

# Customer Specification PART NO. M9708080

#### Construction

				Diameters (In)	
1) Component 1		8 X 1 PAIR			
a) Conductor		18 (7/.0152) AWG BC		0.046	
b) Insulation		0.016" Wall, Nom. PVC		0.078	
(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	4	BLACK-WHITE#4	7	BLACK-WHITE#7
2	BLACK-WHITE#2	5	BLACK-WHITE#5	8	BLACK-WHITE#8
3	BLACK-WHITE#3	6	BLACK-WHITE#6		
c) Pair		2/Cond Cabled Tog	ether		
(1) Twists:		5.3 Twists/foot (min)			
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		9 Components Cabled			
a) Twists:		1.8 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		0.558 (0.581 Max.)	
a) Color(s)		BLACK			
b) Ripcord		1 End 810 Denier Nylon			
c) Print		ALPHA WIRE-* P/N M9708080 8PR 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.]			

CL3	105°C
PLTC	105°C
ITC	105°C
SUN RES	
C(UL) TYPE CMG	105°C
FT4	
	PLTC ITC SUN RES C(UL) TYPE CMG

### 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	217 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	34 pf/ft @1 kHz, Nominal
b) Ground Capacitance	61 pf/ft @1 kHz, Nominal
c) Characteristic Impedance	66
d) Inductance	0.18 μH/ft, Nominal
e) Conductor DCR	6.7 /1000ft @20°C, Nominal
f) 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	24 x 14 x 12 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: M9708080

M9708080, RoHS-Compliant Commencing With7/1/2005Production

This document certifies that the Alpha part numbers cited above are manufactured in accordancewith 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 hazardoussubstances 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	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) 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

11/2/2012

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