

PRODUCT PORTFOLIO

Medical Vacuum

Components

I. Vacuum pumps

Vacuum pumps	Nominal Capacity (m ³ /h)		Motor Power (kW)		Noise Level (dB)	Weight (kg)
Type	50Hz	60Hz	50Hz	60Hz		
<i>Oil-lubricated pumps (3-ph & 1-ph)</i>						
B6	6.4	7.4	0.25	0.30	48	14
P12	12	14.4	0.37	0.37	67	14
B20	18	21	0.55	0.66	63	20
E17	19	23	0.55	0.63	59	36
GP21	21	25	0.75	1.1	64	20
P28	28	33	0.75	0.86	61	25
E25	30	35	0.75	0.86	60	39
P40	40	48	1.10	1.27	67	42
B40	41	48	1.50	1.80	69	38
E40	47	57	1.10	1.27	62	52
P60	60	72	1.50	1.70	67	50
B70	70	84	1.5	1.8	65	60,5
E65	65	78	1.50	1.70	64	75
GP65	65	78	1.5	1.8	69	48
E100	96	115	2.20	2.50	65	85
GP100	100	120	2.2	3.0	70	80
P100	100	120	3.00	3.50	73	82
B100	100	120	2,2	2,6	66	67
E150	132	156	3	3,5	67	154
B165	165	198	4	4,8	71	104
B200	200	240	5,5	6,6	73	119
E200	198	240	4.00	4.80	67	140
GP210	200	240	4	5.5	73	160
P220	220	260	5.50	6.60	76	140
B250	244	276	7.8	9.3	73	178
E300	293	354	5.50	6.60	69	162
B300	300	360	7.8	9.3	74	148
P340	340	405	7.50	9.20	76	175
E350	360	432	7.50	9.00	71	355
E400	426	511	9.00	11.00	72	385
B400	435	508	11.0	12.5	78	400
E500	513	616	11.00	13.20	73	430
B630	624	732	15.0	16.5	80	525
E600	635	769	15.00	17.00	74	500
<i>Oil-free</i>						
C11V	10	12.3	0.37	0.45	64	15
C16V	16	19	0.66	0.72	63	29
C26V	25	29	0.75	0.90	65	29
C40V	40	46	1.50	1.80	68	40
C61V	60	70	1.50	1.80	70	66
S130	112	132	3.00	3.60	76	240
S180	162	194	4.00	4.80	77	250
S250	251	300	5.50	6.60	78	460
S350	342	412	7.50	9.00	79	480
GP65	65	78	1.5	1.8	69	48



Medical Vacuum central station Horizontal (H)



Vacuum pump



Electromagnetic motorized valve for on/off load and soft start



S-type pump - internal view

II. Vessels

Vacuum vessel Capacity (lit)	Painted		Galvanized In/Out		Diameter mm	Height mm	Weight kgr
	Horizontal	Vertical	Horizontal	Vertical			
270	•				500	1500	60
500	•	•	•	•	600	2050	140
1000	•	•	•	•	790	2310	220
1500	•	•	•	•	950	2405	300
2000	•	•	•	•	1000	2770	400
3000		•		•	1200	2929	540
4000		•		•	1450	3032	802
5000		•		•	1450	3532	932

Pressure: -1bar • Test pressure: 16,5bar • Temperature (min.- max.): -10°C ÷ +50°C

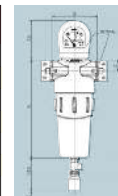


Filter	Connections ISO 228	Flowrate to 350mbar abs		Dimensions mm			
		m ³ /h	A	B	C	D	
105	½"	48	244	94	21	50	
190	¾"	81	281	128	32	60	
300	1"	126	337	128	32	60	
480	1¼"	198	417	128	32	60	
700	1½"	360	518	190	50	80	
1000	2"	570	616	190	50	80	
1200	2½"	600	616	190	50	80	
1500	3"	660	630	240	62	80	
2300	3"	900	985	240	62	80	

III. Antibacterial filters



Vacuum mbar abs	Correction factor	
	F1*	F2**
1013	1	1
500	2	0.5
400	2.5	0.4
350	3	0.35
300	3.3	0.3
200	5	0.2
100	10	0.1



* To select the filter according to the conditions of final vacuum, multiply the flow in Nm³/h for the correction factor F1 on the final vacuum pressure.

** To know the effective range of the filter in vacuum condition, multiply the flow in Nm³/h for the correction factor F2.

***Collector jars at 250 or 500ml

IV. Lubricants

Model	GS TORR-F32/100, GS MV99S	GS P100
Type	Synthetic oil	Mineral oil
Drain interval	2.000 hours or 1 year*	1600 hours
Application	High vacuum	High vacuum
Operating conditions	Normal	Normal

*Whichever comes first in normal conditions.
Available in packages of 2, 5, 19 and 25 lt



