

DMS™ Disposable Motor System™ Data Sheet

AeroTech produces a variety of composite propellant formulations including White Lightning (W), Super White Lightning (WS), Blue Thunder (T), Black Jack (J), Black Max (FJ), Redline (9), Warp-9 (N), Mojave Green (G), Metalstorm (M), Dark Matter (DM), Super Thunder (ST), Classic (C) & Propellant-X (X). Rocket propellant abbreviations, indicated in the brackets, are listed after the average thrust number on the DMS rocket motors listed below. All rocket motors listed have TRA certification.

29mm DMS								
Motor	Part No.	Length (inches/mm)	Total Impulse I _T (N-sec./lb-sec)	Peak Thrust T _{MAX} (N/lb)	Thrust Duration T _B (sec.)	Time Delay T _D (sec.)	Prop Wt. (g/oz)	Total Wt. (g/oz)
G8ST	070800	5.79 / 147	130 / 29.5	8 / 1.8	19.8	P	83.4 / 2.9	157 / 5.5
G12ST	071200	5.79 / 147	144 / 32.4	31 / 7.0	12.7	P	82 / 2.9	150 / 5.3
G72DM	077214	4.88 / 124	105 / 23.6	106 / 23.8	1.3	14	63 / 2.2	132 / 4.7
G75M	077513	4.88 / 124	115 / 25.9	111 / 25.0	1.3	13	67 / 2.4	133 / 4.7
G80NT	078014	4.88 / 124	137 / 30.8	109 / 24.5	1.7	14	62.5 / 2.2	128 / 4.5
G125T	071214	4.88 / 124	128 / 28.8	160 / 36.0	0.95	14	59.6 / 2.1	125 / 4.4
H13ST	081300	8.00 / 203	211 / 47.4	50 / 11.2	15.20	P	116 / 4.1	203 / 7.2
H115DM	081114	8.00 / 203	172 / 38.7	126 / 28.3	1.5	14	113 / 4.0	205 / 7.2
H135W	081314	8.00 / 203	226 / 50.8	152 / 34.2	1.7	14	121 / 4.3	211 / 7.4
H169WS	081613	8.00 / 203	233 / 52.4	231 / 51.9	1.4	13	112 / 4.0	202 / 7.1
H182R	081814	8.00 / 203	218 / 49.0	192 / 43.2	1.2	14	115 / 4.1	207 / 7.3
H195NT	081914	8.00 / 203	236 / 53.1	254 / 57.1	1.16	14	107 / 3.8	196 / 6.9
I205W	092014	12.00 / 305	345 / 77.6	253 / 56.9	1.7	14	188 / 6.6	315 / 11.1
38mm DMS								
Motor	Part No.	Length (inches/mm)	Total Impulse I _T (N-sec./lb-sec)	Peak Thrust T _{MAX} (N/lb)	Thrust Duration T _B (sec.)	Time Delay T _D (sec.)	Prop Wt. (g/oz)	Total Wt. (g/oz)
H100W	081014	6.12 / 155	234 / 52.6	131 / 29.3	2.3	14	121 / 4.3	261 / 9.2
H219T	082114	6.12 / 155	234 / 52.6	267 / 60.0	1.1	14	109 / 3.8	256 / 9.0
H283ST	082815	6.12 / 155	201 / 45.2	325 / 73.1	0.7	15	97 / 3.4	247 / 8.7
H45W	0845P	7.98 / 202	320 / 71.9	87 / 19.6	6.0	PS	180 / 6.4	364 / 12.8
H550ST	085514	7.98 / 202	320 / 71.9	667 / 150.0	0.57	14	145 / 5.1	315 / 11.1
I140W	091414	7.98 / 202	336 / 75.5	181 / 40.7	2.4	14	183 / 6.6	356 / 12.6
I175WS	091713	7.98 / 202	333 / 74.9	260 / 58.5	1.9	13	168 / 5.9	348 / 12.3
I280DM	092814	14.03 / 356	561 / 126.1	386 / 86.8	1.9	14	355 / 12.5	616 / 21.7
I500T	095014	14.03 / 356	620 / 139.4	613 / 137.8	1.24	14	312 / 11.0	576 / 20.3
J270W	102714	14.03 / 356	703 / 158.1	356 / 80.0	2.6	14	381 / 13.4	642 / 22.7
J425R	104214	14.03 / 356	676 / 152.0	452 / 101.6	1.6	14	364 / 12.8	631 / 22.3
J435WS	104314	14.03 / 356	737 / 165.7	607 / 136.5	1.7	14	352 / 12.4	624 / 22.0
54mm DMS								
Motor	Part No.	Length (inches/mm)	Total Impulse I _T (N-sec./lb-sec)	Peak Thrust T _{MAX} (N/lb)	Thrust Duration T _B (sec.)	Time Delay T _D (sec.)	Prop Wt. (g/oz)	Total Wt. (g/oz)
I65W	096510	8.58 / 218	640 / 143.9	178 / 40.0	9.0	PS	377 / 13.3	752 / 26.5
J250W	102514	8.58 / 218	716 / 161.0	331 / 74.4	2.8	14	363 / 12.8	708 / 25.0
J450DM	104514	14.10 / 358	1,097 / 246.6	556 / 125.0	2.4	14	662 / 23.4	1,209 / 42.7
K400C	114014	14.10 / 358	1,361 / 306.2	549 / 123.4	3.3	14	650 / 22.9	1,194 / 42.1
K535W	115314	14.10 / 358	1,434 / 322.4	655 / 147.3	2.8	14	745 / 26.3	1,264 / 44.6
K455NW	114517	25.00 / 635	2,328 / 523.4	1,308 / 294.1	5.1	17	1,361 / 48.0	2,286 / 80.6
K850DM	118516	25.00 / 635	1,867 / 419.7	974 / 219.0	2.2	16	1,149 / 40.5	2,022 / 71.3
L1000W	121018	25.00 / 635	2,714 / 610.2	1,261 / 283.5	2.7	18	1,400 / 49.4	2,194 / 77.4
75mm DMS								
Motor	Part No.	Length (inches/mm)	Total Impulse I _T (N-sec./lb-sec)	Peak Thrust T _{MAX} (N/lb)	Thrust Duration T _B (sec.)	Time Delay T _D (sec.)	Prop Wt. (g/oz)	Total Wt. (g/oz)
L875DM	12875P	25.12 / 638	3,800 / 854.3	1,035 / 232.7	4.3	PS	2,472 / 87.2	4,577 / 161.5
M1350W	13135P	25.12 / 638	5,293 / 1,190.0	1,779 / 400.0	3.9	PS	2,690 / 94.9	4,808 / 169.6
98mm DMS								
Motor	Part No.	Length (inches/mm)	Total Impulse I _T (N-sec./lb-sec)	Peak Thrust T _{MAX} (N/lb)	Thrust Duration T _B (sec.)	Time Delay T _D (sec.)	Prop Wt. (g/oz)	Total Wt. (g/oz)
M1340W	13143P	21.90 / 556	7,673 / 1,725.0	1,928 / 433.5	5.7	PS	4,036 / 142.4	6,998 / 246.8
O5280X	15528P	55.44 / 1408	22,680 / 5,098.9	6,990 / 1,571.5	4.5	PS	9,779 / 344.9	15,345 / 541.3

