



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

# Customer Specification

## PART NO. SPM1409

### Construction

				Diameters (In)	
1) Component 1		9 X 1 COND			
a) Conductor		14 (41/30) AWG BC		0.074	
b) Insulation		0.016" Wall, Nom. PVC/ 0.005" Wall NYLON		0.116	
(1) Color Code		Alpha Wire Color Code F			
Cond	Color	Cond	Color	Cond	Color
1	BLACK	4	GREEN	7	WHITE/BLACK
2	WHITE	5	ORANGE	8	RED/BLACK
3	RED	6	BLUE	9	GREEN/BLACK
2) Cable Assembly		9 Components Cabled			
a) Twists:		2.1 Twists/foot (min)			
b) Core Wrap		Clear Mylar Tape, 25% Overlap, Min.			
3) Jacket		0.065" Wall, Nom.,PVC		0.556+/- 0.026	
a) Color(s)		GREEN			
b) Print		ALPHA WIRE-* P/N SPM1409 9C 14 AWG (2.08mm2) SERIES SPM (UL) WTTC 90C DRY/WET 1000V OR (UL) TC-ER THWN-2 CDRS 90C DRY/WET 600V DIR BUR SUN RES OR MTW 14 AWG FLEXING --- C(RU) AWM I/II A/B 105C 600V FT1 CE ROHS (DATE CODE) (SEQ FOOTAGE) * = Factory Code			

### Applicable Specifications

1) UL		
a) Component 1	THWN-2	90°C Dry / 90°C Wet / 600 V <sub>RMS</sub>
b) Overall	UL 1277 TC	90°C Dry / 90°C Wet / 600 V <sub>RMS</sub>
	UL 2277 WTTC	90°C Dry / 90°C Wet / 1000 V <sub>RMS</sub>
	SUN RES	
	UL 1685 Vertical Tray Flame Test	
	UL 1063 MTW	90°C Dry / 60°C Wet / 600 V <sub>RMS</sub>
	DIRECT BURIAL	
	EXPOSED RUN	
	OIL RES I	
2) CSA International	C(RU) AWM I/II A/B FT1	105°C / 600 V <sub>RMS</sub>
3) Other		
a) Component 1	ASTM-B174 Class K	
4) CE:	EU Low Voltage Directive 2006/95/EC	

## 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) 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 REACH SVHC Declaration.

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-40 to 90°C(static), -30 to 90°C (dynamic)
2) Bend Radius	10X Cable Diameter
3) Pull Tension	290 Lbs, Maximum
4) Sunlight Resistance	Yes
5) Direct Burial	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600/1000 V <sub>RMS</sub>
2) Capacitance	34 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Inductance	0.17 µH/ft, Nominal
4) Conductor DCR	2.6 /1000ft @20°C, Nominal

## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) Bulk(Made-to-order)	

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## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:SPM1409

SPM1409 , RoHS-Compliant Commencing With8/24/2009Production

*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 hazardousubstances used in the manufacture of electrical and electronic equipment. The reader is referredto 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)	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'sknowledge, information and belief at the date of its release. The information provided is designedonly 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 ontheir 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

11/2/2012

