

# ALPHA WIRE COMPANY

## CUSTOMER PRODUCT SPECIFICATION

**Part Number: 5453C**  
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**Issue: 10**  
**Issue Date: 1/29/2008**  
**Effective Date: 3/1/2008**

### A. Construction

### Diameters (In)

- 1) Component 1 3 X 1 PAIR
    - a) Conductor 20 (7/28) AWG TC
    - b) Insulation 0.016" Wall, Nom. PVC
    - (1) Color Code Alpha Wire Company Color Code A
- | Pair | Color     | Pair | Color       | Pair | Color       |
|------|-----------|------|-------------|------|-------------|
| 1    | BLACK-RED | 2    | BLACK-WHITE | 3    | BLACK-GREEN |
- c) Pair 2/Cond Cabled Together
  - (1) Twists: 6.0 Twists/foot (min)
  - 2) Cable Assembly 3 Components Cabled
  - a) Twists: 4.0 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 0.032" Wall, Nom.,PVC 0.320 (0.334 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 5453C 3PR 20 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 61 Lbs, Maximum
- 4) Sunlight Resistance Yes

### D. Electrical Properties

(For Engineering purposes only)

- 1) Voltage Rating 300 VRMS
- 2) Mutual Capacitance 35 pf/ft @1 kHz, Nominal
- 3) Ground Capacitance 63 pf/ft @1 kHz, Nominal

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- 4) Characteristic Impedance 64  $\Omega$
- 5) Inductance 0.19  $\mu$ H/ft, Nominal
- 6) Conductor DCR 10.4  $\Omega$ /1000ft @20°C, Nominal
- 7) 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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