

# Customer Specification PART NO. M9706080

#### Construction

				Diameters (In)	
1) Component 1		8 X 1 PAIR			
a) Conductor		16 (7/.0192) AWG BC			
b) Insulation		0.016" Wall, Nom. PVC		0.090	
(1) Print		ALPHA NUMERIC NUMBERS - WHITE CONDUCTOR ONLY (ONE-1) ALTERNATE INVERTED 2"SPACING(CTR. TO CTR.)			
(2) Color Code		Alpha Wire Company 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 Together			
(1) Twists:		4.8 Twists/foot (min)			
2) Component 2		1 X 1 COND			
a) Conductor		22 (7/30) AWG BC			
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:		1.6 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		18 (7/.0152) AWG TC			
5) Jacket		0.063" Wall, Nom.,PVC		0.639 (0.663 Max.)	
a) Color(s)		BLACK			
b) Ripcord		1 End 810 Denier Nylon			
c) Print		ALPHA WIRE-* P/N M9706080 8PR 16 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			

#### **Applicable Specifications**

1) UL	CL3	105°C
	PLTC	105°C
	ІТС	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	343 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	37 pf/ft @1 kHz, Nominal		
b) Ground Capacitance	67 pf/ft @1 kHz, Nominal		
c) Characteristic Impedance	61		
d) Inductance	0.17 μH/ft, Nominal		
e) Conductor DCR	4.2 /1000ft @20°C, Nominal		
f) OA Shield DCR	5 /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	5 /1000ft @20°C, Nominal		

## Other

1) Packaging	
a) 1000 FT	
b) 500 FT	
c) 100 FT	
d) Bulk(Made-to-order)	

#### www.alphawire.com

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207 Tel: 1-800-52 ALPHA (25742)

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#### **RoHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: M9706080

M9706080, RoHS-Compliant Commencing With1/1/2006Production

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 arerequired 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)

The information provided in this document and disclosure is correct to the best of Alpha Wire'sknowledge, information and belief at the date of its release. The information provided is designed only as a general guide for the safe handling, storage, and any other operation of the productitself or the one that it will become part of. The intent of this document is not to be considered awarranty or quality specification. Regulatory information is for guidance purposes only. Productusers are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering & QA

11/2/2012

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Alpha Wire: <u>M9706080 BK001</u>