



## SYPHON FILTER SYSTEMS WITH AUTOMATIC BY-PASS FS 50 BP and FS 60 BP

The system, composed of two siphon filters, operates initially with suction through filter 1 and with filter 2 excluded. When the suctioned liquid reaches the float on the level switch, automatically by means of the 1" 1/2 three-way vacuum interception solenoid valve for item FS 50 BP and 2" for item FS 60 BP, an exchange is made and suction passes through filter 2.

The input of atmospheric air into filter 1 via the 1/2" three-way solenoid valve installed on its lid, accumulated liquid is allowed to discharge automatically through the check valve with tap on the bottom of the filter. Once liquid has been discharged, after a pre-set time (this operation can be timed), the solenoid valve returns to its initial position, thus allowing recreation of a vacuum inside the filter through a small flexible hose connected to the main vacuum piping.

With this arrangement, there will not be any decrease in the level of vacuum for use when the suction exchange will be carried out between the two filters. This exchange will take place when the liquid reaches the level switch float on filter 2 and, from that moment, the operations described above will be repeated.

The filter system is composed of:

- 2 Plexiglas siphon filters with aluminium lids and complete with accessories, with a flow rate of 38 L each
- 2 1" 1/2 gas three-way servo-operated vacuum solenoid valves, item 07 06 13 for item FS 50 BP and 2" gas servo-operated vacuum solenoid valves, item 07 08 13 for item FS 60 BP
- 2 1/2" gas three-way servo-operated vacuum solenoid valves, item 07 03 13.
- 4 1" 1/2 gas two-way manual valves for vacuum interception, item 13 07 10 for item FS 50 BP and 2" gas for vacuum interception, item 13 08 10 for item FS 60 BP
- 2 Manual 1/2" gas two-way valves, for atmospheric air input, item 13 03 10
- 1 Switchgear enclosed in a special watertight metal box, for single phase electrical voltage Volt 230/ 50 Hz
- 1 Coated profile steel frame to mount all above-described components

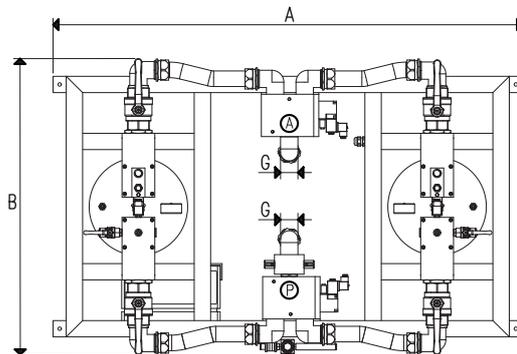
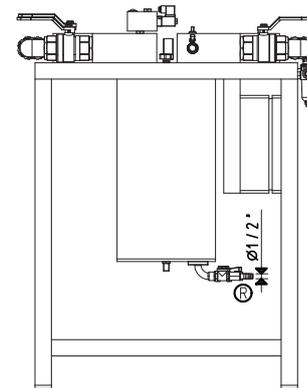
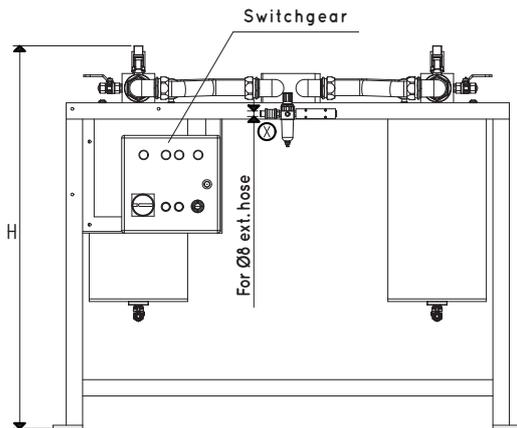
The siphon filter system with automatic by-pass is recommended in all those cases in which there is a strong presence of liquid in suction fluids and where machine shut-down for the discharge of liquids suctioned by traditional siphon filters is not allowed.

### Technical features

Operating pressure: from 0.5 to 2000 absolute mbar

Fluid temperature: from -5 to +50°C

Level of filtration: 100 µ



- X = Compressed air supply
- A = Use
- P = Pump
- R = Discharge

Item	A	B	G	H	Flow rate max m³/h	Capacity L	Cartridge spare part item	Vacuum gauge spare part item	Sealing spare part item	Weight kg
<b>FS 50 BP</b>	1450	1000	G1" 1/2	1180	200	38 x 2	00 FB 45	09 05 10	00 FS 41	130
<b>FS 60 BP</b>	1450	1050	G2"	1200	300	38 x 2	00 FB 45	09 05 10	00 FS 41	136

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

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