

**ALPHA WIRE COMPANY  
CUSTOMER PRODUCT SPECIFICATION**

**Part Number: 5420/7**  
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**Issue: 12**  
**Issue Date: 6/12/2008**  
**Effective Date: 7/1/2008**

**A. Construction**

**Diameters (In)**

- 1) Component 1 7 X 1 COND
  - a) Conductor 20 (10/30) AWG TC
  - b) Insulation 0.0325" Wall, Nom. PVC
  - (1) Color Code Alpha Wire Company Color Code E
  
- 2) Cable Assembly 7 Components Cabled
  - a) Twists: 3.4 Twists/foot (min)
  - b) Core Wrap Nonwoven Polyester Tape, 25% Overlap, Min.
- 3) Shield: Alum/Mylar Tape, 25% Overlap, Min.
  - a) Foil Direction Foil Facing In
  - b) Drain Wire 20 (7/28) AWG TC
- 4) Jacket 0.063" Wall, Nom.,PVC 0.442 (0.465 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 5420/7 7C 20 AWG  
XTRAGUARD 1 XTREME PERFORMANCE FOR XTREME  
ENVIRONMENTS (UL) MTW 600V OR AWM 2501 VW-1 ---  
LLXXXXXX CSA AWM IA/B IIA/B 105C 600  
VOLTS FT4 CE ROHS <SEQ FOOTAGE>  
\* = Factory Code

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

*[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]*

**B. Industry Approvals**

- 1) UL
  - a) Component 1 AWM/STYLE 1015 105°C / 600 VRMS  
MTW 90°C / 600 VRMS
  - b) Overall MTW 90°C / 600 VRMS  
AWM/STYLE 2501 105°C / 600 VRMS  
VW-1
- 2) CSA International
  - a) Component 1 TEW 105°C / 600 VRMS
  - b) Overall AWM I/II A/B 105°C / 600 VRMS  
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 64 Lbs, Maximum
- 4) Sunlight Resistance Yes

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**D. Electrical Properties**

(For Engineering purposes only)

- |                       |   |
|-----------------------|---|
| 1) Voltage Rating     | 600 VRMS  |
| 2) Capacitance        | 31 pf/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Ground Capacitance | 56 pf/ft @1 kHz, Nominal                        |
| 4) Inductance         | 0.24 $\mu$ H/ft, Nominal                        |
| 5) Conductor DCR      | 11.6 $\Omega$ /1000ft @20°C, Nominal            |
| 6) OA Shield DCR      | 7.5 $\Omega$ /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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