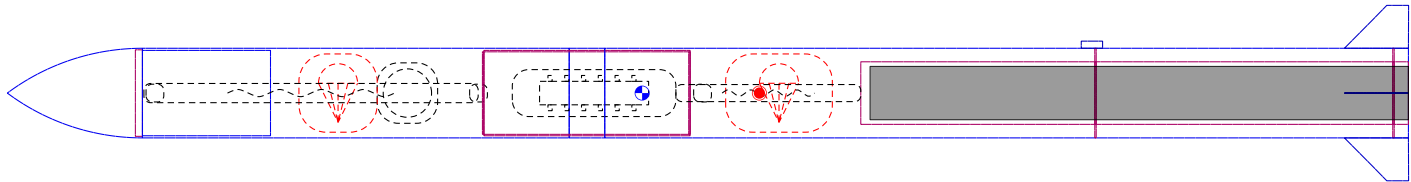


Rocket Design



Rocket

Stages: 1

Mass (with motor): 18722 g

Stability: 1,31 cal




















CG: 89,3 cm

CP: 106 cm

Altitude	4576 m	Motor	Avg Thrust	Burn Time	Max Thrust	Total Impulse	Thrust to Wt	Propellant Wt	Size
Flight Time	63,1 s	8429-M2020-IM	2021 N	4,17 s	2649 N	8429 Ns	11,01:1	4349 g	75/757 mm
Time to Apogee	28,5 s								
Optimum Delay	24,2 s								
Velocity off Pad	39,8 m/s								
Max Velocity	405 m/s								
Velocity at Deployment	N/A								
Landing Velocity	204 m/s								

## Parts Detail

Devam Et

	Burun Konisi	Aluminum (2,7 g/cm <sup>3</sup> )	Ogive	Len: 19 cm	Mass: 4403 g
	Bulkhead	Plywood (birch) (0,63 g/cm <sup>3</sup> )	Dia <sub>out</sub> 12,2 cm	Len: 1 cm	Mass: 73,3 g
	MAPA		Dia <sub>out</sub> 2,5 cm		Mass: 40 g
	üst gövde	Aluminum (2,7 g/cm <sup>3</sup> )	Dia <sub>in</sub> 12 cm Dia <sub>out</sub> 12,6 cm	Len: 60 cm	Mass: 1878 g
	FAYDALI YÜK		Dia <sub>out</sub> 8,5 cm		Mass: 4000 g
	Parachute	Ripstop nylon (67 g/m <sup>2</sup> )	Dia <sub>out</sub> 150 cm	Len: 11 cm	Mass: 135 g
	Shroud Lines	Elastic cord (round 2 mm, 1/16 in) (1,8 g/m)	Lines: 6	Len: 150 cm	
	Shock cord	Tubular nylon (14 mm, 9/16 in) (16 g/m)		Len: 400 cm	Mass: 64 g
	Body tube	Aluminum (2,7 g/cm <sup>3</sup> )	Dia <sub>in</sub> 12 cm Dia <sub>out</sub> 12,6 cm	Len: 5 cm	Mass: 156 g
	iç entegrasyon gövdesi	Cardboard (0,68 g/cm <sup>3</sup> )	Dia <sub>in</sub> 11,6 cm Dia <sub>out</sub> 12 cm	Len: 29 cm	Mass: 146 g
	MAPA		Dia <sub>out</sub> 2,5 cm		Mass: 40 g
	MAPA		Dia <sub>out</sub> 2,5 cm		Mass: 40 g
	Bulkhead	Cardboard (0,68 g/cm <sup>3</sup> )	Dia <sub>out</sub> 11,6 cm	Len: 0,2 cm	Mass: 14,4 g
	Bulkhead	Cardboard (0,68 g/cm <sup>3</sup> )	Dia <sub>out</sub> 11,6 cm	Len: 0,2 cm	Mass: 14,4 g
	AVIONİK		Dia <sub>out</sub> 6,6 cm		Mass: 500 g
	alt gövde	Aluminum (2,7 g/cm <sup>3</sup> )	Dia <sub>in</sub> 12,6 cm Dia <sub>out</sub> 12,6 cm	Len: 113 cm	Mass: 0 g
	motor yatağı	Fiberglass (1,85 g/cm <sup>3</sup> )	Dia <sub>in</sub> 8,8 cm Dia <sub>out</sub> 8,8 cm	Len: 77 cm	Mass: 0 g
	Centering ring	Fiberglass (1,85 g/cm <sup>3</sup> )	Dia <sub>in</sub> 8,8 cm Dia <sub>out</sub> 12,6 cm	Len: 0,2 cm	Mass: 23,6 g
	Centering ring	Fiberglass (1,85 g/cm <sup>3</sup> )	Dia <sub>in</sub> 8,8 cm Dia <sub>out</sub> 12,6 cm	Len: 0,2 cm	Mass: 23,6 g
	Parachute	Ripstop nylon (67 g/m <sup>2</sup> )	Dia <sub>out</sub> 79 cm	Len: 15 cm	Mass: 49 g
	Shroud Lines	Elastic cord (round 2 mm, 1/16 in) (1,8 g/m)	Lines: 6	Len: 150 cm	



Shock cord

Elastic cord  
(round 2 mm,  
1/16 in)  
(1,8 g/m)

Len: 400 cm

Mass: 7,2 g



Freeform fin set (4)

Fiberglass  
(1,85 g/cm<sup>3</sup>)

Thick: 0,3 cm

Mass: 80,6 g



Launch lug

Fiberglass  
(1,85 g/cm<sup>3</sup>)

Dia<sub>in</sub> 0,8 cm  
Dia<sub>out</sub> 1 cm

Len: 3 cm

Mass: 1,57 g

