

# Customer Specification

## PART NO. M4220

### Construction

		Diameters (In)			
1) Component 1		2 X 1 COAX			
a) Conductor		20 (7/28) AWG TC		0.038	
b) Insulation		0.0205" Wall, Nom. Polyethylene(PE)		0.079	
(1) Color(s)					
Cond	Color	Cond	Color	Cond	Color
1	NATURAL	2	NATURAL		
2) Cable Assembly		2 Components Cabled			
a) Twists:		4.8 Twists/foot (min)			
3) Shield		TC BRAID Shield,85% Coverage, Min.			
4) Jacket		0.028" Wall, Nom.,Type IIA PVC		0.235 (0.245 Max.)	
a) Color(s)		BLACK			
b) Print		ALPHA WIRE-* P/N M4220 RG108 TYPE CE ROHS * = Factory Code			

### Applicable Specifications

1) Military	MIL-C-17/ RG 108 TYPE	85°C / 750 V <sub>RMS</sub>
2) CE:	EU Low Voltage Directive 2006/95/EC	

### Environmental

1) CE: EU Directive 2011/65/EU(RoHS2):	
	This product complies with European Directive 2011/65/EU (RoHS Directive)

	of the European Parliament and of the Council of 8 June 2011. No Exemptions are required for RoHS Compliance on this item. Consult Alpha Wire's web site for RoHS C of C.
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.
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 85°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	21.4 Lbs, Maximum
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	750 V <sub>RMS</sub>
2) Characteristic Impedance	78 Ω +/- 7
3) Inductance	0.119 μH/ft, Nominal
4) Mutual Capacitance	19.7 pf/ft @1 kHz, Nominal
5) Ground Capacitance	45.1 pf/ft @1 kHz, Nominal
6) Velocity of Propagation	66 %
7) Conductor DCR	9.5 Ω/1000ft @20°C, Nominal
8) OA Shield DCR	5.3 Ω/1000ft @20°C, Nominal
9) Attenuation, Nom dB/100ft	0.7 @ 1 MHz
	2.3 @ 10 MHz
	5.2 @ 50 MHz
	7.5 @ 100 MHz
	11 @ 200 MHz
	16 @ 400 MHz

## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) 1000 FT	12 x 10 x 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
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>
<b>Notes:</b>	
a) One conductor has a bare strand for identification.	

[www.alphawire.com](http://www.alphawire.com)

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207

Tel: 1-800-52 ALPHA (25742)

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.

ALPHA WIRE - CONFIDENTIAL AND PROPRIETARY Notice to persons receiving this document and/or technical information. This document is confidential and is the exclusive property of ALPHA WIRE, and is merely on loan and subject to recall by ALPHA WIRE at any time. By taking possession of this document, the recipient acknowledges and agrees that this document cannot be used in any manner adverse to the interests of ALPHA WIRE, and that no portion of this document may be copied or otherwise reproduced without the prior written consent of ALPHA WIRE. In the case of conflicting contractual provisions, this notice shall govern the status of this document. <br /><br />©2019 ALPHA WIRE - all rights reserved.



# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M4220

M4220, RoHS-Compliant Commencing With 2/1/2006 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 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) 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.

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 & QA

8/25/2020

Alpha Wire

711 Lidgerwood Ave.

Elizabeth, NJ 07207

Tel: 1-908-925-8000

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Coaxial Cables](#) category:*

*Click to view products by [Alpha](#) manufacturer:*

Other Similar products are found below :

[89880-003-1000](#) [CY2389-000](#) [8221-010-U1000](#) [9116-010-U500](#) [1322R-010-1000](#) [1807A-B59-U1000](#) [9251-010-1000](#) [9275-010-U1000](#)  
[935240-000](#) [980704-001](#) [CF2823-000](#) [33312-010-500](#) [CZ1589-000](#) [5022W0809-0CS3263](#) [10610-4-4](#) [EF8108-000](#) [535719-000](#) [672525-001](#)  
[144517-000](#) [735A1-008-1000](#) [134655-000](#) [8212-010-U500](#) [480414-000](#) [7915A 009U1000](#) [5024A1311-0](#) [1281S5 010250](#) [1281S5 000250](#)  
[1530A 010U1000](#) [1505A 0081000](#) [9272 006U1000](#) [9248 010U1000](#) [7809WB 010500](#) [9244 0101000](#) [1694A 0081000](#) [1190A 0101000](#)  
[8241F J5C1000](#) [7915A 0091000](#) [TRCH-50-2](#) [9066 0031000](#) [7805R 008100](#) [1674A TIN100](#) [9116SB 0101000](#) [1525A 0031000](#) [9271 0061000](#)  
[1613A 0101000](#) [1807A B591000](#) [5339Q5 009U500](#) [643948 010U500](#) [539945 0091000](#) [9116R 0101000](#)