

# 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.	

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