

Load Moving Equipment

GAPMASTER™ Aero-Caster® Cross Section



The GAPMASTER™ Aero-Caster® design includes a perforated membrane which meters the rate of air flow, resulting in the ability to cross gaps and steps.

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The GAPMASTER™ Aero-Caster® is specially developed for the smooth movement of loads over gaps and steps in the floor surface. Originally developed for theater applications to move stage sets and theater seating, the GAPMASTER™ Aero-Caster® can also be effective in autoclave loading, moving dies over t-slots, moving loads into and out of elevators or onto flush-mount scales, lift tables, turntables and pit covers.

Utilizing the Aero-Caster® principle, compressed air is pumped into the circular Aero-Caster® diaphragm and center plenum chamber. When the air pressure in the Aero-Caster® plenum chamber exceeds the weight of the load, air slowly and evenly escapes between the flexible Aero-Caster® membrane and the surface to create a thin, nearly frictionless cushion of air 0,08 to 0,13 mm thick. The load virtually floats on the surface.

A perforated membrane encloses the GAPMASTER™ Aero-Caster® and meters the rate of air flow. Upon encountering a gap, rapid outflow of air is prevented by the metering action of this membrane. Since the load is actually floating over the surface, the potential for floor damage is substantially reduced.

SPECIFICATIONS: GAPMASTER™ Aero-Caster®

Model		12GSM	15GSM	21GSM	27GSM	36GSM
Capacity*	Kg	545	910	1.815	3.175	5445
Operating Pressure	Bar	1,05	1,05	1,05	1,05	1,05
Torus Diameter	mm	305	380	533	685	915
Air Flow	liters/sec	7	8,5	9,5	11,8	17
	m ³ /min	0,45	0,5	0,57	0,7	1,0
Lift Area	cm ²	516	903	1.806	3.096	5.161
Height (Deflated)**	mm	16	16	16	26	33
Effective Lift**	mm	19	32	44	44	51
Weight	Kg	0,9	1,4	1,8	5,5	10,0
Maximum Step	mm	6,3	6,3	6,3	9,6	9,6
Maximum Gap	mm	15	15	15	20	20

*Capacities shown are maximum.

**Height and Effective Lift measurements are based on AeroGo Slide Mount configuration. GAPMASTER™ Aero-Casters® are furnished without landing pads and may be fixed-mounted or slide-mounted. For best results and reduced air flow, smooth and round off all gap edges and repair concrete cracks in floor surface.

An innovative and cost-effective solution for moving heavy loads