

AEROTECH E18

CERTIFIED VALUES

Total Impulse: 39 newton-seconds
Delays: 4, 8, 10 seconds

Propellant Type: Composite
Propellant Mass: 20.7 grams

Casing Dimensions: 24 mm × 70 mm

Certification Date: 93-December-23
Contest Use Date: 94-March-23

Certification Type: Model Rocket

STATIC TEST DATA

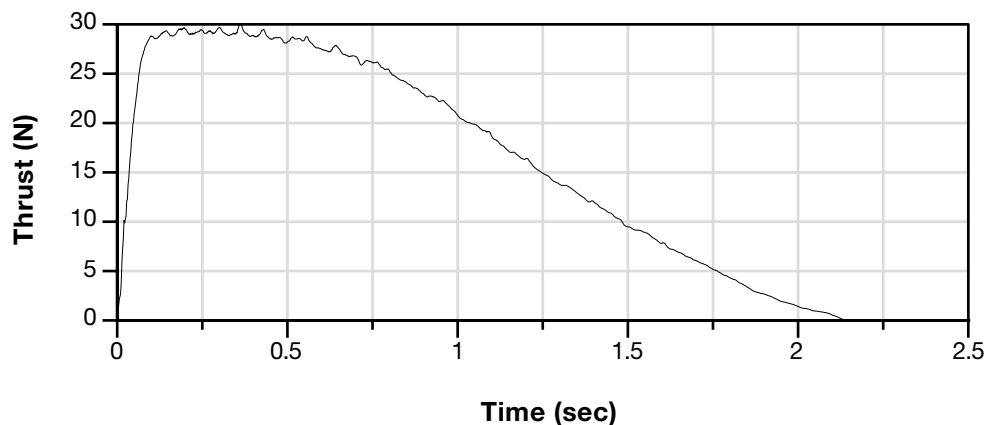
Date Tested: 92-May

Total Impulse: 36.54 newton-seconds (σ 0.95)
Peak Thrust: 30.08 newtons (σ 1.13)
Burn Time: 2.14 seconds (σ 0.07)
Average Thrust: 17.07 newtons

Mass After Firing: 31.5 grams

| Delay Time | Average Measured Delay | Initial Mass | Mfg Recommended Max Liftoff Weight |
|------------|------------------------|--------------|------------------------------------|
| 4 | 3.87 | 58.9 g | 454 g |
| 8 | 8.14 | 58.8 g | 269 g |
| 10 | 10.79 | 59.0 g | 156 g |

TYPICAL THRUST-TIME CURVE



REMARKS

Uses AeroTech RMS-24/40 Reload System and AeroTech E18 Reload Kit. No substitutions allowed.

; Aerotech E18 RASP.ENG file made from NAR published data
 ; File produced July 4, 2000
 ; 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.

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E18 24 70 4-8 .0270 .0589 A
0.016 6.086
0.042 17.004
0.073 26.138
0.098 28.815
0.134 29.357
0.170 29.347
0.195 30.080
0.236 29.347
0.287 29.878
0.338 29.337
0.368 29.878
0.404 28.795
0.424 29.688
0.465 28.976
0.526 28.785
0.592 28.063
0.669 27.341
0.786 25.908
0.908 22.850
1.025 20.163
1.157 17.105
1.284 14.057
1.462 10.638
1.660 6.506
1.838 3.270
2.006 1.109
2.083 0.388
2.140 0.000
  
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