

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

**Part Number: 35452**  
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**Issue: 7**  
**Issue Date: 2/6/2007**  
**Effective Date: 2/16/2007**

**A. Construction**

**Diameters**

- |    |                |                         |       |
|----|----------------|-------------------------|-------|
| 1) | Component 1    | 2 X 1 PAIR              |       |
|    | a) Conductor   | 20 (7/28) AWG TC        |       |
|    | b) Insulation  | 0.016" Wall, Nom. PVC   | 0.070 |
|    | (1) Color Code | Alpha Wire Color Code A |       |

Pair	Color	Pair	Color	Pair	Color
1	BLACK-RED	2	BLACK-WHITE		

- |    |                   |  |                    |
|----|-------------------|--|--------------------|
| c) | Pair              | 2/Cond Cabled Together   |                    |
|    | (1) Twists:       | 6.0 Twists/foot (min)  |                    |
| 2) | Cable Assembly    | 2 Components Cabled  |                    |
|    | a) Twists:        | 3.7 Twists/foot (min)  |                    |
|    | b) Core Wrap      | Clear Mylar 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., Polyethylene (PE)                             | 0.301 (0.315 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 35452   |                    |
|    |                   | XTRAGUARD 3 XTREME PERFORMANCE FOR XTREME                        |                    |
|    |                   | ENVIRONMENTS 80C 300 VOLTS ROHS                                  |                    |
|    |                   | <SEQ FOOTAGE>  |                    |
|    |                   | * = Factory Code   |                    |

**B. Industry Approvals**

- |    |                                |  |              |
|----|--------------------------------|--|--------------|
| 1) | UL                             |  |              |
|    | a) Component 1                 | AWM/STYLE1569  | 105°C / 300V |
| 2) | 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. |              |
| 3) | California Proposition 65:     | The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.   |              |

**C. Physical & Mechanical Properties**

- |    |                     |                    |
|----|---------------------|--------------------|
| 1) | Temperature Range   | -20 to 80°C        |
| 2) | Bend Radius         | 10X Cable Diameter |
| 3) | Pull Tension        | 44 Lbs, Maximum    |
| 4) | Sunlight Resistance | Yes                |
| 5) | Direct Burial       | Yes                |

**D. Electrical Properties**

- |    |                          |                                 |
|----|--------------------------|---------------------------------|
|    |                          | (For Engineering purposes only) |
| 1) | Voltage Rating           | 300 V <sub>RMS</sub>            |
| 2) | Mutual Capacitance       | 39 pf/ft @1 kHz, Nominal        |
| 3) | Ground Capacitance       | 70 pf/ft @1 kHz, Nominal        |
| 4) | Characteristic Impedance | 55 Ω                            |
| 5) | Inductance               | 0.19 μH/ft, Nominal             |
| 6) | Conductor DCR            | 10.3 Ω/1000ft @20°C, Nominal    |
| 7) | OA Shield DCR            | 8.2 Ω/1000ft @20°C, Nominal     |

**E. Other**

- |    |                        |
|----|------------------------|
| 1) | Packaging              |
|    | a) Bulk(Made-to-order) |

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