

ALPHA WIRE COMPANY
CUSTOMER PRODUCT SPECIFICATION

Part Number: 6438
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Issue: 4
Issue Date: 5/26/2005
Effective Date: 8/1/2005

A. Construction

Diameters

- 1) Component 1 9 X 1 PAIR
 - a) Conductor 22 (7/.0096) AWG TC
 - b) Insulation 0.013" Wall, Nom. PVC 0.055
 - (1) Color Code Alpha Wire Color Code BR

Pair	Color	Pair	Color	Pair	Color
1	BLACK#1-RED#1	4	BLACK#4-RED#4	7	BLACK#7-RED#7
2	BLACK#2-RED#2	5	BLACK#5-RED#5	8	BLACK#8-RED#8
3	BLACK#3-RED#3	6	BLACK#6-RED#6	9	BLACK#9-RED#9

- 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 24 (7/32) AWG TC
- 2) Cable Assembly 9 Components Cabled
 - a) Twists: 2.2 Twists/foot (min)
 - b) Core Wrap Clear Mylar Tape, 25% Overlap, Min.
- 3) Jacket 0.053" Wall, Nom.,PVC 0.477 (0.500 Max.)
 - a) Color(s) GRAY
 - b) Print ALPHA WIRE-* P/N 6438 9PR 22 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 123 Lbs, Maximum

D. Electrical Properties

(For Engineering purposes only)

- 1) Voltage Rating 300 V_{RMS}
- 2) Mutual Capacitance 47 pf/ft @1 kHz, Nominal
- 3) Ground Capacitance 85 pf/ft @1 kHz, Nominal
- 4) Characteristic Impedance 48 Ω
- 5) Inductance 0.19 μH/ft, Nominal
- 6) Conductor DCR 18 Ω/1000ft @20°C, Nominal

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7) Component Shield DCR 19.8 Ω /1000ft @20°C, Nominal

E. Other

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

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