

AUTOMATIC FILTERS

AG series



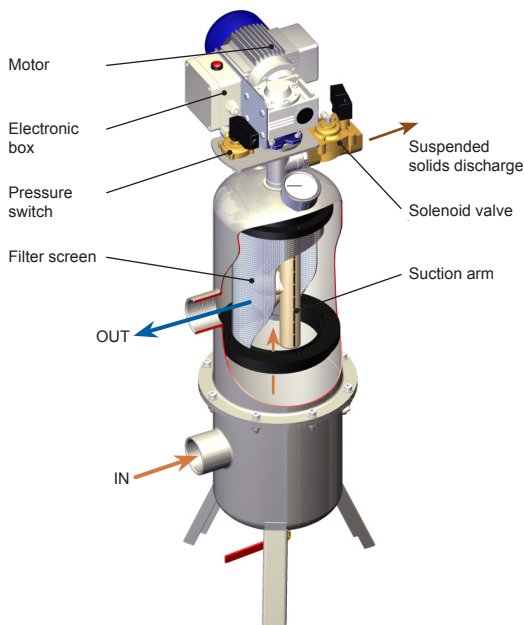
HECTRON

Automatic self-cleaning filters - AG series

Equipped with a high-precision woven fabric filter screen, these automatic self-cleaning filters produce optimum quality water: filtration degree down to 1 micron. They are fully equipped with an automatic self-cleaning system triggered by a pressure difference measurement.

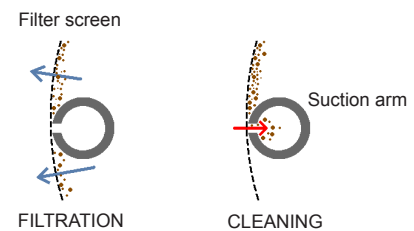
- Available filtration degree from 1 to 500 microns
- Low water consumption for cleaning
- Fully automatic operation
- Delivered completely equipped
- Wide range of products, available for high flow rates

How it works

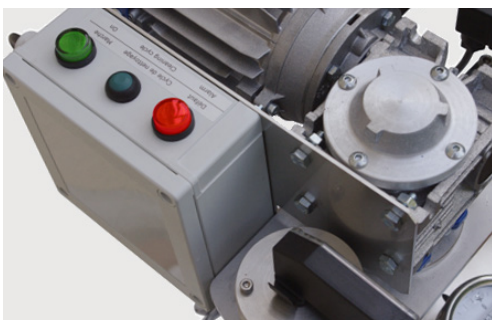
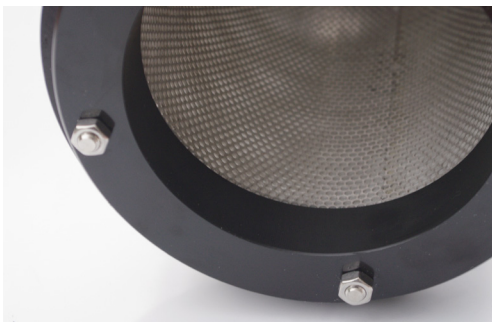


Filtration. Filtration is achieved through a cylindrical screen. As soon as the filter screen is clogged, a pressure switch detects the pressure difference between inlet and outlet and starts the cleaning cycle.

Cleaning. The cleaning cycle is performed by the means of a suction arm which rotates and backwashes the filter screen surface. The cleaning effect is focused on the suction arm holes. A complete rotation of the suction arm is achieved, so that the whole surface is cleaned in one cleaning cycle.



Discharge. During the cleaning cycle, a solenoid valve is opened and the suspended solids are drained out of the filter.



High-performance filtration

- Cylindrical screen
- A stainless steel perforated plate supports and protects the fabric.
- High-precision woven fabric, filtration degree down to 1 micron

Built-in process control system

- Differential pressure switch to trigger the cleaning cycle
- Control electronics
- Indicator lights (except AG100)

Models

Several filter sizes are available, depending on flow rate and on filtration degree.



AG100

Model	Max flow rate (m³/h)	Available filtration degree (µm) :						In / out
		1	6	11	20	40 / 50	60 / 80 / 100 / 200 / 500	
AG100	8		•	•	•	•	•	1" BSP thread



AG200

Model	Max flow rate (m³/h)	Available filtration degree (µm) :						In / out
		1	6	11	20	40 / 50	60 / 80 / 100 / 200 / 500	
AG200 2"	8	•	•	•	•	•	•	2" BSP thread
	17		•	•	•	•	•	
	25				•	•	•	
AG200 3"	35					•	•	3" BSP thread
	45						•	



AG300

Model	Max flow rate (m³/h)	Available filtration degree (µm) :						In / out
		1	6	11	20	40 / 50	60 / 80 / 100 / 200 / 500	
AG300 3"	20	•	•	•	•	•	•	3" BSP thread
	45		•	•	•	•	•	
AG300 DN100	70				•	•	•	DN100 flanges
AG300 DN150	100					•	•	DN150 flanges
	120						•	