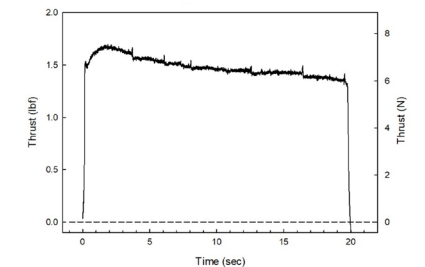
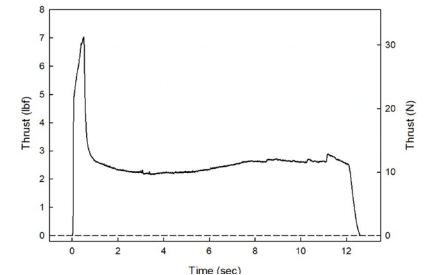
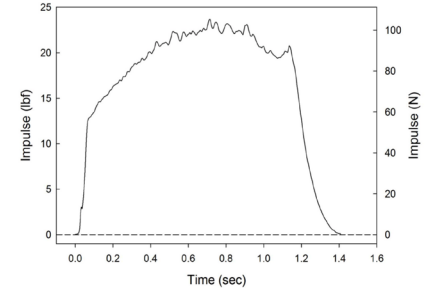
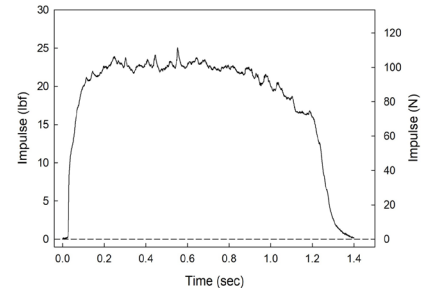
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AEROTECH®
CONSUMER AEROSPACE

