

Customer Specification

PART NO. M1704

Construction

						Diameters (In)	
1) Component 1						4 X 1 COND	
a) Conductor						18 (19/30) AWG Tinned Copper	0.050
b) Insulation						0.016" Wall, Nom. PVC	0.082
(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:						4.4 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) Shield						Tinned Copper BRAID Shield,90% Coverage, Min.	
4) Jacket						0.023" Wall, Nom.,PVC	0.269 (0.281 Max.)
a) Color(s)						SLATE	
b) Print						ALPHA WIRE-* P/N M1704 4C 18 AWG CE ROHS * = Factory Code	

Applicable Specifications

1) UL	VW-1	
2) Military		
a) Component 1	MIL-W-16878/Type C	
3) 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	-55 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	66 Lbs, Maximum
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	1000 V _{RMS}
2) Capacitance	44 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	79 pF/ft @1 kHz, Nominal
4) Inductance	0.17 µH/ft, Nominal
5) Conductor DCR	5.9 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	3.1 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	13.5 x 10 x 4 Continuous length
b) 500 FT	12 x 10.5 x 5 Continuous length
c) 100 FT	10.5 x 5 x 3.5 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

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.

SpecPDFFooterConfidential



EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M1704

M1704, RoHS-Compliant Commencing With 01/11/2004 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European Union (2011/65/EU), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The list of restricted substances to 10 items (commonly known as RoHS 3) The reader is referred to these Directives for the specific definitions and **Compliance on this item**. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control"

Substance

Lead
Mercury
Cadmium
Hexavalent Chromium
Polybrominated Biphenyls (PBB)
Polybrominated Diphenyl Ethers (PBDE) ,
Including Deca-BDE
Bis(2-ethylhexyl) phthalate (DEHP)
Butyl benzyl phthalate (BBP)
Dibutyl phthalate (DBP)
Diisobutyl phthalate (DIBP)

Maximum Control Value

0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.01% by weight (100 ppm)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)

0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
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 this document. This document is intended to be used as a 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 to provide Regulatory information for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory requirements. Authorized Signatory for the Alpha Wire:

A handwritten signature in blue ink, appearing to read 'QBW', with a long horizontal line extending to the right.

Dave Watson, Director of Engineering & QA 16/09/2025

Alpha Wire
711 Lidgerwood Ave.
Elizabeth, NJ 07207
Tel: 1-908-925-8000