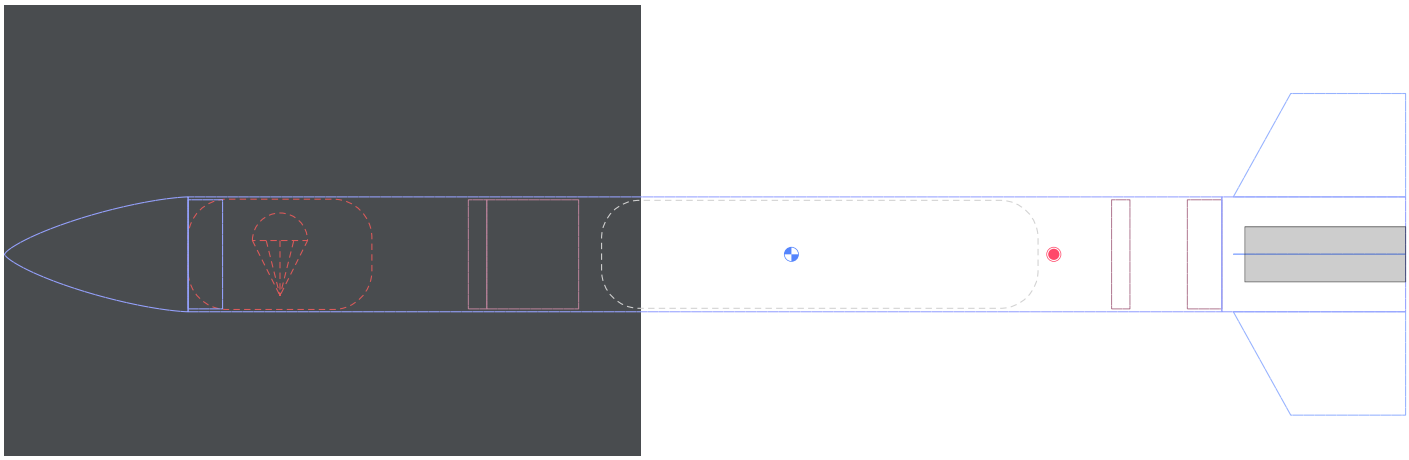
Rocket Design



Matheus I

Stages: 1

Mass (with motor): 672 g

Stability: 2,28 cal / 18,7 %

CG: 34,3 cm

CP: 45,7 cm

F39T-6

Altitude	200 m
Flight Time	31,7 s
Time to Apogee	6,69 s
Optimum Delay	5,36 s
Velocity off Pad	12,8 m/s
Max Velocity	60,5 m/s
Velocity at Deployment	6,91 m/s
Landing Velocity	8,1 m/s

Motor	Avg Thrust	Burn Time	Max Thrust	Total Impulse	Thrust to Wt	Motor Wt	Size
F39T	39,6 N	1,25 s	59,5 N	49,7 Ns	6,01:1	22,7 g	24/70 mm

