ALPHA WIRE
TECHNICAL PRODUCT SPECIFICATION

Part Number: B963021		**Issue:**	**2**
Page 1 of 3 Pages		**Issue Date:**	**1/4/2013**
		Effective Date:	**1/18/2013**

A. Construction — **Diameters (In)**

1) Component 1 — 2 X 1 PAIR
   a) Conductor — 24 (7/32) AWG TC, 0.500" Max Lay — 0.024
   b) Insulation — 0.010" Wall, Nom. PVC, Semi Rigid — 0.044+/- 0.002
      (1) Color Code — Alpha Wire Color Code B

Pair	Color	Pair	Color	Pair	Color
1	WHITE-BLACK	2	WHITE-BROWN		

   c) Pair — 2/Cond Cabled Together
      (1) Max Lay: — 1.25" LH Lay
2) Cable Assembly — 2 Components Bunch Cabled — 0.144
   a) Max Lay: — 1.50" LH Lay
   b) Layup: — 2 &2f(0.072)
   c) Orientation: — Components to be arranged from INSIDE LAYER to OUTSIDE LAYER
   d) Filler — Flame-retardant Fibrillated Polypropylene
   e) Core Wrap — 0.0010" Clear Mylar Tape, 25% Overlap, Min.
3) Jacket — 0.032+/-0.002" Wall,PVC, Tubed — 0.211 (0.222 Max.)
   a) Material — PolyOne WJLK503L
   b) Color(s) — GREY
   c) Ripcord — 1 End 810 Denier Nylon
   d) Print — ALPHA WIRE-* P/N B963021
      0.23MM2 (24AWG) (UL) TYPE CM 105C OR AWM 2464
      VW-1 --- LLXXXXXX CSA 105C TYPE CMG FT4 CE
      ROHS (SEQ METERS)
      * = Factory Code
      [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]
   e) Print Size — 1/16" Block lettering
   f) Print Color — Black, Blue or Red

B. Applicable Specifications

1) UL
   a) Component 1 — AWM/STYLE 10002 — 105°C / 300 V_{RMS}
   b) Overall — AWM/STYLE 2464 — 80°C / 300 V_{RMS}
      CM — 105°C
      VW-1
2) CSA International — CMG — 105°C
   FT4
3) IEC — EN 60332-1 Flame Behavior
   EN 60332-2 Flame Behavior
4) CE: — EU Low Voltage Directive 2006/95/EC
5) Colors — Munsell® Component limits of deviation

C. Environmental Compliance

1) CE: — EU Directive 2011/65/EU(RoHS2):
   All materials used in the manufacture and packaging of this part must meet the requirements of European Directive 2011/65/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment.
2) REACH Regulation (EC 1907/2006):
   This product may not contain any of the substances listed in the latest issue European Union's REACH Substance of Very High Concern (SVHC) candidate list in excess of 0.1% mass of the item.

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D. Physical & Mechanical Properties

1)	Temperature Range	-30 to 105°C
2)	Bend Radius	10X Cable Diameter
3)	Pull Tension	14.1 Lbs, Maximum
4)	Sunlight Resistance	Yes

E. Electrical Properties (For Engineering purposes only)

1)	Voltage Rating	300 V_{RMS}
2)	Mutual Capacitance	21.8 pf/ft @1 kHz, Nominal
3)	Characteristic Impedance	86 Ω
4)	Inductance	0.19 µH/ft, Nominal
5)	Conductor DCR	26 Ω/1000ft @20°C, Nominal

F. Other

1) Packaging — Per Alpha Wire Standards RS-002, PS-001, CE-001

a)	3280 FT	W20-11:	20 x 11 x 8 Continuous length
b)	1640 FT	W16-11:	16 x 11 x 8 Continuous length
c)	328 FT	W12-4.5:	12 x 4.5 x 3.5 Continuous length
d)	164 FT	W12-4.5:	12 x 4.5 x 3.5 Continuous length

[Finished Goods: Packages shall be -0/+1% in length.]

2) Notes:
   a) Gray Jacket color is RAL 7032.
   b) UL File E163869 10002/2464 E163860 Vol. 1, Sec 26 and CSA File LL49185 Rpt 1438589 Part C.
3) CE Logo required on the product label.
4) Certificates of Compliance required with each order.

G. Incoming Inspection Criteria

1) Physical Construction
2) Appearance
3) Packaging & Labeling

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Revisions

Issue 1:	8/11/2010	Original Release. KB.
Issue 2:	1/4/2013	Updated RoHS to RoHS2. Added CSA CMG. Updated jacket print. CCS

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