

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

Part Number: 6433  
Page 1 of 2 Pages

Issue: 4  
Issue Date: 5/26/2005  
Effective Date: 8/1/2005

**A. Construction**

Diameters

- 1) Component 1 15 X 1 PAIR
  - a) Conductor 18 (19/30) AWG TC
  - b) Insulation 0.016" Wall, Nom. PVC 0.082
    - (1) Print ALPHA NUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED 2 INCH SPACING(CTR. TO CTR.)
    - (2) Color Code Alpha Wire Color Code BR

Pair	Color	Pair	Color	Pair	Color
1	BLACK#1-RED#1	6	BLACK#6-RED#6	11	BLACK#11-RED#11
2	BLACK#2-RED#2	7	BLACK#7-RED#7	12	BLACK#12-RED#12
3	BLACK#3-RED#3	8	BLACK#8-RED#8	13	BLACK#13-RED#13
4	BLACK#4-RED#4	9	BLACK#9-RED#9	14	BLACK#14-RED#14
5	BLACK#5-RED#5	10	BLACK#10-RED#10	15	BLACK#15-RED#15

- c) Pair 2/Cond Cabled Together
  - (1) Twists: 4.8 Twists/foot (approx.)
- 2) Cable Assembly 15 Components Cabled
  - a) Twists: 1.3 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/.0121) AWG TC
- 4) Jacket 0.063" Wall, Nom.,PVC 0.751 (0.780 Max.)
  - a) Color(s) GRAY
  - b) Print ALPHA WIRE-\* P/N 6433 15PR 18 AWG SHIELDED 105C (UL) TYPE PLTC SUN. RES. OR TYPE CM --- LLXXXXXX CSA TYPE CMG FT4 ROHS  
\* = Factory Code

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

**B. Industry Approvals**

- 1) UL CM 105°C  
PLTC 105°C  
SUN RES
- 2) CSA International CMG 60°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.

**C. Physical & Mechanical Properties**

- 1) Temperature Range -20 to 105°C
- 2) Bend Radius 10X Cable Diameter
- 3) Pull Tension 456 Lbs, Maximum

**D. Electrical Properties**

(For Engineering purposes only)

- 1) Voltage Rating 300 V<sub>RMS</sub>
- 2) Mutual Capacitance 36 pf/ft @1 kHz, Nominal
- 3) Ground Capacitance 65 pf/ft @1 kHz, Nominal
- 4) Characteristic Impedance 62 Ω

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|------------------|-------------------------------------|
| 5) Inductance    | 0.17 $\mu$ H/ft, Nominal            |
| 6) Conductor DCR | 6.1 $\Omega$ /1000ft @20°C, Nominal |
| 7) OA Shield DCR | 6.2 $\Omega$ /1000ft @20°C, Nominal |

**E. Other**

- 1) Packaging
  - a) 1000 FT
  - b) 500 FT

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