2200 US Highway 27 South
Richmond, IN 47374
Tel: 1-800-52 ALPHA
Web: www.alphawire.com

Customer Specification

PART NO. M4220

Construction

						Diameters (In)	
1) Component 1						2 X 1 COAX	
a) Conductor						20 (7/28) AWG Tinned Copper	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)	
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
3) Shield						Tinned Copper 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_{RMS}
2) 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.
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 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_{RMS}
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, Max 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

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	12 x 10.5 x 5 Continuous length
b) 500 FT	12 x 5.94 x 5 Continuous length
c) 100 FT	6.5 x 4 x 2.5 Continuous length
d) Bulk(Made-to-order)	
	[Spool dimensions may vary slightly]
Notes:	
a) One conductor has a bare strand for identification.	

www.alphawire.com

Alpha Wire
2200 US Highway 27 South
Richmond, IN 47374

Tel: 1-800-52 ALPHA

□□□□□

□□□□

Alpha Wire □□□□M4220

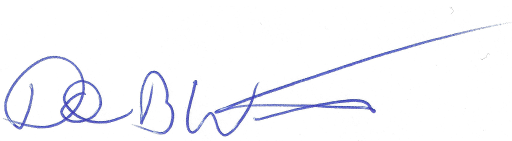
M4220□□□RoHS□□□□ 2006/2/1 □□□□□□□

□□□□□□□□□□ *Alpha* □□□□□□□□□□□□□□□□*2011/65/EU*□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□*RoHS2*□□□□□□□□□□□□□□□□□□□□□*2015/863/EU*□
RoHS□□*SJ/T 11364-2014*□

□□□□	□□□□□□
Lead	□□□□□□□□□0.1% (1000 ppm)
Mercury	□□□□□□□□□0.1% (1000 ppm)
Cadmium	□□□□□□□□□0.01% (100 ppm)
Hexavalent Chromium	□□□□□□□□□0.1% (1000 ppm)
Polybrominated Biphenyls (PBB)	□□□□□□□□□0.1% (1000 ppm)
Polybrominated Diphenyl Ethers (PBDE), Including Deca-BDE	□□□□□□□□□0.1% (1000 ppm)
Bis(2-ethylhexyl) phthalate (DEHP)	□□□□□□□□□0.1% (1000 ppm)
Butyl benzyl phthalate (BBP)	□□□□□□□□□0.1% (1000 ppm)
Dibutyl phthalate (DBP)	□□□□□□□□□0.1% (1000 ppm)
Diisobutyl phthalate (DIBP)	□□□□□□□□□0.1% (1000 ppm)

Alpha Wire □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ □□
□□□

Alpha Wire □□□□□□□□□



□□□□□□□□ Dave Watson 2025/9/14