

# ALPHA WIRE COMPANY

## CUSTOMER PRODUCT SPECIFICATION

**Part Number: 5170/20C**  
**Page 1 of 1 Pages**

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

### A. Construction

### Diameters (In)

- |                |                                 |       |
|----------------|---------------------------------|-------|
| 1) Component 1 | 20 X 1 COND                     |       |
| a) Conductor   | 18 (16/30) AWG TC               |       |
| b) Insulation  | 0.016" Wall, Nom. PVC           | 0.079 |
| (1) Color Code | Alpha Wire Company Color Code D |       |

Cond	Color	Cond	Color	Cond	Color
1	BLACK	8	YELLOW	15	RED/BLACK
2	RED	9	VIOLET	16	WHITE/BLACK
3	WHITE	10	SLATE	17	WHITE/RED
4	GREEN	11	PINK	18	WHITE/GREEN
5	ORANGE	12	TAN	19	WHITE/YELLOW
6	BLUE	13	RED/GREEN	20	WHITE/BLUE
7	BROWN	14	RED/YELLOW		

- |                   |   |                    |
|-------------------|---|--------------------|
| 2) Cable Assembly | 20 Components Cabled  |                    |
| a) Twists:        | 2.4 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  | 0.512 (0.532 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 5170/20C 20C 18 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 1569 | 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  |

### C. Physical & Mechanical Properties

- |                        |                    |
|------------------------|--------------------|
| 1) Temperature Range   | -20 to 105°C       |
| 2) Bend Radius         | 10X Cable Diameter |
| 3) Pull Tension        | 273 Lbs, Maximum   |
| 4) Sunlight Resistance | Yes                |

### D. Electrical Properties

(For Engineering purposes only)

- |                   |          |
|-------------------|----------|
| 1) Voltage Rating | 300 VRMS |
|-------------------|----------|

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- |                       |   |
|-----------------------|---|
| 2) Capacitance        | 51 pf/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Ground Capacitance | 92 pf/ft @1 kHz, Nominal                        |
| 4) Inductance         | 0.18 $\mu$ H/ft, Nominal                        |
| 5) Conductor DCR      | 7.3 $\Omega$ /1000ft @20°C, Nominal             |
| 6) OA Shield DCR      | 1.55 $\Omega$ /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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