DISPOSABLE MOTOR SYSTEM™

DMS ROCKET MOTORS

29mm

G8ST**G12ST****G72DM****G75M**

Dan Michael's 3/4 Scale Patriot Missile
using an AeroTech DMS 05280X Rocket Motor
at the 2021 Red Glare Launch

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CONSUMER AEROSPACE

THRUST YOU CAN TRUST!™

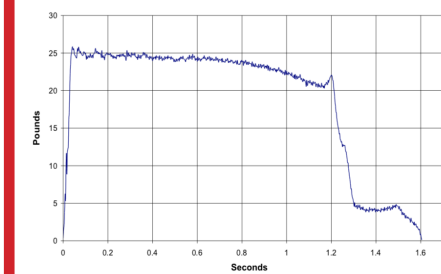
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Rocketry**

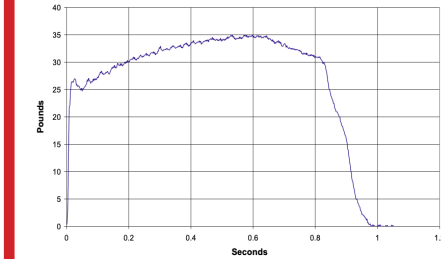
ACTUAL CERTIFICATION
THRUST-TIME CURVES FOR
DMS™ ROCKET MOTORS.
MANY DMS™ ROCKET MOTORS
FEATURE ADJUSTABLE TIME DELAYS.

