

## Customer Specification

# PART NO. M8706120

## Construction

						Diameters (In)		
1) Component 1						12 X 1 PAIR		
a) Conductor						16 (7/.0192) AWG Bare Copper		0.058
b) Insulation						0.016" Wall, Nom. PVC/ 0.005" Wall NYLON		0.100
(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	5	BLACK-WHITE#5	9	BLACK-WHITE#9			
2	BLACK-WHITE#2	6	BLACK-WHITE#6	10	BLACK-WHITE#10			
3	BLACK-WHITE#3	7	BLACK-WHITE#7	11	BLACK-WHITE#11			
4	BLACK-WHITE#4	8	BLACK-WHITE#8	12	BLACK-WHITE#12			
c) Pair						2/Cond Cabled Together		
(1) Twists:						4.0 Twists/foot (min)		
2) Cable Assembly						12 Components Cabled		
a) Twists:						1.2 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						18 (7/.0152) AWG Tinned Copper		
4) Jacket						0.085" Wall, Nom.,PVC		0.858 (0.900 Max.)
a) Color(s)						BLACK		
b) Ripcord						1 End 810 Denier Nylon		
c) Print						ALPHA WIRE-* P/N M8706120 12PR 16 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 <sub>RMS</sub>
	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	500 Lbs, Maximum
4) Sunlight Resistance	Yes
5) Direct Burial	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600 V <sub>RMS</sub>
2) Mutual Capacitance	32 pF/ft @1 kHz, Nominal
3) Ground Capacitance	58 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	68 Ω
5) Inductance	0.18 μH/ft, Nominal
6) Conductor DCR	4.2 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	4.7 Ω/1000ft @20°C, Nominal

## Other

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Packaging	Flange x Traverse x Barrel (inches)
a) 2500 FT	48 x 26 x 18 Continuous length
b) 1000 FT	48 x 26 x 18 Continuous length
c) 500 FT	30 x 14 x 12 Continuous length
d) 100 FT	24 x 14 x 12 Continuous length
e) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>
<b>Notes:</b>	
a) 2500 ft. put-up available by special order.	

[www.alphawire.com](http://www.alphawire.com)

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Alpha Wire □□□□M8706120

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Lead	□□□□□□□□□□0.1% (1000 ppm)
Mercury	□□□□□□□□□□0.1% (1000 ppm)
Cadmium	□□□□□□□□□□0.01% (100 ppm)
Hexavalent Chromium	□□□□□□□□□□0.1% (1000 ppm)
Polybrominated Biphenyls (PBB)	□□□□□□□□□□0.1% (1000 ppm)
Polybrominated Diphenyl Ethers (PBDE), Including Deca-BDE	□□□□□□□□□□0.1% (1000 ppm)
Bis(2-ethylhexyl) phthalate (DEHP)	□□□□□□□□□□0.1% (1000 ppm)
Butyl benzyl phthalate (BBP)	□□□□□□□□□□0.1% (1000 ppm)
Dibutyl phthalate (DBP)	□□□□□□□□□□0.1% (1000 ppm)
Diisobutyl phthalate (DIBP)	□□□□□□□□□□0.1% (1000 ppm)

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