

Customer Specification

PART NO. M8704240

Construction

						Diameters (In)	
1) Component 1						24 X 1 PAIR	
a) Conductor						14 (7/.0242) AWG Bare Copper	0.073
b) Insulation						0.016" Wall, Nom. PVC/ 0.005" Wall NYLON	0.115
(1) Print						ALPHA NUMERIC NUMBERS - WHITE CONDUCTOR ONLY (ONE-1) ALTERNATE INVERTED 2"SPACING(CTR. TO CTR.)	
(2) Color Code						Alpha Wire Color Code BW	
Pair	Color	Pair	Color	Pair	Color		
1	BLACK-WHITE#1	9	BLACK-WHITE#9	17	BLACK-WHITE#17		
2	BLACK-WHITE#2	10	BLACK-WHITE#10	18	BLACK-WHITE#18		
3	BLACK-WHITE#3	11	BLACK-WHITE#11	19	BLACK-WHITE#19		
4	BLACK-WHITE#4	12	BLACK-WHITE#12	20	BLACK-WHITE#20		
5	BLACK-WHITE#5	13	BLACK-WHITE#13	21	BLACK-WHITE#21		
6	BLACK-WHITE#6	14	BLACK-WHITE#14	22	BLACK-WHITE#22		
7	BLACK-WHITE#7	15	BLACK-WHITE#15	23	BLACK-WHITE#23		
8	BLACK-WHITE#8	16	BLACK-WHITE#16	24	BLACK-WHITE#24		
c) Pair						2/Cond Cabled Together	
(1) Twists:						3.7 Twists/foot (min)	
2) Cable Assembly						24 Components Cabled	
a) Twists:						0.7 Twists/foot (min)	
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
c) 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						16 (7/.0192) AWG Tinned Copper	
4) Jacket						0.085" Wall, Nom.,PVC	1.286 (1.343 Max.)
a) Color(s)						BLACK	
b) Ripcord						1 End 810 Denier Nylon	
c) Print						ALPHA WIRE-* P/N M8704240 24PR 14 AWG EXXXXXX (UL) TYPE TC-ER 600V 90C DRY 75C WET SUN. RES. DIR. BUR. CE ROHS * = Factory Code	

Applicable Specifications

1) UL	TC	90°C / 600 V _{RMS}
	SUN RES	
	DIRECT BURIAL	
	EXPOSED RUN	
2) CE:	EU Low Voltage Directive 2014/35/EU	

Environmental

1) CE: EU Directive 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3):	
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011 and the amending Directive 2015/863/EU of 4 June 2015 . No Exemptions are required for RoHS Compliance on this item.
2) REACH Regulation (EC 1907/2006):	
	This product does not contain Substances of Very High Concern (SVHC) listed on the European Union's REACH candidate list in excess of 0.1% mass of the item.

Properties

Physical & Mechanical Properties	
1) Temperature Range	-25 to 90°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	1567 Lbs, Maximum
4) Sunlight Resistance	Yes
5) Direct Burial	Yes
Electrical Properties	
	(For Engineering purposes only)
1) Voltage Rating	600 V _{RMS}
2) Mutual Capacitance	35 pF/ft @1 kHz, Nominal
3) Ground Capacitance	63 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	63 Ω
5) Inductance	0.17 μH/ft, Nominal
6) Conductor DCR	2.6 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	2.9 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	48 x 26 x 18 Continuous length
b) 500 FT	48 x 26 x 18 Continuous length
c) 100 FT	48 x 26 x 18 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

www.alphawire.com

Alpha Wire
2200 US Highway 27 South
Richmond, IN 47374

Tel: 1-800-52 ALPHA

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EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M8704240

M8704240, RoHS-Compliant Commencing With 01/01/2006 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European Union (RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This document also certifies that the listed part number is in compliance with the list of restricted substances to 10 items (commonly known as RoHS 3). The reader is referred to these Directives for the specific definitions and restrictions. **Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control" requirements.

Substance

Lead
Mercury
Cadmium
Hexavalent Chromium
Polybrominated Biphenyls (PBB)
Polybrominated Diphenyl Ethers (PBDE),
Including Deca-BDE
Bis(2-ethylhexyl) phthalate (DEHP)
Butyl benzyl phthalate (BBP)
Dibutyl phthalate (DBP)
Diisobutyl phthalate (DIBP)

Maximum Control Value

0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.01% by weight (100 ppm)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
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Dave Watson, Director of Engineering & QA 31/03/2025

Alpha Wire
711 Lidgerwood Ave.
Elizabeth, NJ 07207
Tel: 1-908-925-8000