

# Customer Specification PART NO. M9708360

### Construction

				Diameters (In)	
1) Component 1		36 X 1 PAIR			
a) Conductor		18 (7/.0152) AWG Bare Copper		0.046	
b) Insulation		0.016" Wall, Nom. PVC		0.078	
(1) Print		ALPHA NUMERIC NUMBERS - WHIT (ONE-1) ALTERNATE INVERTED 2"S			
(2) Color Code		Alpha Wire Color Code BW			
Pair	Color	Pair	Color	Pair	Color
1	BLACK- WHITE#1	13	BLACK- WHITE#13	25	BLACK- WHITE#25
2	BLACK- WHITE#2	14	BLACK- WHITE#14	26	BLACK- WHITE#26
3	BLACK- WHITE#3	15	BLACK- WHITE#15	27	BLACK- WHITE#27
4	BLACK- WHITE#4	16	BLACK- WHITE#16	28	BLACK- WHITE#28
5	BLACK- WHITE#5	17	BLACK- WHITE#17	29	BLACK- WHITE#29
6	BLACK- WHITE#6	18	BLACK- WHITE#18	30	BLACK- WHITE#30
7	BLACK- WHITE#7	19	BLACK- WHITE#19	31	BLACK- WHITE#31
8	BLACK- WHITE#8	20	BLACK- WHITE#20	32	BLACK- WHITE#32
9	BLACK- WHITE#9	21	BLACK- WHITE#21	33	BLACK- WHITE#33
10	BLACK- WHITE#10	22	BLACK- WHITE#22	34	BLACK- WHITE#34
11	BLACK-	23	BLACK-	35	BLACK-

	WHITE#11		WHITE#23		WHITE#35	
12	BLACK- WHITE#12	24	BLACK- WHITE#24	36	BLACK- WHITE#36	
c) Pair		2/Cond Cabled Together				
(1) Twists:		5.3 Twists/foot (min)				
2) Component 2		1 X 1 COND				
a) Conductor		22 (7/30) AWG Bare Copper		0.030		
b) Insulation	b) Insulation		0.016" Wall, Nom. PVC		0.062	
(1) Color(s)						
Cond	Color	Cond	Color	Cond	Color	
1	ORANGE					
3) Cable Assembly		37 Components Cabled				
a) Twists:		0.9 Twists/foot (min)				
b) Orientation:	Components to be arranged from INSIDE LAYER to OUTSIDE LAYER					
c) Core Wrap	/rap Clear Mylar Tape, 25% Overlap, Min.					
4) Shield: Alum/Mylar Tape, 25%		25% Overlap, Min.				
a) Foil Direction Foil Facing In						
b) Drain Wire	p) Drain Wire 20 (7/28) AWG Tinned Copper					
5) Jacket		0.073" Wall, Nom.,PVC		1.049 (1.088 Max.)		
a) Color(s) BLACK						
b) Ripcord		1 End 810 Denier Nylon				
ALPHA WIRE-* P/N M9708360 36PF SHIELDED EXXXXX (UL) TYPE PLTO OR CL3 105C OR C(UL) CMG 105C The second of the seco		C/ITC 105C SUN RE T4 CE ROHS	ES			

# Applicable Specifications

1) UL	CL3	105°C	
	PLTC	105°C	
	ITC	105°C	
	SUN RES		
2) CSA International	C(UL) TYPE CMG	105°C	
	FT4		

3) CE:	EU Low Voltage Directive 2014/35/EU
J) JL.	Lo Low Voltage Directive 2014/00/LO

## 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.		
3) California Proposition 65:	This product may contain substances known to the State of California to cause Cancer or Reproductive Harm, but is exempt from labeling based on the Consent Judgement. See the Alpha Wire website for more information.		

# **Properties**

Physical & Mechanical Properties		
1) Temperature Range	-20 to 105°C	
2) Bend Radius	10X Cable Diameter	
3) Pull Tension	929 Lbs, Maximum	
4) Sunlight Resistance	Yes	
Electrical Properties	(For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>	
2) Component 1		
a) Mutual Capacitance	35 pF/ft @1 kHz, Nominal	
b) Ground Capacitance	63 pF/ft @1 kHz, Nominal	
c) Characteristic Impedance	65 Ω	
d) Inductance	0.18 μH/ft, Nominal	
e) Conductor DCR	6.7 Ω/1000ft @20°C, Nominal	
f) OA Shield DCR	5.2 Ω/1000ft @20°C, Nominal	
3) Component 2		
a) Ground Capacitance	107 pF/ft @1 kHz, Nominal	
b) Inductance	0.044 μH/ft, Nominal	
c) Conductor DCR	15.4 Ω/1000ft @20°C, Nominal	

d) OA Shield DCR	5.2 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	36 x 14 x 12 Continuous length
c) 100 FT	24 x 14 x 12 Continuous length
d) Bulk(Made-to-order)	
	[Spool dimensions may vary slightly]

#### www.alphawire.com

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#### EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M9708360

M9708360, RoHS-Compliant Commencing With 7/1/2005 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 Parliament, better known as the RoHS Directive (commonly known as RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This certification extends to amending Directive 2015/863/EU which expanded the list of restricted substances to 10 items (commonly known as RoHS 3). This product also complies with UK - RoHS. The reader is referred to these Directives for the specific definitions and extents of the Directives. **No Exemptions are required for RoHS Compliance on this item**. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2014. This product is also in compliance with China RoHS 2 per GB/T 26572-2011.

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

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering

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