

ALPHA WIRE COMPANY
CUSTOMER PRODUCT SPECIFICATION

Part Number: 6431
Page 1 of 2 Pages

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

A. Construction

Diameters

- 1) Component 1 9 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	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: 4.8 Twists/foot (approx.)
- 2) Cable Assembly 9 Components Cabled
 - a) Twists: 1.7 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/.0121) AWG TC
- 4) Jacket 0.063" Wall, Nom.,PVC 0.622 (0.646 Max.)
 - a) Color(s) GRAY
 - b) Print ALPHA WIRE-* P/N 6431 9PR 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 277 Lbs, Maximum

D. Electrical Properties

(For Engineering purposes only)

- 1) Voltage Rating 300 V_{RMS}
- 2) Mutual Capacitance 36 pf/ft @1 kHz, Nominal
- 3) Ground Capacitance 65 pf/ft @1 kHz, Nominal
- 4) Characteristic Impedance 62 Ω
- 5) Inductance 0.17 μH/ft, Nominal

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: 6431
Page 2 of 2 Pages

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

- 6) Conductor DCR 6.1 Ω /1000ft @20°C, Nominal
- 7) OA Shield DCR 6.7 Ω /1000ft @20°C, Nominal

E. Other

- 1) Packaging
 - a) 1000 FT
 - 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.