| 2) Cable Assembly | 50 Components Cabled  |                    |
| a) Twists:        | 2.8 Twists/foot (min)   |                    |
| b) Core Wrap      | Nonwoven Polyester 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  | 0.457 (0.482 Max.) |
| a) Color(s)       | Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White |                    |
| b) Ripcord        | 1 End 810 Denier Nylon  |                    |
| c) Print          | ALPHA WIRE-* P/N 5120/50C 50C 24 AWG                              |                    |

XTRAGUARD 1 XTREME PERFORMANCE FOR XTREME ENVIRONMENTS - SHIELDED 105C (UL) TYPE CM OR AWM 2464 VW-1 --- LLXXXXXX CSA 105C TYPE CMG FT4  
CE ROHS <SEQ FOOTAGE>

\* = 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/STYLE 10002 | 105°C / 300 VRMS |
| b) Overall                        | AWM/STYLE 2464  | 80°C / 300 VRMS  |
|                                   | 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  |

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**C. Physical & Mechanical Properties**

- 1) Temperature Range -20 to 105°C
- 2) Bend Radius 10X Cable Diameter
- 3) Pull Tension 186 Lbs, Maximum
- 4) Sunlight Resistance Yes

**D. Electrical Properties**

(For Engineering purposes only)

- 1) Voltage Rating 300 VRMS
- 2) Capacitance 32 pf/ft @1 kHz, Nominal Conductor to Conductor
- 3) Ground Capacitance 58 pf/ft @1 kHz, Nominal
- 4) Inductance 0.19  $\mu$ H/ft, Nominal
- 5) Conductor DCR 26  $\Omega$ /1000ft @20°C, Nominal
- 6) OA Shield DCR 2.7  $\Omega$ /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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