

AEROTECH KBA K1750R

CERTIFIED VALUES

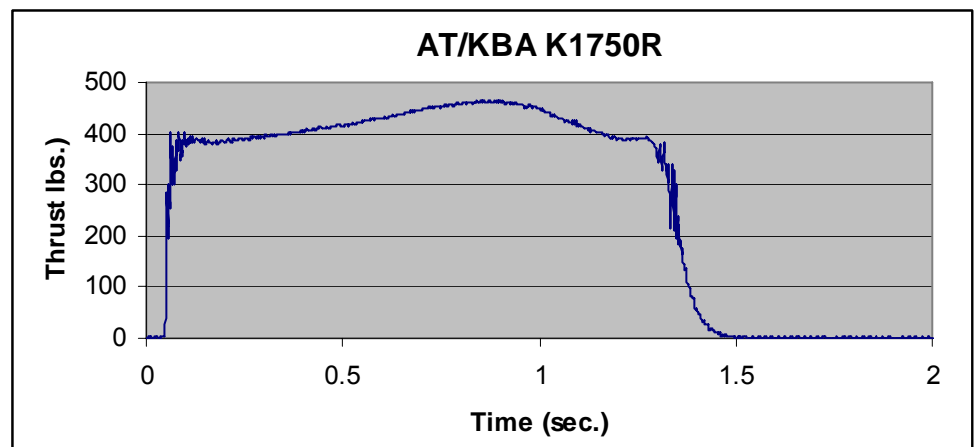
Total Impulse: 2423 Newton-seconds
Delays: Plugged
Propellant Type: Redline
Propellant Mass: 1253 grams
Casing Dimensions: 54mm × 727mm
Certification Date: July 11, 2007
Certification Type: High Power Rocket Motor

STATIC TEST DATA

Date Tested: June 16, 2007
Total Impulse: 2423 Newton-seconds (σ 2)
Peak Thrust: 2070 Newtons (σ 3)
Burn Time: 1.38 seconds (σ 0.02)
Average Thrust: 1751 Newtons (σ 24)
Mass After Firing: 1123.0 grams

Delay Time(sec.)	Plugged		
Average Measured Delay(sec.)	P		
Initial Mass (gm.)	2564.3		

TYPICAL THRUST-TIME CURVE



REMARKS

Certified for use in AMW 54-2550 hardware only.
 No substitutions allowed



Data File		Total	Peak	Average	Burn	Delay	Initial	Fired
#	Engine	Impulse	Thrust	Thrust	Time	Time	Weight	Weight
070616W07	K1750R-P	2424.0	2072.0	1767.7	1.37	Plugged	2563.5	1121.3
070616W09	K1750R-P	2421.0	2068.0	1734.2	1.40	Plugged	2565.0	1124.7
Average		2422.5	2070.0	1751.0	1.38		2564.3	1123.0
Std Dev		2.121	2.828	23.688	0.018			
Std Dev %		0.1%	0.1%	1.4%	1.3%			
Range	Indicated	Actual	Actual	Actual	Actual	Actual	Average	
	Plugged	Plugged	Plugged				Plugged	

; @File: AT_KBA_K1750R_combined.txt, @Pts-I: 801, @Pts-O: 32, @Sm: 5, @CO: 5%
; @TI: 2421.44, @Tia: 2418.01, @Tie: +0.01%, @ThMax: 2058.05, @ThAvg: 1742.085, @Tb: 1.388
; Exported using ThrustCurveTool, www.ThrustGear.com
K1750 54 727 Plugged 1.253 2.564 RCS/AT

0.0 2.45499
0.01 39.5218
0.016 357.969
0.02 649.982
0.022 845.325
0.024 915.287
0.028 1142.042
0.032 1279.968
0.044 1528.224
0.064 1671.433
0.072 1697.02
0.096 1719.708
0.166 1699.356
0.292 1754.903
0.706 2005.76
0.862 2053.02
0.958 2004.95
1.164 1732.828
1.2359 1733.891
1.2539 1704.359
1.2879 1552.031
1.2939 1416.239
1.3019 1292.719
1.3059 1287.983
1.3139 1162.03
1.3319 775.007
1.3479 502.036
1.3679 278.186
1.3999 101.2629
1.4319 33.1233
1.4639 10.24151
1.5999 0.0