

# AG RANGE AUTOMATIC FILTERS

**HECTRON**

**100%**  
AUTOMATIC

FROM  
**0,5 µm**

UP TO  
**340 m<sup>3</sup>/h**

MADE IN  
FRANCE

The versatile automatic filters in the Hectron AG range are available with filtration degrees from 0.5 to 500 microns. The washing system with suction arm offers optimum efficiency with low water consumption.



Washing system electronic control unit. Supplied fully equipped, with indicator lights and cycle counter (except AG100).

Membrane-type differential pressure switch to trigger the washing cycles.

High-performance filtering sieve, consisting of a stainless steel support cylinder and a synthetic filter membrane.

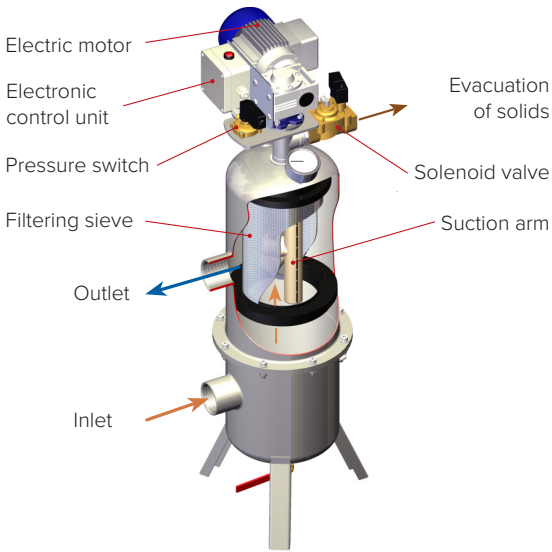
230 V motor to rotate the washing mechanical assembly.

Pilot-operated solenoid valve, with anti-clogging protection, to evacuate solids.

Stainless steel housing.

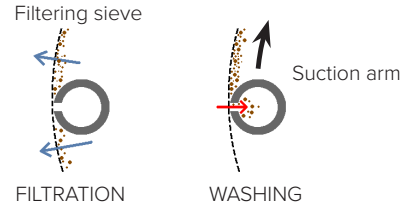
AG200 316L

# OPERATION



**Filtration.** Filtration is carried out through a cylindrical sieve. When this sieve is clogged, a pressure switch detects the pressure difference between the inlet and the outlet and triggers the washing cycle.

**Washing.** Washing is carried out by means of a suction arm, which carries out back-washing focused on the openings in the arm. The arm rotates and therefore cleans the entire sieve surface.



**Evacuation.** During washing, a solenoid valve opens and the suspended solids are evacuated out of the filter.

# MODELS



## AG100

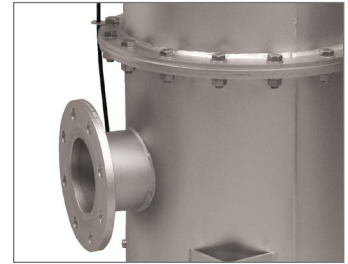
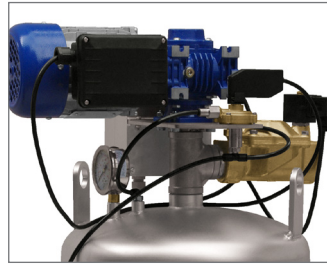
Model	Inlet / outlet	Max. flow rate (m³/h)	Filtration degree (µm)														
			2	3	6	11	20	30	40	50	60	80	100	200	300	400	
AG100 1"	1" BSPF		6	4							8						
AG100 1 1/4"	1 1/4" BSPF		6	4	8	8						12					



## AG200

Model	Inlet / outlet	Max. flow rate (m³/h)	Filtration degree (µm)														
			2	3	6	11	20	30	40	50	60	80	100	200	300	400	
AG200 2"	2" BSPF		12	8	20	20					25						
AG200 3"	3" BSPM		12	8	20	20	25	30	35	35				45			
AG200 DN80	DN80 ISO flanges		12	8	20	20	25	30	35	35			45				

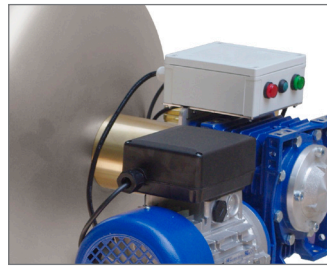
0.5 µm and 1 µm membranes available on option.