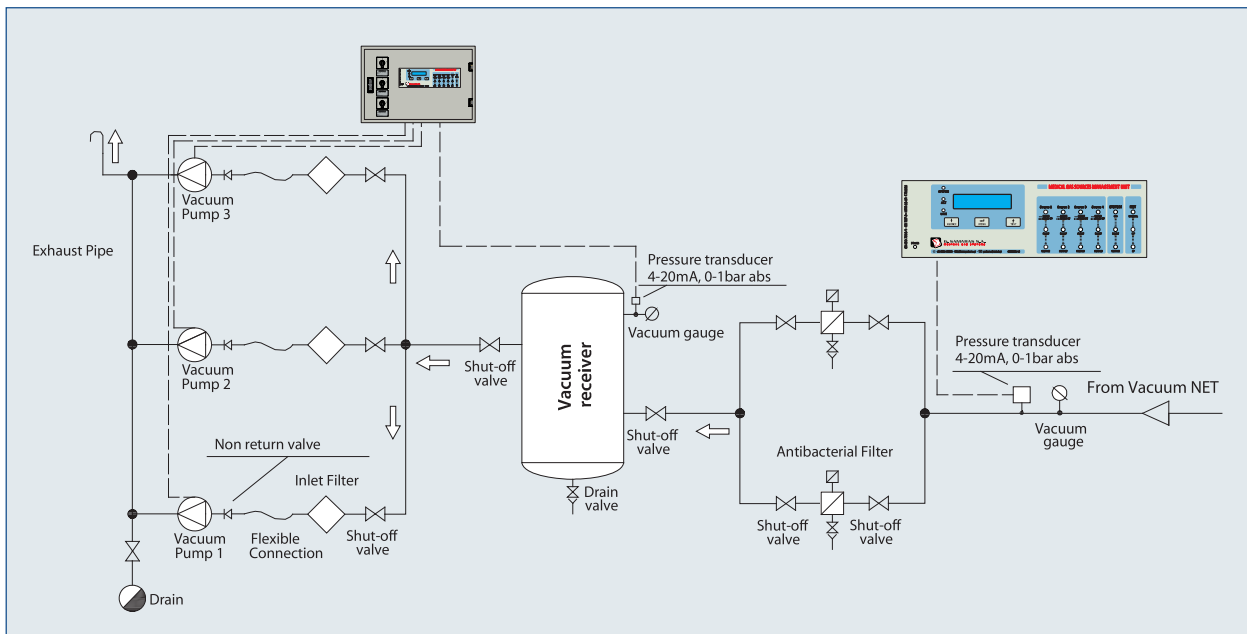
Medical Vacuum central station Vertical (V)

Medical Vacuum central station Vertical compact set with vessel (MVCS 3x100+500 C)



Compact Medical Vacuum Central Station according to ISO 7396-1 with:
 · 3 vacuum pumps 94m³/h
 · 2 filters
 · 1 electronic and control panel

Typical lay-out Medical Vacuum Central Station according to ISO 7396-1

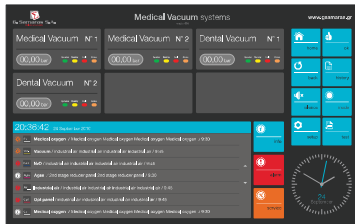


PRODUCT PORTFOLIO

Electronic Control Panel

IP based 

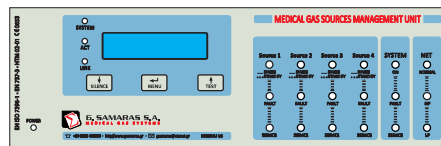
HTM02-01 EN ISO 7396-1, NFPA 99



Touch panel version

V. Electronic control panel for controlling the operation of the pumps

The MGS Vacuum control panel is a fully electronic automatic, controller and monitoring device of a complete vacuum plant. The MGS Vacuum control panel is built on the latest technology of microcontrollers and provides superior reliability, functionality and flexibility.



MGSMU L6 (up to 4 sources)

General features of MGS Vacuum control panel:

- built up to four transfer switches for AUTO and MANUAL mode selection, independent for each source. OFF position also included
- microprocessor based design, Ethernet communication supported,
- remote access via Ethernet by any internet browser (no additional software needed).
- On line remote system viewing and additional daily graphs for all Net pressures (data logging function) for plant pressure monitoring and analysis (24 hours depth, 1 sample per 15 sec) (**Medimote**)
- remote parameter settings via Ethernet using any internet browser (code protected area for authorized staff only)
- on site firmware upgrade capability via TFTP (**MGSMU L6**)
- built in buzzer, SILENCE button and TEST button
- user friendly interface via built in LCD screen, 2X16 (**MGSMU L6**) characters and additional led indicators for sources and net work pressure, functionality according to ISO 7396-1, HTM 02-01 and NFPA 99 standards.
- text messages for all conditions, emergency alarms and events for real time status viewing
- user programmable configuration and parameter settings (code protected area for authorized personnel only)
- alarm / events / services report and log file (max 250 records with time stamp) for plant performance analysis and debugging
- cyclic operation of sources based on time balance operation, 4 with time rotation (**MGSMU L6**) for load and run time measurement of each source
- additional capability of primary Net pressure measurement redundancy for enhancing the system's reliability, using an extra digital pressure sensor connected to digital input (built in auto transfer algorithm for operation via the digital pressure switch if the primary analog pressure transducer failed) (**MGSAP C1**)
- self test procedures and diagnostics utilities included for system integrity, communication and wiring testing
- real time clock with battery back up
- 9 (**MGSMU L6**) (4...20 mA transducer).
- 12 digital inputs NO/NC and enabling/disabling capability
- filters performance monitoring
- power supply over/under voltage monitoring
- phase sequence monitoring
- thermal protection and operation status monitoring of each source independently
- 9 digital outputs (**MGSAP C1**) or 6 (**MGSMU L6**) (relay output, 12A/250 Vac)
- dry contacts for remote signaling and interface with other monitoring systems
- Battery back up system and DC UPS capability with mains power failure signaling function
- **ability to connect to MEDIMOTE portal, providing SMS / E-mail alert (www.medimote.gr)**