Parts Detail

Etapa: Sustentador

	Ogiva	PLA - 100% infill (1,25 g/cm³)	Série de Haack	Len: 8 cm	Mass: 33 g
	Tubo do corpo	PVC (1,39 g/cm³)	Dia_{in} 4,8 cm Dia_{out} 5 cm	Len: 45 cm	Mass: 171 g
	Componente de massa		Dia_{out} 4,7 cm		Mass: 200 g
	SkyAngle Classic 20 [Cd 0.8 (3 oz) 20.8 in^3]	Nylon 240 (0,014 g/m²)	Dia_{out} 50,8 cm	Len: 8 cm	Mass: 85 g
	Shroud Lines	Polietileno (15 g/m)	Lines: 8	Len: 70 cm	
	Anteparo	Madeira compensada (bétula) (0,63 g/cm³)	Dia_{out} 4,75 cm	Len: 0,8 cm	Mass: 7 g
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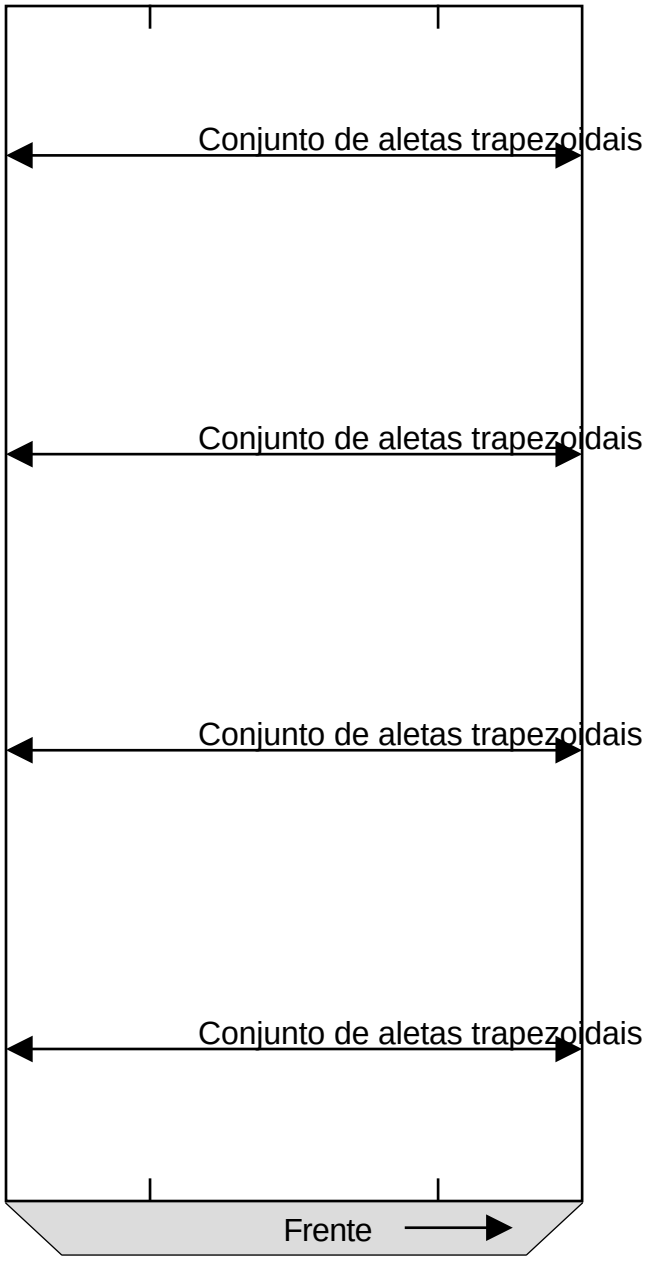
	Acoplador de tubo	PLA - 100% infill (1,25 g/cm³)	Dia_{in} 4,75 cm Dia_{out} 4,75 cm	Len: 1,5 cm	Mass: 0 g
	Acoplador de tubo	PLA - 100% infill (1,25 g/cm³)	Dia_{in} 4,75 cm Dia_{out} 4,75 cm	Len: 4 cm	Mass: 20 g
	Tubo do corpo	PLA - 100% infill (1,25 g/cm³)	Dia_{in} 4,75 cm Dia_{out} 5 cm	Len: 8 cm	Mass: 20 g
	Conjunto de aletas trapezoidais (4)	PLA - 100% infill (1,25 g/cm³)	Thick: 0,3 cm		Mass: 70 g


Conjunto de aletas trapezoidais
Conjunto de aletas trapezoidais
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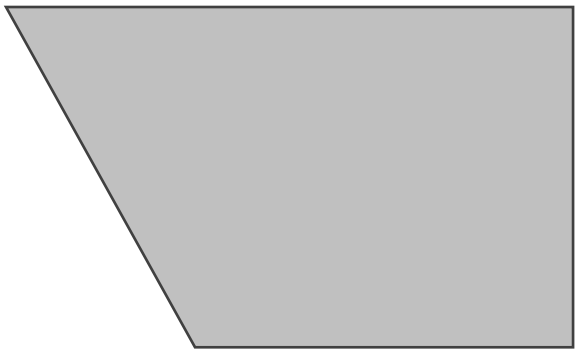
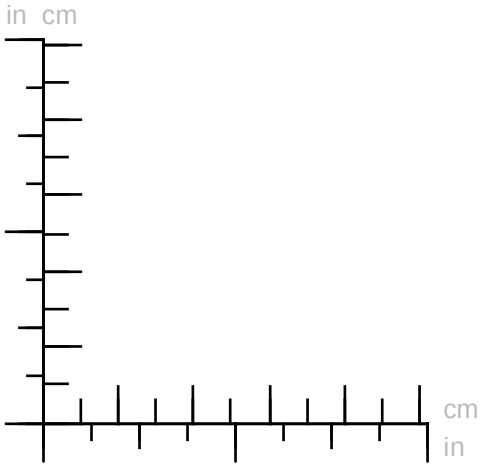
Conjunto de aletas trapezoidais
Frente

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