



MULTI-STAGE, MULTI-FUNCTION AND MODULAR INTERMEDIATE VACUUM MODULES SERIES MI - GENERAL DESCRIPTION

Intermediate modules are non-independent multi-stage and multi-function vacuum generators to be assembled to the generators of the GVMM range.

Their thickness and weight are reduced to the maximum compared to their suction flow rate and they have been designed to be enclosed between the lid and the base of the GVMM vacuum generator and fixed with screws. The internal connections for the compressed air supply allow communication between them and the basic generator, with no need for external manifolds.

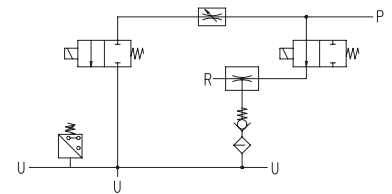
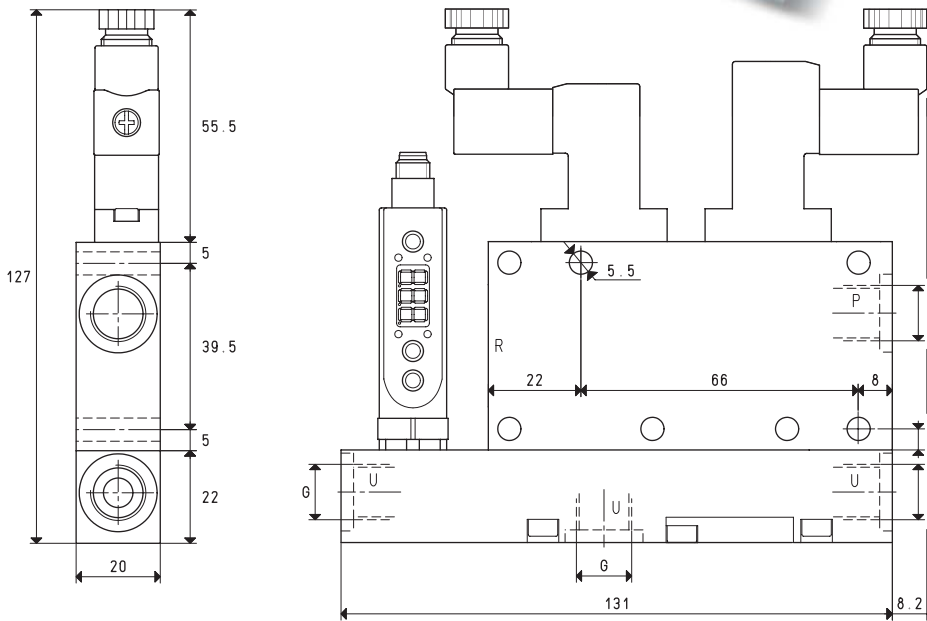
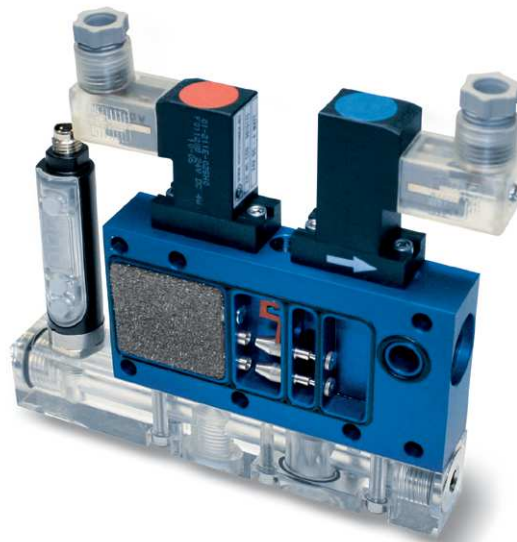
This way, each module becomes an independent vacuum unit that can control an entire vacuum system.

They can be ordered in the desired amount and flow rate, either already assembled onto the GVMM multi-function vacuum generator, or separately, to be assembled to the GVMM generator previously installed onto the machine. In this case, we suggest ordering a screw kit suitable for the number of modules to be assembled.

MI intermediate vacuum modules are made up of the same elements that compose GVMM generators, except for the lid. They operate and they are used as the GVMM multi-function vacuum generator onto which they are assembled.

3D drawings are available on vuototecnica.net





P=COMPRESSED AIR CONNECTION R=EXHAUST U=VACUUM CONNECTION

Item		MI 3						MI 7		
		MI 3			MI 7			MI 7		
Intake air flow rate	m ³ /h	2.6	2.8	3.0	5.5	6.0	6.4			
Maximum level of vacuum	-KPa	64	85	85	60	80	85			
Final pressure	mbar abs.	360	150	150	400	200	150			
Supply pressure	bar	3	4	5	3	4	5			
Optimal supply pressure	bar			5			5			
Air consumption	NI/s	0.6	0.7	0.8	0.9	1.1	1.3			
Max quantity of air blown at 5 bar	l/min			128			128			
Supply solenoid valve position	NO/NC			NO			NO			
Electrical absorption	W			2			2			
Ejection solenoid valve position	NC			NC			NC			
Electrical absorption	W			4			4			
Supply voltage	V			24DC			24DC			
Vacuum switch output				PNP			PNP			
Degree of protection	IP			65			65			
Temperature of use	°C			-10 / +60			-10 / +60			
Noise level at optimal supply pressure	dB(A)			66			70			
Weight	g			380			380			
G	Ø			G1/4"			G1/4"			

Note: To order a generator without a digital vacuum switch, indicate code MI .. SV.