29mm

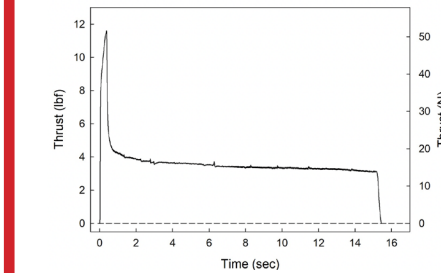
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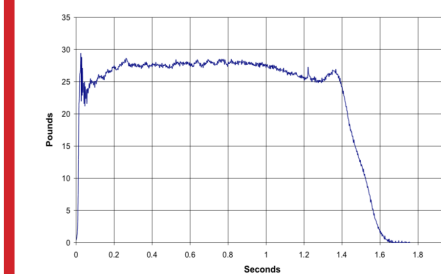
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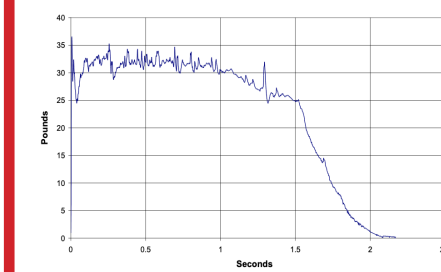
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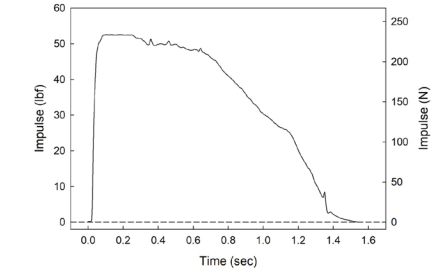
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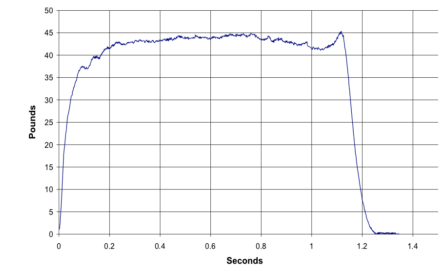
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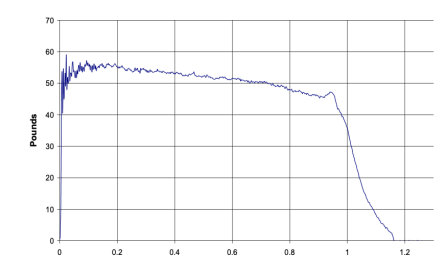
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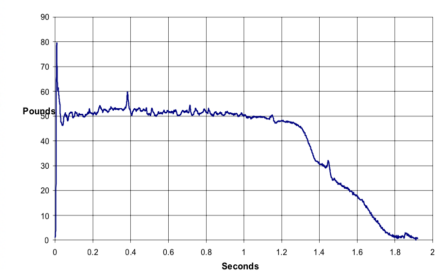
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H195NT



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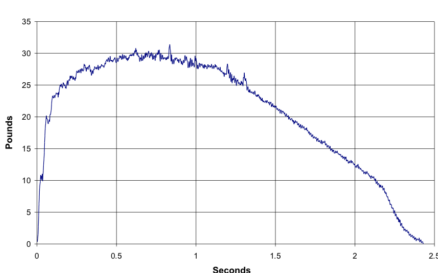
38mm

Additional DMS™ motor data
is available in the Resources
Area of the AeroTech website.
www.aerotech-quest.com

