

## Customer Specification

### PART NO. 74009

#### Construction

						<b>Diameter ("in")</b>	
1) Component 1						4 x 1 PAIR	
a) Conductor						22 (SOLID) AWG Bare Copper	0.026
b) Insulation						0.011" Wall, Nom. Polyolefin	0.048
(1) Color(s)							
Pair	Color	Pair	Color	Pair	Color		
1	BLUE - WHITE/BLUE	3	GREEN - WHITE/GREEN				
2	ORANGE - WHITE/ORANGE	4	BROWN - WHITE/BROWN				
c) Pair						2/Cond Cabled Together	
(1) Twists						Staggered Lays	
2) Cable Assembly						4 Components Cabled	
a) Twists						4.0 Twists/ft. min.	
3) Jacket						0.043" Wall, Nom., PVC	0.301 (0.316 max.)
a) Color(s)						BLACK	
b) Ripcord						1 End 810 Denier Nylon	
c) Print						ALPHA WIRE-* P/N 74009 4PR 22 AWG VERIFIED (UL) CAT 5E PLTC OR CMR-CMX OUTDOOR OR C(UL) CMR --- ISO/IEC 11801 CAT 5E SUN RES OIL RES --- US PATENT 6273977 CE ROHS (2 FT, 7 DIGIT SEQUENTIAL NUMBER) FT <i>Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.</i> * = Factory Code	

#### Applicable Specifications

1) UL	CMR	75°C
	PLTC	75°C
	CMX	75°C
	OIL RES I	
2) CSA International	C(UL) TYPE CMR	75°C
	FT4	
3) Other	ISO/IEC 11801 Category 5e Horizontal Cable	
	TIA-568-C.2 Cat5e	
	NEMA WC-63.1 Category 5e	
4) CE	EU Low Voltage Directive 2014/35/EC	

## Environmental

1) CE: EU Directive 2011/65/EU(RoHS2)	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. Refer to the <a href="#">RoHS Certificate of Compliance</a> for more detail.
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. For up-to-date information, please see Alpha's <a href="#">REACH SVHC Declaration</a> .
3) California Proposition 65	Exempt from warning labels based on the Consent Judgment. Please see Alpha's <a href="#">CA Prop 65 Statement</a> for more information.

## Properties

### Physical & Mechanical Properties

1) Temperature Range	-25 to 75°C
2) Bend Radius	4X Cable Diameter
3) Pull Tension	40 lbs. max.
4) Sunlight Resistance	Yes
5) Cable Weight	30 lbs./1000ft.

### Electrical Properties

*Engineering purposes only*

1) Voltage Rating	300 V <sub>RMS</sub>
2) Characteristic Impedance	100 $\omega$ +/- 15
3) Mutual Capacitance	15 pF/ft. @1 kHz, Nominal
4) Velocity of Propagation	70%
5) Propagation Delay	510 nS/100m
6) Delay Skew	25 nS/100m (max.)
7) Conductor DCR	9 $\omega$ /100m @20°C (max.)
8) DCR Unbalance	3% @20°C (max.)

Frequency(MHz)	Max. Attenuation(dB/100m)	Min. NEXT(dB)	Min. PSNEXT(dB)	Min. ACR(dB)
1	2	65.3	65.3	63.3
4	4	56.3	56.3	52.3
8	5.7	51.8	51.8	46.1
10	6.4	50.3	50.3	43.9
16	8.1	47.3	47.3	39.1
20	9.2	45.8	45.8	35.2
25	10.3	44.3	44.3	34.1
31.25	11.6	42.9	42.9	31.3
62.5	16.8	38.4	38.4	21.6
100	21.7	35.3	35.3	17.1

Frequency (MHz)	Min. PSACR(dB)	Min. RL(dB)	Min. ELFEXT(dB)	Min. PSELFEXT(dB)
1	63.3	20	63.8	60.8
4	52.3	23	51.7	48.7
8	46.1	24.5	45.7	42.7
10	43.9	25	43.8	40.8
16	39.1	25	39.7	36.7
20	35.2	25	37.7	34.7
25	34.1	24.3	35.8	32.8
31.25	31.3	23.6	33.9	30.9
62.5	21.6	21.5	27.8	24.8
100	17.1	20.1	23.8	20.8

## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) 500 FT	12 x 10 x 5 Continuous Length
	<i>Spool dimensions may vary slightly.</i>

[www.alphawire.com](http://www.alphawire.com)

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## EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 74009

74009, RoHS-Compliant Commencing With 9/30/2013 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials, 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:

A blue ink signature of the name "Dave Watson".

Dave Watson, Director of Engineering 12/23/2025

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