

# KOSDON I170

## CERTIFIED VALUES

Total Impulse: 440 newton-seconds  
Delays: 11 seconds

Propellant Type: Composite  
Propellant Mass: 287.0 grams

Casing Dimensions: 38 mm × 314 mm

Certification Date: 96-June-30

Certification Type: High Power Rocket

## STATIC TEST DATA

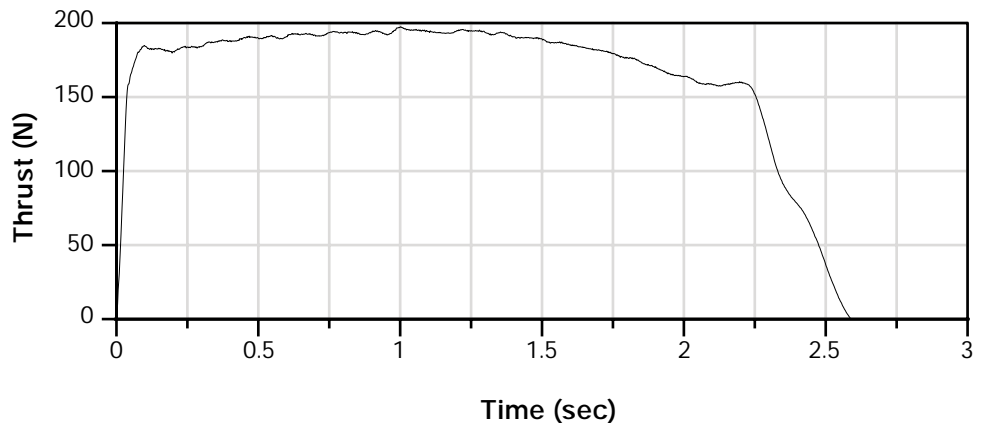
Date Tested: 96-March-17

Total Impulse: 433.21 newton-seconds ( $\sigma$  0.35)  
Peak Thrust: 197.54 newtons ( $\sigma$  4.93)  
Burn Time: 2.59 seconds ( $\sigma$  0.01)  
Average Thrust: 167.26 newtons

Mass After Firing: 352.0 grams

| Delay Time | Average Measured Delay | Initial Mass | Mfg Recommended Max Liftoff Weight |
|------------|------------------------|--------------|------------------------------------|
| 11         | 11.07                  | 645.0 g      |                                    |

## TYPICAL THRUST-TIME CURVE



## REMARKS

This is a reloadable motor, certified only with the manufacturer specified casing and reload kit. No substitutions allowed.

; Kosdon I170 RASP.ENG file made from NAR published data  
 ; File produced November 1, 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.

```

I170 38 314 6 .2870 .6450 K
0.021 101.195
0.029 132.631
0.050 166.762
0.093 181.831
0.171 180.434
0.307 183.229
0.436 188.618
0.593 190.015
0.757 192.809
0.914 194.107
1.007 197.540
1.093 194.107
1.229 194.107
1.407 190.015
1.564 185.923
1.686 181.831
1.836 174.945
1.986 164.067
2.129 157.181
2.200 159.976
2.236 158.579
2.264 143.509
2.307 118.959
2.336 99.798
2.386 82.023
2.450 64.249
2.500 39.649
2.543 17.774
2.590 0.000
  
```

