

# Modular Air Bearing System (MLS)



## Operation

Solving Modular Air Bearing Systems are designed to handle a variety of heavy loads and items of machinery.

To ensure maximum stability at least three or four modules should be placed under the load, placing the modules as far apart as possible whilst also evenly distributing the weight between them.

The modules are then connected to the control unit and the compressed air supply. Pressure regulators within the control unit are used to increase the air pressure in each module until the load is raised off the floor. A thin film of air is then formed under each module virtually eliminating friction and allowing a heavy load to be moved and positioned with ease and accuracy.

## Floor surface quality

The quality of the floor surface affects the air consumption and the force required to move the load. To achieve optimum performance a level, paper-smooth surface, free of steps and cracks, is required. For occasional moves a substandard floor can be improved using thin sheet steel or PVC.



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## TECHNICAL INFORMATION

Type	Capacity per set of 4 <sup>1)</sup>		Air consumption <sup>2)</sup>		Air pressure <sup>3)</sup>		A	B	C	D	E <sup>5)</sup>	Control unit type
	kg	lbs	NI/min	SCFM	kPa	psi	mm	mm	mm	in	in	
MLS 412X-S	7000	15400	1120	39	300	43	304	31/51 <sup>4)</sup>	15	1/2	1	MRB 4x15-25
MLS 415X-S	10000	22000	2200	77	300	43	380	31/51 <sup>4)</sup>	20	1/2	1	MRB 4x15-25
MLS 418X-S	11200	24200	2600	92	300	43	457	58	20	3/4	1	MRB 4x20-25
MLS 421X-S	14000	31000	3000	106	210	30	534	58	25	3/4	1	MRB 4x20-25
MLS 427X-S	24000	53000	3400	120	210	30	684	65	35	3/4	1 1/2	MRB 4x20-40
MLS 436X-S	44000	97000	4000	141	210	30	914	71	50	3/4	1 1/2	MRB 4x20-40
MLS 418X-H	20000	44000	4600	162	410	59	457	58	20	3/4	1	MRB 4x20-25
MLS 421X-H	28000	62000	5200	184	410	59	534	58	25	3/4	1 1/2	MRB 4x20-40
MLS 427X-H	48000	106000	6000	212	430	62	684	65	35	3/4	1 1/2	MRB 4x20-40
MLS 436X-H	80000	176000	7000	247	400	58	914	71	50	1	1 1/2	MRB 4x25-40
MLS 442X-H	120000	265000	7500	262	400	58	1070	71	65	1	2	MRB 4x25-50
MLS 448X-H	160000	353000	8000	282	450	65	1220	71	75	1	2	MRB 4x25-50
MLS 460X-H	240000	528000	11000	388	400	57	1505	71	75	1	2	MRB 4x25-50

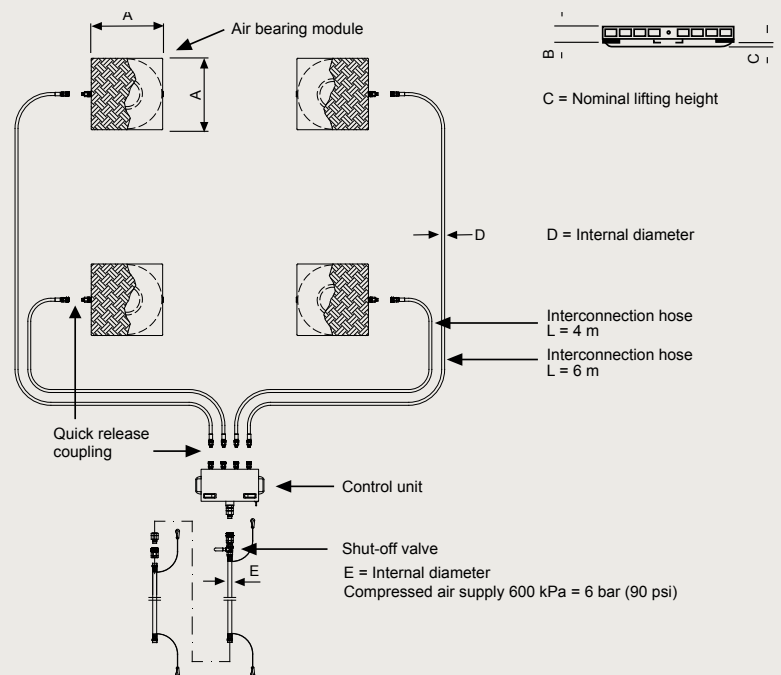
1) The modules must be placed under the load so that each one sees no more than one quarter of the full system capacity. 2) These figures refer to good floor conditions, e.g. power-trowelled and sealed concrete surfaces. 3) Air pressure in air bearing element at max load (100 kPa=1 bar). 4) Cast aluminium/ Extruded aluminium construction. 5) Supply hose ID and shut-off-valve thread size.

### The Modular Air Bearing System includes:

- 4 air bearing modules
- 4 interconnection hoses with quick release couplings
- Control unit equipped with pressure regulator and gauge for each module, supply pressure gauge and plastic support bars
- 30 m supply hose including shut-off valve
- Operating instructions

### Optional:

- Remote control unit
- Control unit for six-module system
- Control unit equipped with assembly brackets or ball casters
- 8 m or 10 m interconnection hose
- 50 m supply hose including shut-off valve
- Outlets for air jacks and external drive units



**Ab Solving Oy**  
 Bennäsvägen 181  
 FI-68600 Jakobstad, Finland  
 Tel. +358 6 781 7500  
 sales@solving.com  
 www.solving.com

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