To order a generator with NC supply solenoid valve, indicate code MI .. NC.

Note: All vacuum values indicated in the table are valid at the normal atmospheric pressure of 1013 mbar and obtained with a constant supply pressure.

Vacuum generator supply must be carried out with non-lubricated compressed air, 5 micron filtration, in accordance with standard ISO 8573-1 class 4.

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

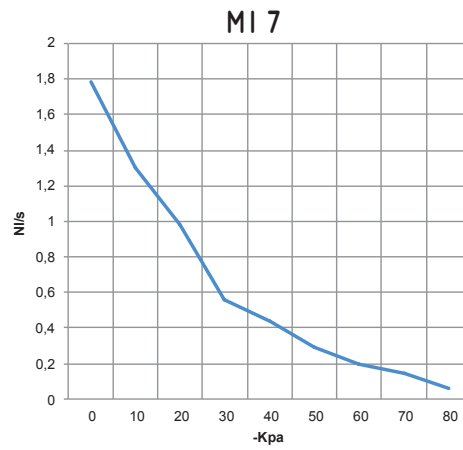
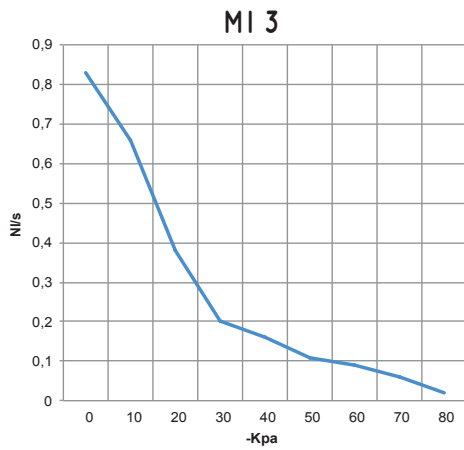
inch = $\frac{\text{mm}}{25.4}$; pounds = $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

Adapters for GAS - NPT threading available on page 1.130



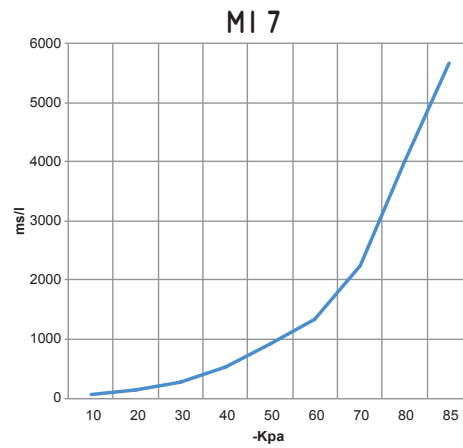
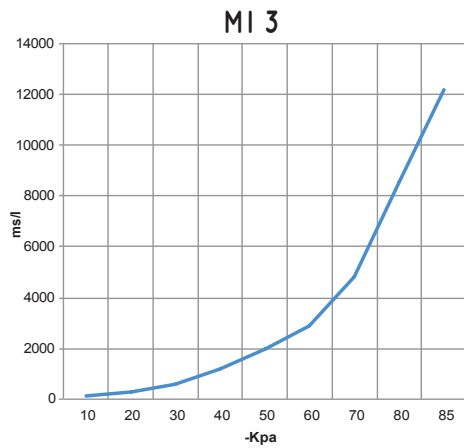
INTERMEDIATE VACUUM MODULES MI 3 and MI 7

Air flow rate (NI/s) at different level of vacuum (-KPa) at optimal supply pressure



Generator item	Supp. press. bar	Air consumption NI/s	Air flow rate (NI/s) at different levels of vacuums (-KPa) at optimal supply pressure										Max vacuum -KPa
			0	10	20	30	40	50	60	70	80		
MI 3	5.0	0.8	0.83	0.66	0.38	0.20	0.16	0.11	0.09	0.06	0.02	85	
MI 7	5.0	1.3	1.78	1.30	0.98	0.56	0.44	0.29	0.20	0.14	0.06	85	

Evacuation rates (ms/l = s/m³) at different levels of vacuums (-KPa) at optimal supply pressure



Generator item	Supp. press. bar	Air consumption NI/s	Evacuation rates (ms/l = s/m ³) at different levels of vacuums (-KPa) at optimal supply pressure										Max vacuum -KPa
			10	20	30	40	50	60	70	80	85		
MI 3	5.0	0.8	128	294	592	1167	1978	2889	4824	8588	12195	85	
MI 7	5.0	1.3	59	137	275	543	921	1344	2245	3997	5676	85	

ACCESSORIES AND SPARE PARTS UPON REQUEST

Item		MI 3	MI 7
Sealing kit and reed valves	item	00 KIT MI 3	00 KIT MI 7
Exhaust silencer	item		00 15 150
Electrical connection cable with axial connector, for vacuum switch	item		00 12 20
Electrical connection cable with radial connector, for vacuum switch	item		00 12 21
Set of electrical connection cables, with built-in NO energy saving device and connectors	item		00 15 202
Set of electrical connection cables, with built-in NC energy saving device and connectors	item		00 15 203
Digital vacuum switch	item		12 10 10
NO supply solenoid valve	item		00 15 176
NC supply solenoid valve	item		00 15 175