

# AEROTECH/KBA M3500

## CERTIFIED VALUES

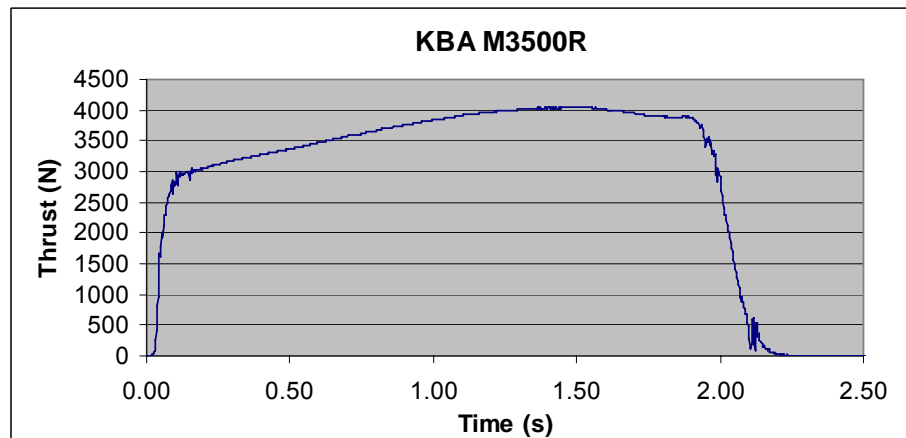
**Total Impulse:** 7310 Newton-seconds  
**Delays:** Plugged  
**Propellant Type:** Redline  
**Propellant Mass:** 3755 grams  
**Casing Dimensions:** 75mm × 1039mm  
**Certification Date:** August 25, 2008  
**Certification Type:** High Power Rocket Motor

## STATIC TEST DATA

**Date Tested:** August 25, 2008  
**Total Impulse:** 7310 Newton-seconds ( $\sigma$  18)  
**Peak Thrust:** 4076 Newtons ( $\sigma$  82)  
**Burn Time:** 2.11 seconds ( $\sigma$  0.04)  
**Average Thrust:** 3469 Newtons ( $\sigma$  74)  
**Mass After Firing:** 2832 grams

<b>Delay Time(sec.)</b>	<b>Plugged</b>		
<b>Average Measured Delay(sec.)</b>	N/A		
<b>Initial Mass (gm.)</b>	7173		

## TYPICAL THRUST-TIME CURVE



## REMARKS

**Certified for use in AMW 76-7600 hardware only.  
No substitutions allowed**



Data File #	Engine	Total Impulse	Max Thrust	Avg Thrust	Burn Time	Delay Time	Init Weight	Fired Weight
080825W01	KBA-M3500	7322	4134	3521	2.08	Plugged	7169	2829
080825W02	KBA-M3500	7297	4018	3416	2.13	Plugged	7177	2835
Average		7310	4076	3469	2.11		7173	2832
Std Dev		17.678	82.024	74.246	0.040			
Std Dev %		0.2%	2.0%	2.1%	1.9%			
Range	Indicated	Actual	Actual					
	Plugged	Plugged	Plugged					

; @File: M3500.txt, @Pts-I: 1176, @Pts-O: 32, @Sm: 3, @CO: 5%  
; @TI: 7311.23, @Tla: 7305.44, @Tle: 0.0%, @ThMax: 4059.41, @ThAvg: 3454.11, @Tb: 2.115  
; Exported using ThrustCurveTool, www.ThrustGear.com  
M3500 75 1039 P 3.755 7.173 AT/RCS

0.0 0.371006  
0.106 8.86696  
0.122 135.5975  
0.13 670.948  
0.14 1587.827  
0.156 2299.92  
0.178 2751.17  
0.188 2731.01  
0.196 2914.16  
0.2 2842.83  
0.208 2985.3  
0.21 2903.6  
0.248 3027.96  
0.932 3723.01  
1.5879 4059.41  
1.9859 3900.58  
2.0279 3759.75  
2.0399 3495.75  
2.0539 3522.63  
2.0739 3313.47  
2.0819 2962.24  
2.0899 2964.52  
2.1039 2484.66  
2.1639 1015.768  
2.1879 602.438  
2.1979 218.762  
2.2059 440.947  
2.2119 274.648  
2.2199 474.133  
2.2219 353.742  
2.2399 180.0836  
2.3499 0.0