AG400

Model	Max flow rate (m³/h)	Available filtration degree (µm) :						In / out
		1	6	11	20	40 / 50	60 / 80 / 100 / 200 / 500	
AG400 DN100	55	•	•	•	•	•	•	DN100 flanges
AG400 DN150	110		•	•	•	•	•	DN150 flanges
	160				•	•	•	
AG400 DN200	240					•	•	DN200 flanges
AG400 DN250	310						•	DN250 flanges

Technical specifications

Operating conditions	Units	AG100	AG200	AG300	AG400
Maximum working pressure	Bar	5	5 / 10* / 16*	5 / 10* / 16*	5 / 10*
Inlet minimum pressure	Bar	2.5			
Min. pressure downstream the filter	Bar	2			
Water maximal temperature	°C	50	70 / 90*		
Maximal size of suspended solids	mm	3	3	4	4

Filters features	Units	AG100	AG200	AG300	AG400
Electrical supply	V/Hz	230/50	230/50 / 120/60*		
Degree of protection		IP53	IP53 / IP65*		
Power	W	60	110	200	370
Weight (empty)	Kg	15	26	68	210
Filter area	cm ²	690	1104	2813	7960
Volume of water rejected per cleaning cycle	L	5	6	12	48
Cleaning cycle duration	s	5	4	4	8
Cleaning cycle flow rate	m ³ /h	3.6	5.4	10.8	21.6
Filter maximal pressure loss	Bar	0.5			

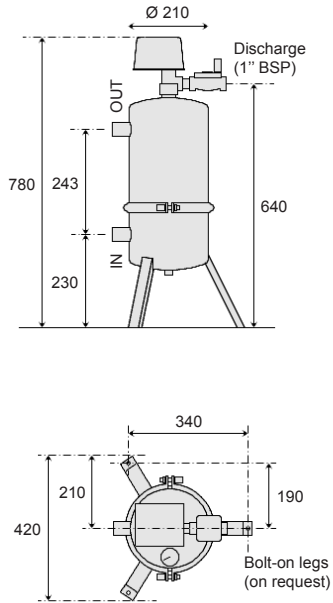
Materials	Standard range	316L range*
Filter housing	S.S. 304	S.S. 316L
Suction arm	PET-P (ertalyte) Except AG100 : PVC	PET-P (ertalyte)
Solenoid valve	brass	S.S. 316L
Differential pressure switch	brass	S.S. 316L
Filter screen: fabric support	S.S. 316L, PE	S.S. 316L, PE
Filter screen: fabric	PET (polyethylene)	PET (polyethylene)
Seals	EPDM	EPDM

Available options	
Stainless steel 316L**	<ul style="list-style-type: none"> Version for use with aggressive water: chlorinated water, seawater Housing in S.S. 316L; solenoid valve, pressure switch and fittings in S.S. 316L On request, an anti-corrosion coating (Rilsan) is applied on the housing (recommended for seawater)
ACS certification	<ul style="list-style-type: none"> Version for potable water networks ACS certificated models (french certification for potable water networks)
PN10** PN16**	<ul style="list-style-type: none"> Versions for a maximum working pressure of 10 Bar or 16 Bar A suction pressure limiter automatically regulates suction pressure in the cleaning system. PN16 version: strenghtened housing
IP65**	<ul style="list-style-type: none"> Better protection of electrical elements : IP65 Can be used outdoor (in frost-free conditions)
90°C**	<ul style="list-style-type: none"> Higher water temperature is admitted with this option : up to 90°C
120V**	<ul style="list-style-type: none"> Version for a 120V/60Hz power supply (USA, Canada, etc. standard)

