

ALPHA WIRE
CUSTOMER PRODUCT SPECIFICATION

Part Number: SF61222CY
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Issue: 3
Issue Date: 10/13/2011
Effective Date: 11/4/2011

A. Construction

Diameters (In)

- 1) Component 1 4 X 1 COND
- a) Conductor 12 (65/30) AWG TC 0.093
- b) Insulation 0.016" Wall, Nom. PVC/ 0.005" Wall NYLON 0.135
- (1) Print ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED
- (2) Color Code Alpha Wire Color Code KX

Cond	Color	Cond	Color	Cond	Color
1	GREEN/YELLOW	3	BLACK#2		
2	BLACK#1	4	BLACK#3		

- 2) Component 2 2 X 1 PAIR
- a) Conductor 16 (26/30) AWG TC 0.060
- b) Insulation 0.016" Wall, Nom. PVC/ 0.005" Wall NYLON 0.102
- (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: 5.3 Twists/foot (min)
- Individually Applied:
- d) Shield: Flex Alum/Mylar Tape, 25% Overlap, Min.
- (1) Foil Direction Foil Facing Out
- (2) Drain Wire 22 (7/30) AWG TC
- (3) Braid TC,85% Coverage, Min.
- e) Over Wrap: PTFE(skived) Tape, 25% Overlap, Min.
- 3) Cable Assembly 6 Components Cabled
- a) Twists: 2.5 Twists/foot (min)
- b) Core Wrap REMAY Tape, 25% Overlap, Min.
- 4) Shield: A/P/A Tape, 25% Overlap, Min.
- a) Drain Wire 22 (7/30) AWG TC
- b) Braid TC,85% Coverage, Min.
- 5) Jacket 0.065" Wall, Nom.,TPE 0.676+/- 0.027
- a) Color(s) ORANGE
- b) Jacket Separator Tissue Tape, 25% Overlap, Min.
- c) Print ALPHA WIRE-* P/N SF61222CY

4C12 THHN 2PR16 TFFN E324185 (UL) WTTC 90C
1000 VOLT OR (UL) TC-ER 90C 600V OIL RES I/II SUN
RES OR C(UL) CIC CONTROL/TC 90C PVC/NYLON INS
FT4 4C12 2PR16 --- LLXXXXXX CSA AWM I/II A/B
90C 600V FT4 CE ROHS
(DATE CODE) (SEQ FOOTAGE)
* = Factory Code

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

B. Applicable Specifications

- 1) UL
- a) Component 1 THHN 90°C / 600 V_{RMS}
- b) Component 2 TFFN 90°C / 600 V_{RMS}
- c) Overall TC 90°C / 600 V_{RMS}
- EXPOSED RUN
OIL RES I/II
SUN RES
WTTC 90°C / 1000 V_{RMS}

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|----------------------|--|---|
| 2) CSA International | AWM I/II A/B
FT4
C(UL) CIC CONTROL
C(UL) TC | 90°C / 600 V _{RMS}
90°C / 600 V _{RMS}
90°C / 600 V _{RMS} |
| 3) CE: | LVD 73/23/EEC Amendment 93/68/EEC | |

C. Environmental Compliance

- 1) 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.
- 2) California Proposition 65: The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

D. Physical & Mechanical Properties

- 1) Temperature Range -25 to 90°C(static), -5 to 90°C (dynamic)
- 2) Bend Radius 10X Cable Diameter
- 3) Pull Tension 323 Lbs, Maximum
- 4) Sunlight Resistance Yes

E. Electrical Properties

- (For Engineering purposes only)
- 1) Voltage Rating 600 V_{RMS}
 - 2) Component 1
 - a) Capacitance 60 pf/ft @1 kHz, Nominal Conductor to Conductor
 - b) Ground Capacitance 108 pf/ft @1 kHz, Nominal
 - c) Inductance 0.16 µH/ft, Nominal
 - d) Conductor DCR 1.8 Ω/1000ft @20°C, Nominal
 - 3) Component 2
 - a) Mutual Capacitance 53 pf/ft @1 kHz, Nominal
 - b) Ground Capacitance 95 pf/ft @1 kHz, Nominal
 - c) Characteristic Impedance 41 Ω
 - d) Inductance 0.18 µH/ft, Nominal
 - e) Conductor DCR 4.6 Ω/1000ft @20°C, Nominal
 - f) Component Shield DCR 3.1 Ω/1000ft @20°C, Nominal
 - 4) OA Shield DCR 1.23 Ω/1000ft @20°C, Nominal

F. Other

- 1) Packaging Flange x Traverse x Barrel (inches)
 - a) 1000 FT 36 x 14 x 12 Continuous length
 - b) 500 FT 24 x 14 x 12 Continuous length
 - c) 100 FT 16 x 11 x 8 Continuous length

[Spool dimensions may vary slightly]
- 2) Notes:
 - a) Suitable for use in Industrial Machinery per the requirements of NFPA-79

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