

## FS SYPHON SUCTION FILTRES



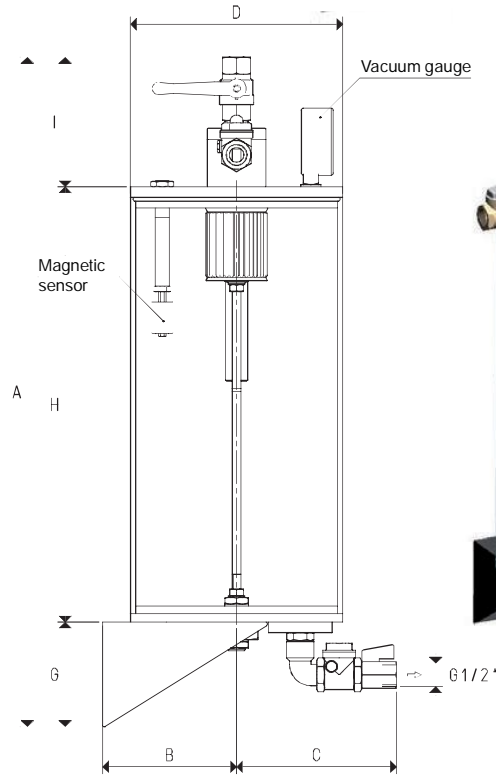
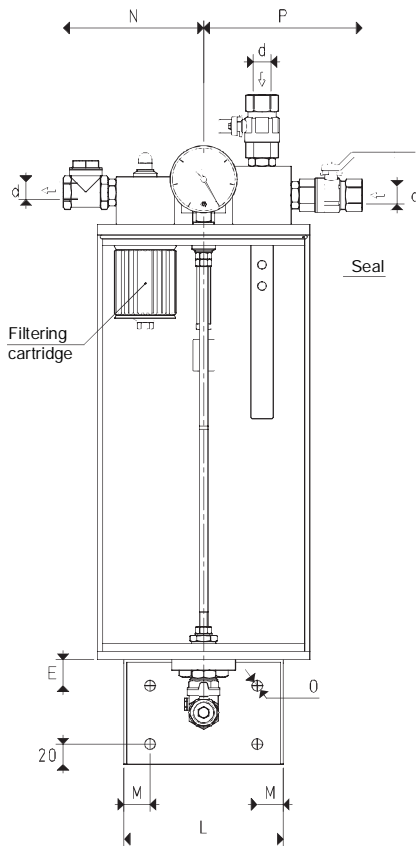
- These filters retain impurities and liquids extracted through vacuum cups or vacuum clamping systems, preventing them from entering into the vacuum pumps. They are composed of:
- A transparent plexiglas cylindrical container with an extractable lid to allow inspection and cleaning.
  - A check valve located on the suction inlet for preventing the air from returning in the filtre when the pump is idle.
  - A stainless steel mesh filtering cartridge with a filtering degree equal to  $44 \mu$ , also located on the suction inlet to retain dust and solid impurities.
  - A 2-way manual valve for service vacuum interception.
  - A 2-way manual valve for restoring the atmospheric pressure inside the filtre.
  - A radial vacuum gauge the direct reading of the vacuum level.
  - A magnetic level switch that stops the pump when the sucked liquid exceeds the safety level.
  - A rigid pipe connected to the service to convey the air flow and the sucked liquid to the bottom of the container.
  - A check valve at the bottom of the filtre to automatically drain the sucked liquid and impurities every time the atmospheric pressure is restored inside the filtre.
  - A cock applied on the aforementioned check valve for manual liquid drainage.
  - A sturdy metal bracket for fixing the filtre to the wall.

### Technical features

Working pressure: from 0.5 to 2000 mbar abs.

Fluid temperature: from  $-5$  to  $+50$  °C

Filtering degree:  $44 \mu$



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Art.	d	A	B	C	D	E	G	H	I	L	M	N	O	P	Max capacity	Capacity	Spare cartridge art.	Spare vacuum gauge art.	Spare seal art.	Weight
	$\emptyset$			$\emptyset$								$\emptyset$			cum/h	l				Kg
<b>FS 5</b>	G3/8"	461	130	175	200	25	100	250	111	150	25	140	10	136	10	6.0	00 FB 13	09 05 10	00 FS 52	5.5
<b>FS 10</b>	G3/8"	551	130	175	200	25	100	340	111	150	25	140	10	136	10	8.5	00 FB 13	09 05 10	00 FS 52	6.0
<b>FS 20</b>	G1/2"	630	130	175	200	25	100	410	120	150	25	140	10	145	20	10.5	00 FB 22	09 05 10	00 FS 52	6.8
<b>FS 25</b>	G3/4"	750	150	195	240	25	100	510	140	170	30	170	11	180	40	19.5	00 FB 22	09 05 10	00 FS 36	9.1
<b>FS 30</b>	G1"	890	190	225	300	30	120	610	160	200	40	205	11	220	70	38.0	00 FB 34	09 05 10	00 FS 41	19.2
<b>FS 50</b>	G2"	960	190	225	300	30	120	610	240	200	40	250	11	276	150	38.0	00 FB 45	09 05 10	00 FS 41	22.7

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

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## SYPHON FILTRE SYSTEM WITH AUTOMATIC BY-PASS FS 50 BP

This system is composed of two syphon filters. It starts working with suction through filtre 1 while filtre 2 is excluded. When the sucked liquid reaches the level switch floater via the 1" 1/2 3-way vacuum interception solenoid valves, the suction is automatically commuted to filtre 2.