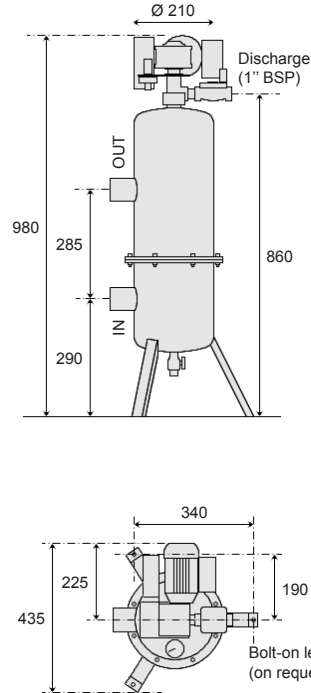
Dimensions

In mm

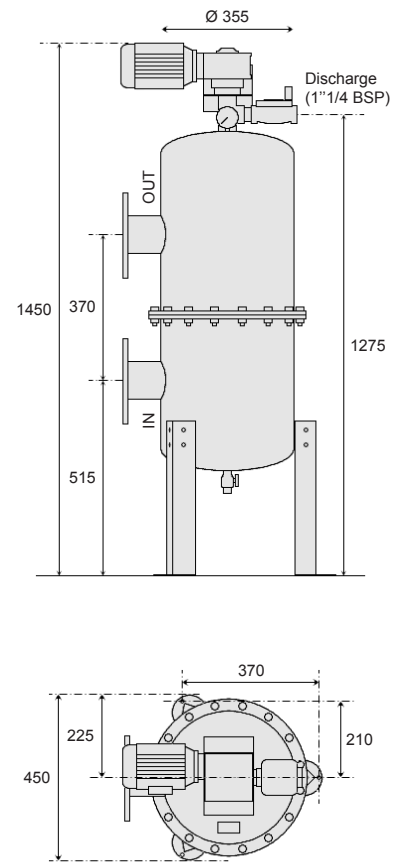
AG100



AG200

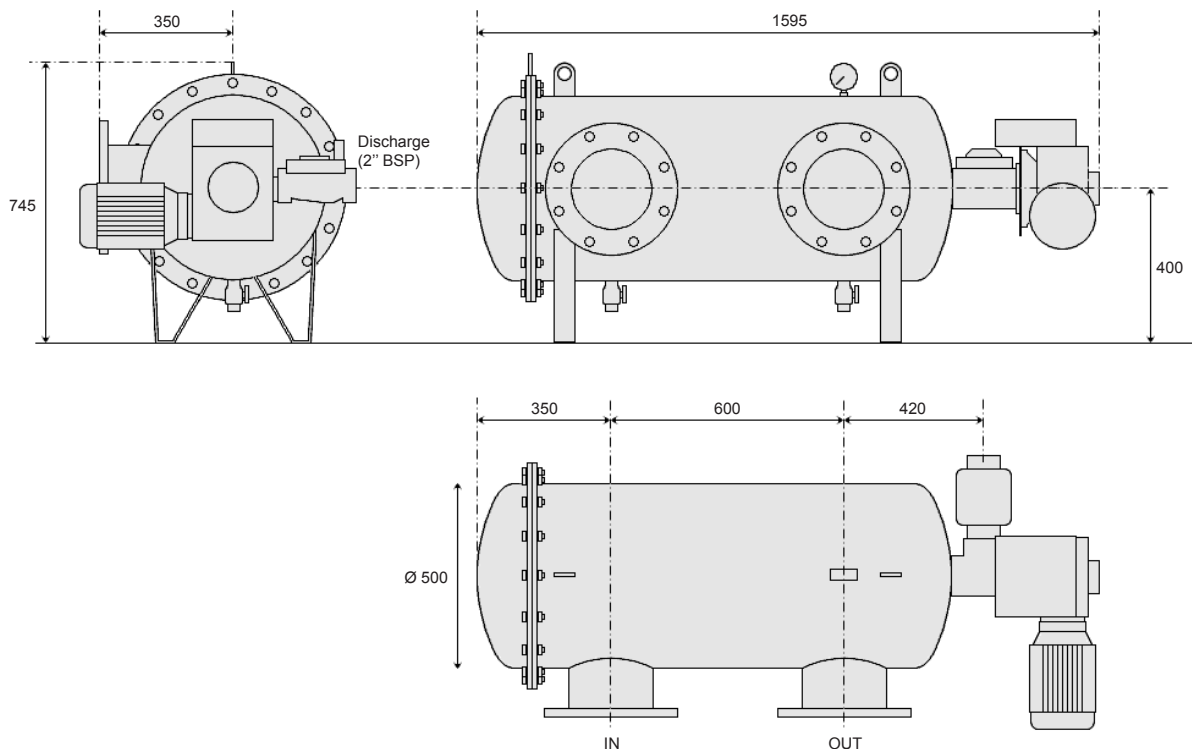


AG300



The inlet and outlet nozzles can be turned one toward the other (180°, 90°,....)

AG400



Applications



Potable water. These models are available in ACS certified version for use on potable water networks. They can be used as final filtration or to protect ultrafiltration systems.

Wastewater treatment plants. Hectron AG filters are used at clarifier outlet of wastewater treatment plants to filter industrial water or before discharge.



Well-water, geothermal heating. These filters provide an efficient solution for well-water filtration (geothermal heating, irrigation, etc.), even in the presence of clay or fine mud.

Industrial networks. Hectron AG filters are used to filter factory water networks: cooling water or water used in the manufacturing process.



Surface water. Lake and river water contains highly clogging materials, requiring the use of an efficient cleaning system. Hectron filters can operate with water containing a high particle concentration.

Seawater. A special, corrosion-resistant version is available for seawater. These filters are used to protect heat pumps on seawater, in aquaculture or as prefiltration before reverse osmosis desalination systems.