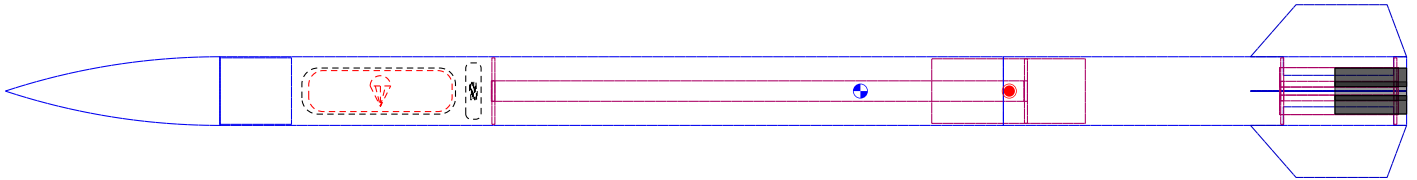


Rocket Design



Momba von Madcow Rocketry Extendet Cluster

Stages: 1

Mass (with motor): 788 g

Stability: 2,17 cal

CG: 83,5 cm

CP: 98 cm















		Motor	Avg Thrust	Burn Time	Max Thrust	Total Impulse	Thrust to Wt	Propellant Wt	Size
Altitude	402 m	D9 (×5)	9,16 N	2,18 s	25 N	20 Ns	1,18:1	16,1 g	18/70 mm
Flight Time	64,2 s								
Time to Apogee	9,12 s								
Optimum Delay	6,9 s								
Velocity off Pad	15,7 m/s								
Max Velocity	96,5 m/s								
Velocity at Deployment	2,35 m/s								
Landing Velocity	7,31 m/s								
Total:						99,8 Ns	5,92:1	80,5 g	

5×C6-5

		Motor	Avg Thrust	Burn Time	Max Thrust	Total Impulse	Thrust to Wt	Propellant Wt	Size
Altitude	149 m	C6 (×5)	6,17 N	1,61 s	15 N	9,99 Ns	0,83:1	9,6 g	18/70 mm
Flight Time	27,3 s								
Time to Apogee	6,09 s								
Optimum Delay	4,4 s								
Velocity off Pad	12,2 m/s								
Max Velocity	49,4 m/s								
Velocity at Deployment	6,5 m/s								
Landing Velocity	7,31 m/s								
Total:						50 Ns	4,17:1	48 g	

Parts Detail

Stufe

	Nose cone	Polystyrene PS (1,05 g/cm ³)	Ogive	Len: 21 cm	Mass: 135 g
	Körperrohr	Karton (0,68 g/cm ³)	Dia _{in} 6,31 cm Dia _{out} 6,71 cm	Len: 76,5 cm	Mass: 213 g
	Parachute	Rip stop nylon (64,4 g/m ²)	Dia _{out} 60 cm	Len: 14 cm	Mass: 21,4 g
	Shroud Lines	1/16 In. braided nylon (1,02 g/m)	Lines: 6	Len: 52 cm	
	Nomex Tuch		Dia _{out} 4,5 cm		Mass: 20 g
	Ring	Aircraft plywood (Birch) (0,725 g/cm ³)	Dia _{in} 2 cm Dia _{out} 6,5 cm	Len: 0,292 cm	Mass: 6,36 g
	Ring	Aircraft plywood (Birch) (0,725 g/cm ³)	Dia _{in} 2 cm Dia _{out} 6,3 cm	Len: 0,292 cm	Mass: 5,94 g
	Innenrohr	Karton (0,68 g/cm ³)	Dia _{in} 1,9 cm Dia _{out} 2 cm	Len: 52 cm	Mass: 10,8 g
	Koppler	Karton (0,68 g/cm ³)	Dia _{in} 6,31 cm Dia _{out} 6,31 cm	Len: 15 cm	Mass: 0 g
	Schock Band	Tubular Nylon (11 mm, 7/16 in) (13 g/m)		Len: 40 cm	Mass: 5,2 g
	Body tube	Paper (1,12 g/cm ³)	Dia _{in} 6,5 cm Dia _{out} 6,71 cm	Len: 39,4 cm	Mass: 95,3 g
	Fin set (4)	Aircraft plywood (Birch) (0,725 g/cm ³)	Thick: 0,3 cm		Mass: 70,3 g
	Ring	Aircraft plywood (Birch) (0,725 g/cm ³)	Dia _{in} 1,9 cm Dia _{out} 6,5 cm	Len: 0,292 cm	Mass: 6,42 g
	Ring	Aircraft plywood (Birch) (0,725 g/cm ³)	Dia _{in} 1,9 cm Dia _{out} 6,5 cm	Len: 0,292 cm	Mass: 6,42 g
	Innenrohr	Karton (0,68 g/cm ³)	Dia _{in} 1,8 cm Dia _{out} 1,9 cm	Len: 11,6 cm	Mass: 11,5 g

