



Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207  
Tel: 1-800-52 ALPHA (25742), Web: [www.alphawire.com](http://www.alphawire.com)

# Customer Specification

## PART NO. M9740040

Construction

				Diameters (In)	
1) Component 1		4 X 1 PAIR			
a) Conductor		20 (7/.0121) AWG BC		0.036	
b) Insulation		0.016" Wall, Nom. PVC		0.068	
(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	3	BLACK-WHITE#3		
2	BLACK-WHITE#2	4	BLACK-WHITE#4		
c) Pair		2/Cond Cabled Together			
(1) Twists:		6.0 Twists/foot (min)			
Individually Applied:					
d) Shield:		Foil Free Alum/Mylar Tape, 25% Overlap, Min.			
(1) Foil Direction		Foil Facing In			
(2) Drain Wire		22 (7/30) 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		5 Components Cabled			
a) Twists:		2.7 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		22 (7/30) AWG TC			
5) Jacket		0.053" Wall, Nom.,PVC		0.423 (0.441 Max.)	
a) Color(s)		BLACK			
b) Ripcord		1 End 810 Denier Nylon			
c) Print		ALPHA WIRE-* P/N M9740040 4PR 20 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 <i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i>			

## 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	97 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	47 pf/ft @1 kHz, Nominal
b) Ground Capacitance	85 pf/ft @1 kHz, Nominal
c) Characteristic Impedance	48
d) Inductance	0.19 µH/ft, Nominal
e) Conductor DCR	10.6 /1000ft @20°C, Nominal
f) Component Shield DCR	13.8 /1000ft @20°C, Nominal
g) OA Shield DCR	10.3 /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	15.3 /1000ft @20°C, Nominal
d) OA Shield DCR	10.4 /1000ft @20°C, Nominal

## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) 1000 FT	24 x 14 x 12 Continuous length
b) 500 FT	18 x 12 x 8 Continuous length
c) 100 FT	12 x 10 x 5 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

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## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:M9740040

M9740040 , 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.***

<b>Substance</b>	<b>Maximum Control Value</b>
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)	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's knowledge, 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 product itself or the one that it will become part of. The intent of this document is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users 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:

A handwritten signature in black ink, appearing to read 'Dave Watson'.

Dave Watson, Director of Engineering &QA

7/21/2011