

## **Customer Specification**

### **PART NO. M4213**

#### Construction

						Diameters (In)	
1) Component 1						1 X 1 COAX	
a) Conductor						21 (19/.0072) AWG Tinned Copper	0.036
b) Insulation						0.040" Wall, Nom. Polyethylene(PE) 0.116	
(1) Colo	or(s)						
Cond	Color	Cond	Color	Cond	Color		
1	CLEAR						
2) Shield					Tinned Copper BRAID Shield,94% Coverage, Min.		
3) Jacket						0.028" Wall, Nom.,Type IIA PVC	0.195+/- 0.004
a) Color(s)						BLACK	
b) Print						ALPHA WIRE-* P/N M4213 RG 58C/U ROHS * = Factory Code	

### **Applicable Specifications**

1) Military	MIL-C-17/28B RG 58C/U	75°C / 1400 V <sub>RMS</sub>

#### **Environmental**

1) EU Directive 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3):	
	All materials used in the manufacture of this part are in compliance with European Directive 2011/65/EU and the amending Directive 2015/863/EU of 4 June 2015 regarding the restriction of use of certain hazardous substances in electrical and electronic equipment.
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.
3) California Proposition 65:	This product may contain substances known to the State of California to cause Cancer or Reproductive Harm, but is exempt from labeling based on the Consent Judgement. See the Alpha Wire website for more information.

## Properties

Physical & Mechanical Properties		
1) Temperature Range	-40 to 75°C	
2) Bend Radius	10X Cable Diameter	
3) Pull Tension	12.3 Lbs, Maximum	
Electrical Properties	(For Engineering purposes only)	
1) Voltage Rating	1400 V <sub>RMS</sub>	
2) Characteristic Impedance	50 Ω +/- 2	
3) Inductance	0.077 μH/ft, Nominal	
4) Ground Capacitance	30.8 pF/ft @1 kHz, Nominal	
5) Velocity of Propagation	66 %	
6) Conductor DCR	10.8 Ω/1000ft @20°C, Nominal	
7) OA Shield DCR	4.1 Ω/1000ft @20°C, Nominal	
8) Voltage Withstanding	5 kVrms, Minimum	
9) Corona Extinction	1.9 kVrms, Minimum	
10) Attenuation, Max dB/100ft	0.4 @ 1 MHz	
	1.4 @ 10 MHz	
	3.3 @ 50 MHz	
	4.9 @ 100 MHz	
	7.3 @ 200 MHz	
	11.5 @ 400 MHz	
	17 @ 700 MHz	
	20 @ 900 MHz	
	21.5 @ 1 GHz	

## Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 2500 FT	18 x 9 x 8 Continuous length	
b) 1000 FT	12 x 10.5 x 5 Continuous length	
c) 500 FT	10.5 x 5 x 3.5 Continuous length	
d) 100 FT	6.5 x 4 x 2.5 Continuous length	
	[Spool dimensions may vary slightly]	

#### www.alphawire.com

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-800-52 ALPHA

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# **EU/UK/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: M4213

#### M4213, RoHS-Compliant Commencing With 2/1/2006 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 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 8/19/2025

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