

# Customer Specification PART NO. M9748060

Construction

				Diameters (In)		
1) Component 1		6 X 1 PAIR	6 X 1 PAIR			
a) Conductor		18 (7/.0152) AWG BC	18 (7/.0152) AWG BC			
b) Insulation		0.016" Wall, Nom. PVC		0.078	0.078	
(1) Print		ALPHA NUMERIC NUMBERS - WHITE CONDUCTOR ON (ONE-1) ALTERNATE INVERTED 2"SPACING(CTR. TO C				
(2) Color Code		Alpha Wire Color Code BW				
Pair	Color	Pair	Color	Pair	Color	
1	BLACK-WHITE#1	3	BLACK-WHITE#3	5	BLACK-WHITE#5	
2	BLACK-WHITE#2	4	BLACK-WHITE#4	6	BLACK-WHITE#6	
c) Pair		2/Cond Cabled Togeth	2/Cond Cabled Together			
(1) Twists:		5.3 Twists/foot (min)				
Individually Applied:				-		
d) Shield:		Foil Free Alum/Mylar Tape, 25% Overlap, Min.		1.		
(1) Foil Direction		Foil Facing In	Foil Facing In			
(2) Drain Wire		20 (7/28) AWG TC	20 (7/28) AWG TC			
2) Component 2		1 X 1 COND				
a) Conductor		22 (7/30) AWG BC		0.030		
b) Insulation		0.016" Wall, Nom. PVC		0.062		
(1) Color(s)						
Cond	Color	Cond	Color	Cond	Color	
1	ORANGE					
3) Cable Assembly		7 Components Cabled				
a) Twists:		1.9 Twists/foot (min)				
b) Core Wrap		Clear Mylar Tape, 25% Overlap, Min.				
4) Shield:		Alum/Mylar Tape, 25% Overlap, Min.				
a) Foil Direction		Foil Facing In				
b) Drain Wire		20 (7/28) AWG TC				
5) Jacket		0.053" Wall, Nom.,PVC		0.541 (0.562 Max.)		
a) Color(s)		BLACK		-		
b) Ripcord		1 End 810 Denier Nylon				
c) Print		ALPHA WIRE-* P/N M9748060 6PR 18 AWG 1C 22 AWG SHIELDED EXXXXX (UL) TYPE PLTC/ITC 105C SUN RES OR CL3 105C OR C(UL) CMG 105C FT4 ROHS * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]				

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	

#### Environmental

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. Consult Alpha Wire's web site for compliance Date of Manufacture.
2) California Proposition 65:	The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

## **Properties**

Physical &Mechanical Properties		
1) Temperature Range	-20 to 105°C	
2) Bend Radius	10X Cable Diameter	
3) Pull Tension	219 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	54 pf/ft @1 kHz, Nominal	
b) Ground Capacitance	97 pf/ft @1 kHz, Nominal	
c) Characteristic Impedance	42	
d) Inductance	0.18 µH/ft, Nominal	
e) Conductor DCR	6.7 /1000ft @20°C, Nominal	
f) Component Shield DCR	8.3 /1000ft @20°C, Nominal	
g) OA Shield DCR	6.9 /1000ft @20°C, Nominal	
3) Component 2		
a) Ground Capacitance	105 pf/ft @1 kHz, Nominal	
b) Inductance	0.06 μH/ft, Nominal	
c) Conductor DCR	15.4 /1000ft @20°C, Nominal	
d) OA Shield DCR	6.9 /1000ft @20°C, Nominal	

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	30 x 14 x 12 Continuous length
b) 500 FT	20 x 11 x 8 Continuous length
c) 100 FT	16 x 11 x 8 Continuous length
d) Bulk(Made-to-order)	
	[Spool dimensions may vary slightly]

www.alphawire.com

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#### RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M9748060

M9748060, RoHS-Compliant Commencing With1/1/2006Production

This document certifies that the Alpha part numbers cited above are manufactured in accordance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003, better known as the RoHS Directives, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to these Directives for the specific definitions and extents of these Directives. **No Exemptions are required for RoHS Compliance on this item.** 

Substance	<b>Maximum Control Value</b>
Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.1% by weight (100 ppm)
Hexavalent Chromium	0.1% by weight (1000 ppm)
Polybrominated Biphenyls (PBB) Polybrominated Diphenyl Ethers (PBDE)	0.1% by weight (1000 ppm)
Including Deca-BDE	0.1% by weight (1000 ppm)

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Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering &QA

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