The inlet of atmospheric air in filtre 1, via the 1/2" 3-way solenoid valve installed on its lid allows automatically draining the liquid through the check valve with cock located at the bottom of the filtre. Once the liquid has been drained after a set time (this operation can be timed), the solenoid valve returns to its initial position, thus allowing the recreation of vacuum inside the filtre, through a small flexible pipe connected to the main vacuum piping.

Thanks to this solution, there is no reduction of the vacuum level at the service when the suction exchange between the two filters occurs. This exchange occurs when the liquid reaches the level switch floater in filtre 2 and from that moment on, the operations described above will be repeated.

The filtre system is composed of:

- 2 plexiglas syphon filters with aluminium lids and with accessories, with a capacity of 38 litres each.
- 2 1" 1/2 gas servo-controlled 3-way vacuum solenoid valves art. 07 06 11.
- 2 1/2" gas servo-controlled 3-way solenoid valves art. 07 03 11.
- 4 1" 1/2 gas 2-way manual valves for vacuum interception art. 13 07 10.
- 2 1/2" gas 2-way manual valves for the inlet of atmospheric air art. 13 03 10.
- 1 switchgear enclosed in a watertight metal casing for Volt 230/ 50 Hz single-phase electric voltage.
- 1 frame in varnished steel profiles for the assembly of all the components described above.

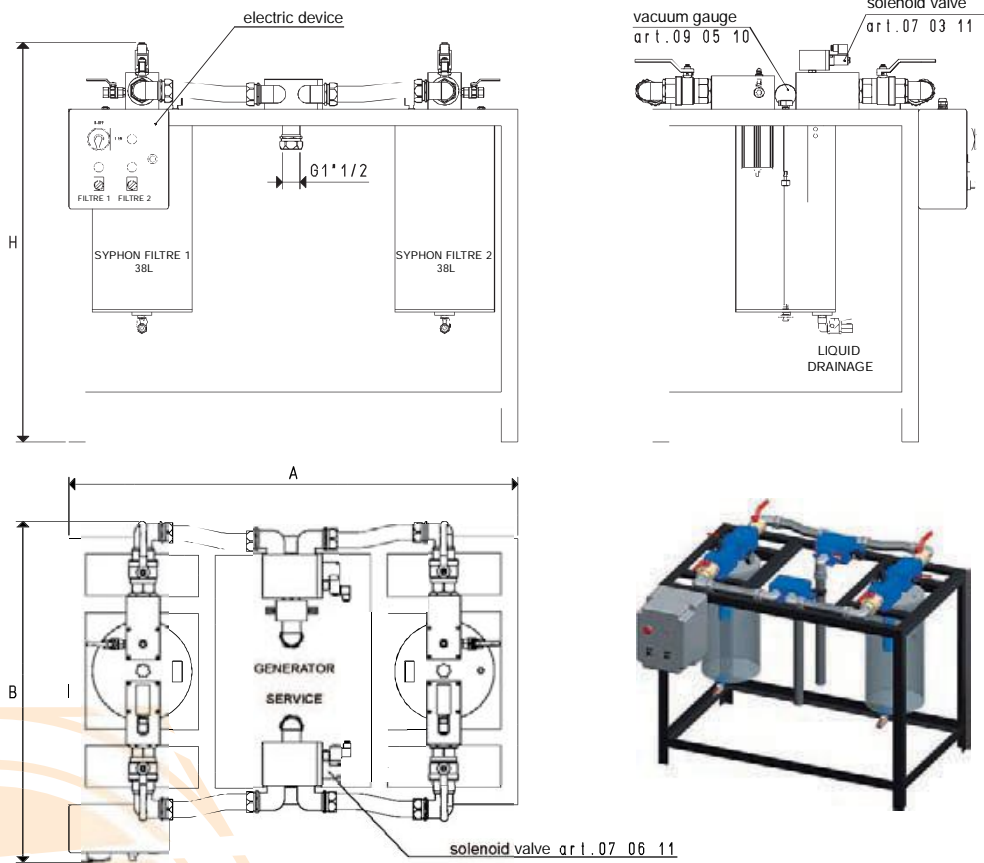
The syphon filtre system with automatic by-pass is recommended when there is a considerable presence of liquid in the sucked fluid and the machines cannot be stopped for draining the sucked liquid with traditional syphon filters.

### Technical features

Working pressure: from 0.5 to 2000 mbar abs.

Fluid temperature: from -5 to +50 °C

Filtering degree: 44 µ



3D drawings available at [www.vuototecnica.net](http://www.vuototecnica.net)

Art.	A	B	G	H	Max capacity	Capacity	Spare Cartridge art.	Spare vacuum gauge art.	Spare seal art.
<b>FS 50 BP</b>	1350	1000	G1" 1/2	1180	200 cum/h	38 x 2 l	00 FB 45	09 05 10	00 FS 41

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Conversion ratio: inch =  $\frac{\text{mm}}{25.4}$ , pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

GAS-NPT thread adapters available at page 1.117



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