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September 29, 2025

ABRA Space LTD.
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The VULCAN 29 rocket engine was tested on 29 September 2025 by the ABRA Space team at our test stand. This test was carried out for the purpose of evaluating data on the performance of the engine, and no definitive determination was made as to its full compliance with the NFPA 1125 standard. However, according to the test results, the engine was judged to be suitable for model rocketry use and was approved by members of the ABRA Space Engine Testing Division.

Motor Details

Motor Manufacturer	ABRA Space LTD.
Manufacturer's Designation	ARMS – Amateur Rocket Motor System, single use
Propellant	C-Slot & Standart Burn
TMT Nomenclature	4501 / F

Physical Characteristics

Diameter	1.141’’	/ 29 mm
Overall Length (Forward Closure & Nozzle Included)	7.795”	/ 198 mm
Case Length	6.299’’	/ 160 mm
Inner Diameter	1.043’’	/ 26,5 mm
Wall Thickness	0.049’’	/ 1,25 mm

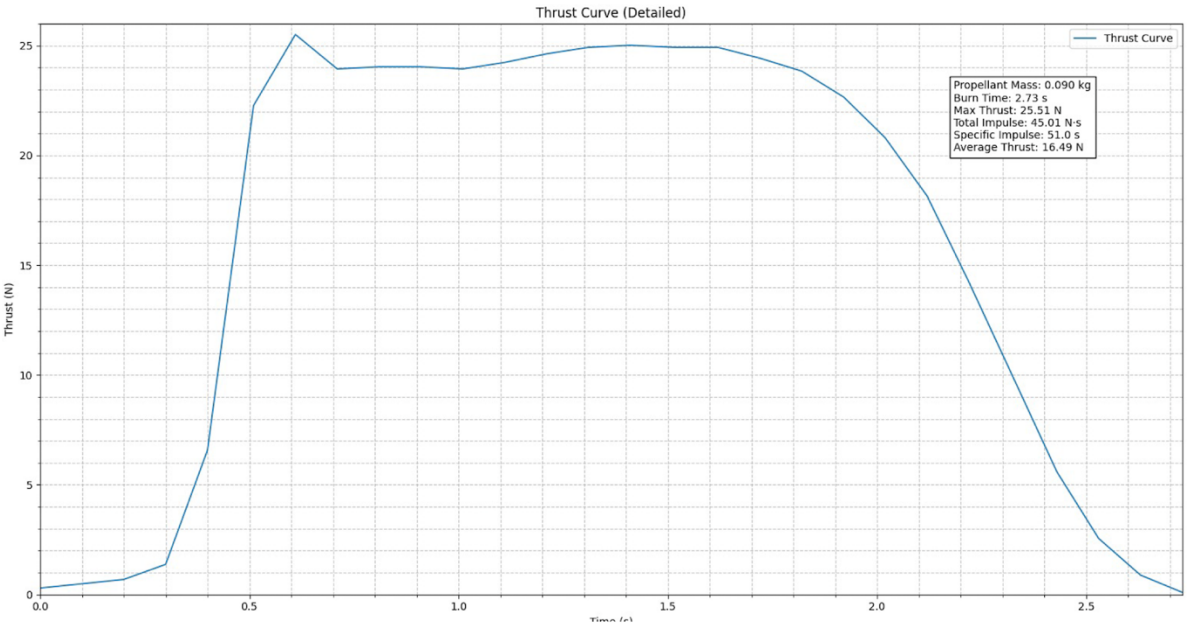
Mass Data

Loaded Mass	0.279 lb	/ 127 g (± 17g)
Propellant Mass	0.198 lb	/ 90 g*
Burnout Mass	0.081 lb	/ 37 g

Performance Data

Burn Time	2.73 sec	
Total Impulse	10.119 lbf.s	/ 45.01 N.s
Specific Impulse	51.0 sec	
Max Thrust	5.735 lbf	/ 25.51 N
Average Thrust	3.708 lbf	/ 16.49 N

(*data provided by manufacturer)



Sincerely,

ABRA Space LTD.