

ANIMAL MOTOR WORKS J450

CERTIFIED VALUES

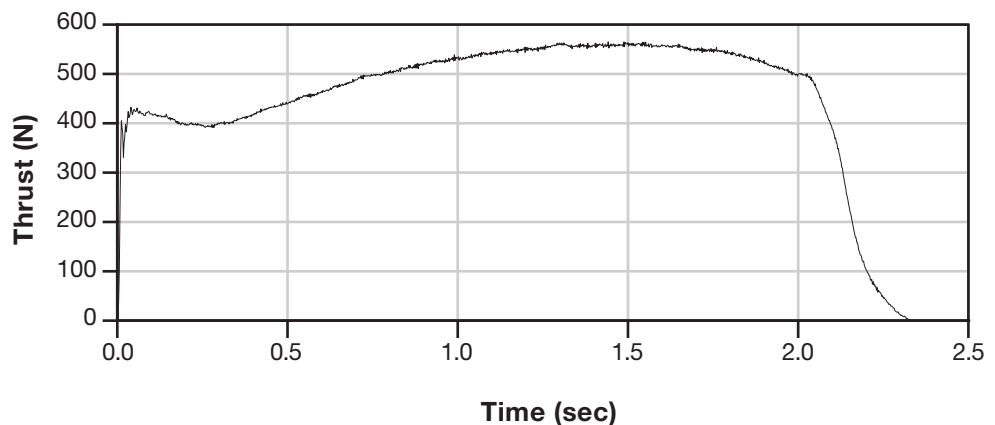
Total Impulse: 1080 newton-seconds
Delays: Plugged
Propellant Type: Composite / Super Tiger
Propellant Mass: 533.1grams
Casing Dimensions: 54 mm x 326 mm
Certification Date: 02-August-25
Certification Type: High Power Rocket

STATIC TEST DATA

Date Tested: 02-August-24
Total Impulse: 1069.72 newton-seconds (σ 7.83)
Peak Thrust: 563.18 newtons (σ 26.39)
Burn Time: 2.33 seconds (σ 0.14)
Average Thrust: 459.11 newtons
Mass After Firing: 659.5 grams

Delay Time	Average Measured Delay	Initial Mass	Mfg Recommended Max Liftoff Weight
P	None	1196.4 g	

TYPICAL THRUST-TIME CURVE



REMARKS

Consists of the Animal Motor Works 54-1050 motor and Animal Motor Works J450ST-P reload kit. No substitutions allowed.

AMW J450 RASP.ENG file made from NAR published data
; File produced SEPT 4, 2002
; The total impulse, peak thrust, average thrust and burn time are
; the same as the averaged static test data on the NAR web site in
; the certification file. The curve drawn with these data points is as
; close to the certification curve as can be with such a limited
; number of points (32) allowed with wRASP up to v1.6.

Time (sec)	Thrust (N)
0.009	251.586
0.016	376.074
0.030	413.450
0.051	430.832
0.094	423.296
0.162	413.149
0.262	395.566
0.402	420.182
0.495	444.898
0.805	504.078
1.048	536.028
1.223	550.597
1.299	563.180
1.334	555.319
1.470	560.042
1.588	559.841
1.764	546.980
1.921	516.838
1.993	496.743
2.025	499.154
2.047	479.160
2.086	414.354
2.115	344.525
2.141	252.290
2.177	140.161
2.213	82.780
2.239	50.347
2.271	27.861
2.296	12.860
2.330	0.000

