

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

Part Number: 6416  
Page 1 of 2 Pages

Issue: 3  
Issue Date: 5/23/2005  
Effective Date: 8/1/2005

**A. Construction**

Diameters

- |    |               |                                   |       |
|----|---------------|-----------------------------------|-------|
| 1) | Component 1   | 2 X 1 PAIR                        |       |
|    | a) Conductor  | 20 (7/28) AWG TC                  |       |
|    | b) Insulation | 0.010" Wall, Nom. PVC, Semi Rigid | 0.058 |
|    | (1) Color(s)  |                                   |       |
- 
- | Pair | Color     | Pair | Color       | Pair | Color |
|------|-----------|------|-------------|------|-------|
| 1    | BLACK-RED | 2    | GREEN-WHITE |      |       |
- 
- |    |                       |   |                    |
|----|-----------------------|---|--------------------|
| c) | Pair                  | 2/Cond Cabled Together  |                    |
|    | (1) Twists:           | 8.0 Twists/foot (min)   |                    |
|    | Individually Applied: |   |                    |
|    | d) Shield:            | Foil Free Alum/Mylar Tape, 25% Overlap, Min.  |                    |
|    | (1) Foil Direction    | Foil Facing In  |                    |
|    | (2) Drain Wire        | 22 (7/30) AWG TC  |                    |
| 2) | Cable Assembly        | 2 Components Cabled   |                    |
|    | a) Twists:            | 4.0 Twists/foot (min)   |                    |
| 3) | Jacket                | 0.041" Wall, Nom., PVC  | 0.295 (0.309 Max.) |
|    | a) Color(s)           | GRAY  |                    |
|    | b) Print              | ALPHA WIRE-* P/N 6416 2PR 20 AWG<br>SHIELDED 75C (UL) TYPE CM OR AWM 2464 --- LLXXXXXX<br>CSA TYPE CMG FT4 ROHS<br>* = Factory Code |                    |

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

**B. Industry Approvals**

- |    |                                |  |                     |
|----|--------------------------------|--|---------------------|
| 1) | UL                             | AWM/STYLE2464<br>CM<br>VW-1  | 80°C / 300V<br>75°C |
| 2) | CSA International              | CMG<br>FT4   | 60°C                |
| 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.   |                     |

**C. Physical & Mechanical Properties**

- |    |                   |                    |
|----|-------------------|--------------------|
| 1) | Temperature Range | -20 to 80°C        |
| 2) | Bend Radius       | 10X Cable Diameter |
| 3) | Pull Tension      | 46 Lbs, Maximum    |

**D. Electrical Properties**

- |                                 |                           |                              |
|---------------------------------|---------------------------|------------------------------|
| (For Engineering purposes only) |                           |                              |
| 1)                              | Voltage Rating            | 300 V <sub>RMS</sub>         |
| 2)                              | Mutual Capacitance        | 55 pf/ft @1 kHz, Nominal     |
| 3)                              | Ground Capacitance        | 95 pf/ft @1 kHz, Nominal     |
| 4)                              | Conductor DCR             | 10.3 Ω/1000ft @20°C, Nominal |
| 5)                              | Ind. Shield DC Resistance | 13.9 Ω/1000ft @20°C, Nominal |

**E. Other**

- |    |            |
|----|------------|
| 1) | Packaging  |
|    | a) 1000 FT |

Although Alpha Wire Company ("Alpha") makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Alpha has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

---

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

---

**Part Number: 6416**  
**Page 2 of 2 Pages**

**Issue: 3**  
**Issue Date: 5/23/2005**  
**Effective Date: 8/1/2005**

---

b) 500 FT

Although Alpha Wire Company ("Alpha") makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Alpha has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.