



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

Customer Specification

PART NO. SPM1803

Construction

				Diameters (In)	
1) Component 1		3 X 1 COND			
a) Conductor		18 (19/30) AWG BC		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	2	WHITE	3	RED
2) Cable Assembly		3 Components Cabled			
a) Twists:		4.4 Twists/foot (min)			
b) Core Wrap		Clear Mylar Tape, 25% Overlap, Min.			
3) Jacket		0.050" Wall, Nom.,PVC		0.301+/- 0.018	
a) Color(s)		GREEN			
b) Print		ALPHA WIRE-* P/N SPM1803 3C 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

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}
	DIRECT BURIAL	
	EXPOSED RUN	
	OIL RES I	
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 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	45 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	29 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Inductance	0.19 µH/ft, Nominal
4) Conductor DCR	5.6 /1000ft @20°C, Nominal

Other

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

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

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure the 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.



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

RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:SPM1803

SPM1803 , RoHS-Compliant Commencing With8/24/2009Production

*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.***

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'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

11/2/2012

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Alpha Wire:](#)

[SPM1803 GR001](#)