

ALPHA WIRE
CUSTOMER PRODUCT SPECIFICATION

Part Number: 518140
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Issue: 1
Issue Date: 9/15/2011
Effective Date: 11/10/2011

A. Construction

Diameters (In)

- 1) Component 1 49 X 1 COND
- a) Conductor 16 (65/34) AWG BC 0.059
- b) Insulation 0.011" Wall, Nom. PVC, Semi Rigid 0.081
- (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	18	BLACK#17	35	BLACK#34
2	BLACK#1	19	BLACK#18	36	BLACK#35
3	BLACK#2	20	BLACK#19	37	BLACK#36
4	BLACK#3	21	BLACK#20	38	BLACK#37
5	BLACK#4	22	BLACK#21	39	BLACK#38
6	BLACK#5	23	BLACK#22	40	BLACK#39
7	BLACK#6	24	BLACK#23	41	BLACK#40
8	BLACK#7	25	BLACK#24	42	BLACK#41
9	BLACK#8	26	BLACK#25	43	BLACK#42
10	BLACK#9	27	BLACK#26	44	BLACK#43
11	BLACK#10	28	BLACK#27	45	BLACK#44
12	BLACK#11	29	BLACK#28	46	BLACK#45
13	BLACK#12	30	BLACK#29	47	BLACK#46
14	BLACK#13	31	BLACK#30	48	BLACK#47
15	BLACK#14	32	BLACK#31	49	BLACK#48
16	BLACK#15	33	BLACK#32		
17	BLACK#16	34	BLACK#33		

- 2) Cable Assembly 49 Components Cabled
- a) Twists: 1.7 Twists/foot (min)
- b) Core Wrap Nonwoven Polyester Tape, 25% Overlap, Min.
- 3) Shield TC BRAID Shield, 85% Coverage, Min.
- 4) Jacket 0.075" Wall, Nom., PVC 0.901 +/- 0.032
- a) Color(s) BLACK
- b) Jacket Separator Tissue Tape, 25% Overlap, Min.
- c) Print ALPHA WIRE-* P/N 518140 49C 16 AWG

(UL) 105C TYPE CM --- C(UL) CMG OR AWM 2661
105C 300V LLXXXXX CSA AWM I/II A/B FT4 105C 300V
ROHS

* = Factory Code

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

B. Applicable Specifications

- 1) UL AWM/STYLE 2661 105°C / 300 V_{RMS}
CM 105°C
- 2) CSA International C(UL) TYPE CMG 105°C
FT4
AWM I/II A/B 105°C / 300 V_{RMS}

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.
- 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 105°C(static), -5 to 105°C (dynamic)
- 2) Bend Radius 10X Cable Diameter(static), 10X Cable Diameter(dynamic)
- 3) Pull Tension 1018 Lbs, Maximum
- 4) Sunlight Resistance Yes

E. Electrical Properties

- 1) Voltage Rating (For Engineering purposes only)

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- 2) Capacitance 50 pf/ft @1 kHz, Nominal Conductor to Conductor
- 3) Ground Capacitance 90 pf/ft @1 kHz, Nominal
- 4) Inductance 0.15 μ H/ft, Nominal
- 5) Conductor DCR 4.3 Ω /1000ft @20°C, Nominal
- 6) OA Shield DCR 1.12 Ω /1000ft @20°C, Nominal

F. Other

- 1) Packaging Flange x Traverse x Barrel (inches)
 - a) Bulk(Made-to-order)

This Design is custom, Made-To-Order & once accepted, the order is NON-CANCELLABLE & NON-RETURNABLE.

Accepted By:	Date:
Company:	Title:

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