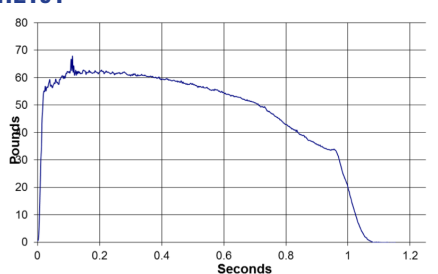


AeroTech Division of RCS,
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Cedar City, UT 84721 USA
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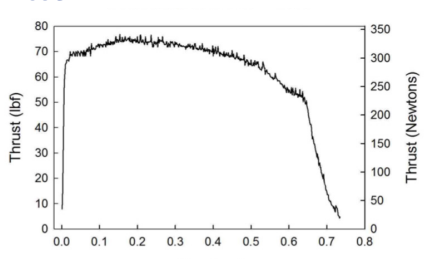
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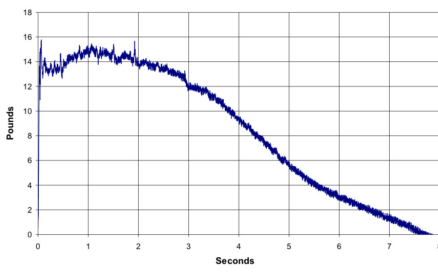
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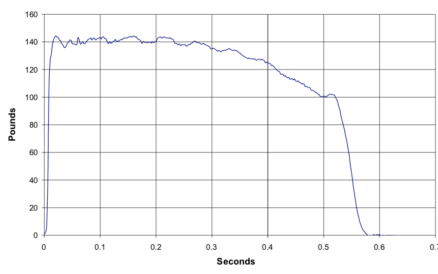
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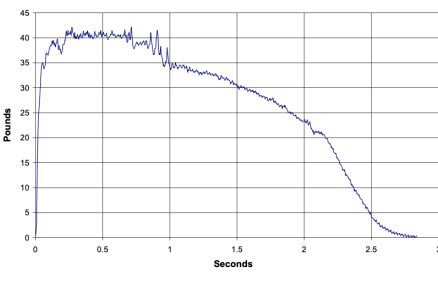
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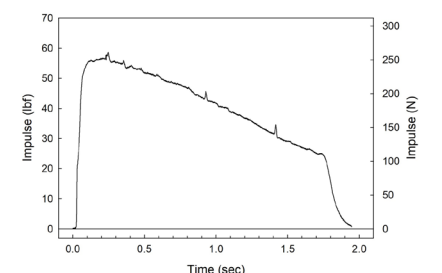
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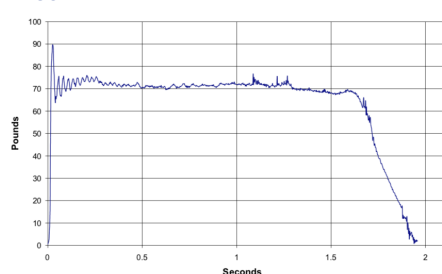
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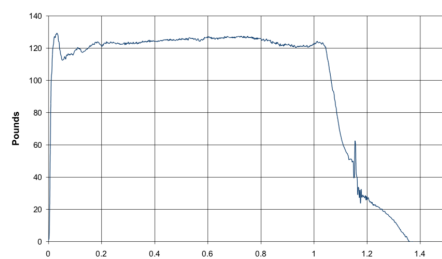
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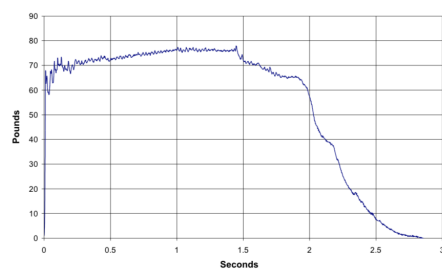
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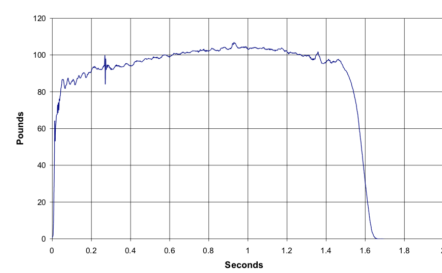
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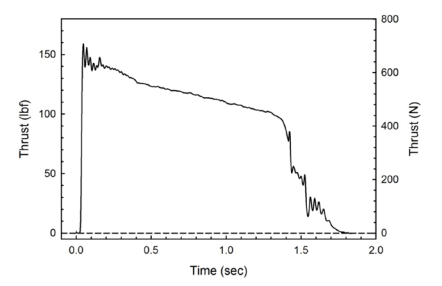
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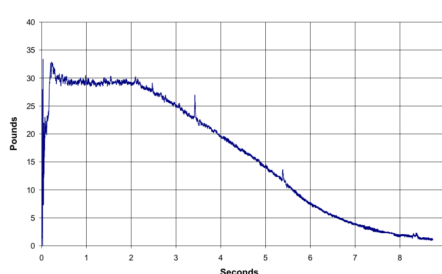
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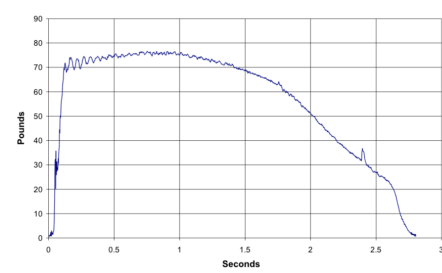
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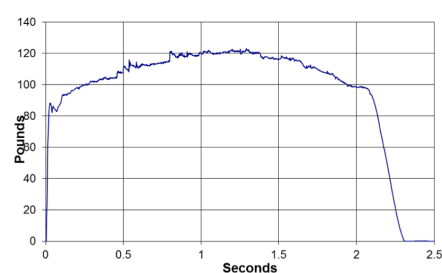
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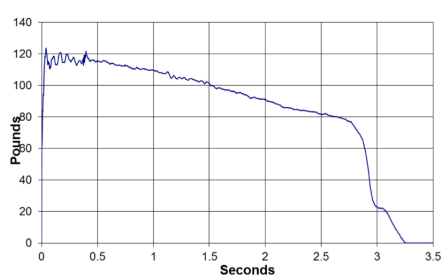
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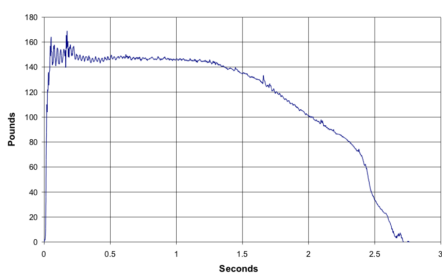
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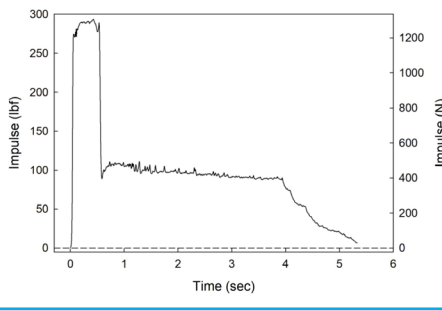
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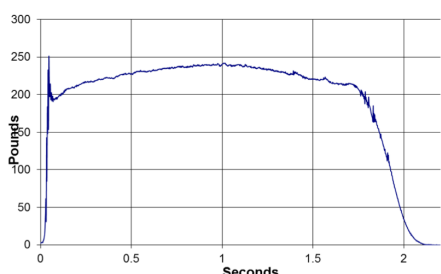
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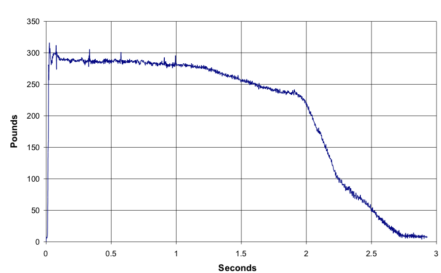
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K850DM

