

# **Customer Specification**

## **PART NO. M4213**

### Construction

						Diameters (	ln)	
1) Component 1		1 X 1 COAX						
a) Conductor		21 (19,	21 (19/.0072) AWG TC				0.036	
b) Insulation (		0.040"	0.040" Wall, Nom. Polyethylene(PE)			0.116		
(1) Color(s)								
Cond	Color		Cond	Color	Cond		Color	
1	CLEAR							
2) Shield		TC 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(F	RoHS2):
	All materials used in the manufacture of this part are in compliance with European Directive 2011/65/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. Consult Alpha Wire's web site for <u>RoHS C of C</u> .
2) REACH Regulation (EC 190	)7/2006):
	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 <u>Alpha's REACH SVHC Declaration</u> .
3) California Proposition 65:	The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

## **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 kV, Minimum		
9) Corona Extinction	1.9 kV, Minimum		
10) Attenuation, Nom 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) 1000 FT	12 x 6 x 3.5 Continuous length	
b) 500 FT	12 x 4.5 x 3.5 Continuous length	
c) 100 FT	6.5 x 4 x 2.5 Continuous length	
	[Spool dimensions may vary slightly]	

#### www.alphawire.com

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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 5/5/2024

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