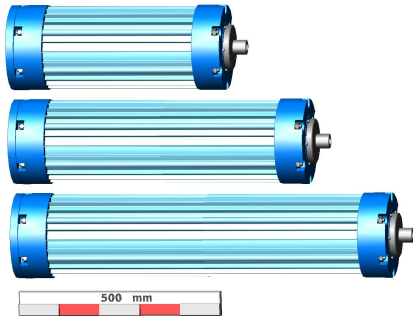


# ADVANCED MOTION TECHNOLOGIES Inc

## D125 Series ServoRam™



	Model No	D125C/039/10/MkI	D125C/078/9/MkI	D125C/117/8/MkI	D125C/156/7/MkI	D125C/195/6/MkI	D125C/234/5/MkI	D125C/273/4/MkI	D125C/312/3/MkI
<b>Description</b>	<b>Rail Voltage</b>								
Stroke Length (mm)	-	39	78	117	156	195	234	273	312
Magnet Sets	-	10	9	8	7	6	5	4	3
Peak Static Thrust (N)	300V	7500	6750	6000	5250	4500	3750	3000	2250
	600V	15000	13500	12000	10500	9000	7500	6000	4500
Thrust at Continuous Rated Current	300/600V	2000	1800	1600	1400	1200	1000	800	600
Thrust Co-efficient (N/A)	-	500	450	400	350	300	250	200	150
Damping Coefficient (A/Ms-1)	-	29.75	26.77	23.8	20.83	17.85	14.88	11.9	8.93
Peak Current (A)	300V	15	15	15	15	15	15	15	15
	600V	30	30	30	30	30	30	30	30
Continuous Rated Current (A)	300/600V	4	4	4	4	4	4	4	4
Max Velocity (Ms-1 at zero thrust)	300V	0.4	0.8	1.2	1.6	2.0	2.4	2.6	2.9
	600V	0.5	1.1	1.6	2.2	2.7	3.3	3.4	3.5
Efficiency (N/W)		0.94	0.846	0.752	0.72	0.658	0.564	0.47	0.38
Phase Resistance (Ohms)	-	8.87	8.87	8.87	8.87	8.87	8.87	8.87	8.87
Approximate Closed Length (mm)	-	700	700	700	700	700	700	700	700
External Diameter (mm)	-	208	208	208	208	208	208	208	208
Approximate Mass (Kgs)	-	100	96	92	88	84	80	76	72

Please note the forces shown above **ARE NOT REQUIRED TO SUPPORT A DEAD LOAD**. They are therefore fully available to manoeuvre it. The dead load is supported by the self-tuning gas spring, integral to the ram.

Gas Pressure (psi)	20	40	60	80	100	120	140
Load Supported (kg)	146.4	292.7	439.1	585.4	731.8	878.2	1024.5
Load Supported (lbs)	322	644	966	1288	1610	1932	2254

It is important to note that a ServoRam™ should not be considered to be a direct replacement for a fluid ram in any machine application. The dynamic forces need to be distinguished from the static forces, so that the electro-magnetic part of the machine handles the precision dynamic actions, whilst the slowly changing and kinetic energy recycling actions are handled by the gas spring.



[www.advancedmotion.net](http://www.advancedmotion.net)

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