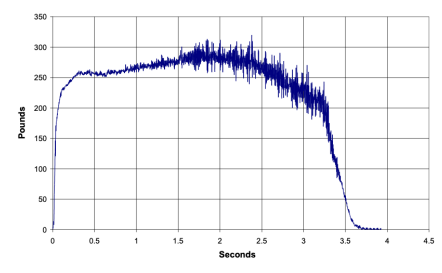


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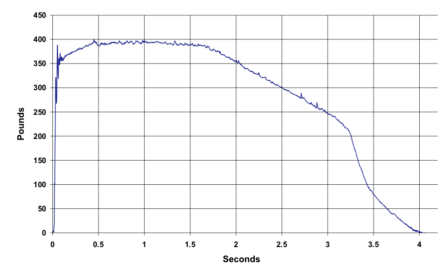


54mm

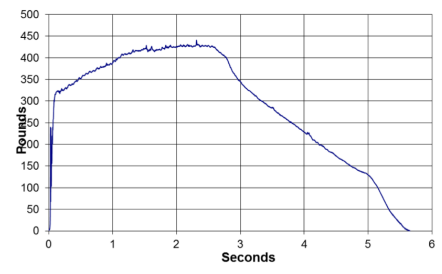
L875DM (75mm)



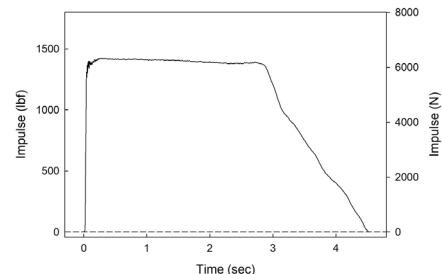
M1350W (75mm)



M1340W (98mm)



O5280X (98mm)



75mm & 98mm