2200 US Highway 27 South
Richmond, IN 47374
Tel: 1-800-52 ALPHA
Web: www.alphawire.com

Customer Specification

PART NO. SPM1804

Construction

						Diameters (In)	
1) Component 1						4 X 1 COND	
a) Conductor						18 (19/30) AWG Bare Copper	0.050
b) Insulation						0.016" Wall, Nom. PVC/ 0.005" Wall NYLON	0.092
(1) Color Code						Alpha Wire Color Code F	
Cond	Color	Cond	Color	Cond	Color		
1	BLACK	3	RED				
2	WHITE	4	GREEN				
2) Cable Assembly						4 Components Cabled	
a) Twists:						4.0 Twists/foot (min)	
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
c) Core Wrap						Clear Mylar Tape, 25% Overlap, Min.	
3) Jacket						0.050" Wall, Nom.,PVC	0.326+/- 0.019
a) Color(s)						GREEN	
b) Print						ALPHA WIRE-* P/N SPM1804 4C 18 AWG (0.963mm2) SERIES SPM (UL) WTTC 90C DRY/WET 1000V OR (UL) TC-ER 90C DRY/WET 600V DIR BUR SUN RES OR MTW 18 AWG FLEXING --- C(RU) AWM I/II A/B 105C 600V FT1 CE ROHS (DATE CODE) (SEQ FOOTAGE) * = Factory Code	

Applicable Specifications

Downloaded from Arrow.com.

1) UL		
a) Component 1	Unlisted Conductor	90°C Dry / 90°C Wet / 600 V_{RMS}
b) Overall	UL 1277 TC	90°C Dry / 90°C Wet / 600 V_{RMS}
	UL 2277 WTTC	90°C Dry / 90°C Wet / 1000 V_{RMS}
	SUN RES	
	UL 1685 Vertical Tray Flame Test	
	UL 1063 MTW	90°C Dry / 60°C Wet / 600 V_{RMS}
	OIL RES I	
	DIRECT BURIAL	
	EXPOSED RUN	
2) CSA International	C(RU) AWM I/II A/B FT1	105°C / 600 V_{RMS}
3) Other		
a) Component 1	ASTM-B174 Class K	
4) CE:	EU Low Voltage Directive 2014/35/EU	

Environmental

1) CE: EU Directive 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3):	
	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.
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.

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	60 Lbs, Maximum
4) Sunlight Resistance	Yes
5) Direct Burial	Yes
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	600/1000 V_{RMS}
2) Capacitance	27 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Inductance	0.19 µH/ft, Nominal
4) Conductor DCR	5.6 Ω/1000ft @20°C, Nominal

Downloaded from Arrow.com.

Other

Packaging	Flange x Traverse x Barrel (inches)
a) Bulk(Made-to-order)	

www.alphawire.com

Alpha Wire
2200 US Highway 27 South
Richmond, IN 47374

Tel: 1-800-52 ALPHA

Although Alpha Wire (“Alpha”) makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an “AS IS” basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

Downloaded from Arrow.com.

EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: SPM1804

SPM1804, RoHS-Compliant Commencing With 8/24/2009 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)

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:



Dave Watson, Director of Engineering 4/12/2025

Alpha Wire
2200 US Highway 27 South
Richmond, IN 47374
Tel: 1-908-925-8000

Downloaded from Arrow.com.