## AG300

Model	Inlet / outlet	Max. flow rate (m <sup>3</sup> /h)	Filtration degree (µm)													
			2	3	6	11	20	30	40	50	60	80	100	200	300	400
<b>AG300 3"</b>	3" BSPM		30	20	45											
<b>AG300 DN100</b>	DN100 ISO flanges		30	20	45	45	70									
<b>AG300 DN150</b>	DN150 ISO flanges		30	20	45	45	70	85	100	105	120					

0.5 µm and 1 µm membranes available on option.



## AG400

Model	Inlet / outlet	Max. flow rate (m <sup>3</sup> /h)	Filtration degree (µm)													
			2	3	6	11	20	30	40	50	60	80	100	200	300	400
<b>AG400 DN100</b>	DN100 ISO flanges		70	60	70											
<b>AG400 DN150</b>	DN150 ISO flanges		90	60	140	140	160									
<b>AG400 DN200</b>	DN200 ISO flanges		90	60	140	140	190	220	260							
<b>AG400 DN250</b>	DN250 ISO flanges		90	60	140	140	190	220	260	290	340					

### 0.5 to 2 µm: non-woven membrane

- Very fine filtration degree.
- Good opening coefficient: relatively high crossing flow rate.
- Good turbidity reductions.

#### ⊕ Recommended in the presence of:

- fine mineral solids (clay, silt)

#### ⊖ Not recommended in the presence of:

- iron, manganese
- polymer flocculating agents

### 3 to 500 µm: cloth membrane

- Precision-woven cloth, square mesh.
- Suitable for all types of suspended solids, excellent lifetime.

#### ⊕ Recommended in the presence of:

- mineral solids
- organic solids

#### ⊖ Not recommended in the presence of:

- polymer flocculating agents

# TECHNICAL SPECIFICATIONS

		unité	AG100	AG200	AG300	AG400
Operating conditions	Maximum working pressure	Bar	5	5 / 10* / 16*	5 / 10* / 16*	5 / 10*
	Minimum inlet pressure	Bar	2,5	2,5	2,5	2,5
	Minimum outlet pressure	Bar	2	2	2	2
	Maximum water temperature	°C	50	70 / 90*	70 / 90*	70 / 90*
	Maximum size of suspended solids	mm	3	3	4	4
Filter characteristics	Electricity supply	V/Hz	230/50	230/50	230/50	230/50
	Ingress protection rating		IP40	IP40 / IP65*	IP40 / IP65*	IP40 / IP65*
	Power	W	60	110	270	570
	Weight empty	Kg	15	26	68	190
	Weight filled with water	Kg	27	51	155	355
	Filtration area	cm <sup>2</sup>	690	1 104	2 813	7 960
	Volume of water discharged per washing cycle	L	5	8	18	60
	Washing cycle duration	s	5	5	6	10
	Washing cycle instantaneous flow rate	m <sup>3</sup> /h	3,6	5,8	10,8	21,6
	Maximum head loss	Bar	0,5	0,5	0,5	0,5

\*on option

				VERSIONS		
				Standard	316L**	Marine**
				Stainless steel 304 + brass	All stainless steel 316L	Coated SST 316L, duplex, plastics
Water quality required	Maximum free chlorine	permanently	mg/L	0,3	3	10
		occasionally	mg/L	3	12	20
	Max. salinity		g/L	0,3	5	50
	Max. chlorides Cl <sup>-</sup>		mg/L	200	2 700	27 000
	min. / max. pH	permanently		6 / 8	5 / 10	4 / 10
		occasionally		3 / 12	2 / 12	2 / 12
Materials	Filter housing			Stainless steel 304	Stainless steel 316L	SST 316L + coating
	Suction arm			POM	POM	POM
	Evacuation solenoid valve (Marine version: motorized valve)			Brass	Stainless steel 316L	PP / EPDM
	Differential pressure switch			Brass	Stainless steel 316L	SST 316L
	Filtering sieve support			SST 316L, PE	SST 316L, PE	Duplex, PE
	Hardware in contact with water			Stainless steel A4	Stainless steel A4	Duplex
	Woven cloth filter membrane			PETP or PA 6.6	PETP or PA 6.6	PETP or PA 6.6
	Non-woven filter membrane			Polyester	Polyester	Polyester
	Seals			EPDM, nitrile (NBR)	EPDM, nitrile (NBR)	EPDM, nitrile (NBR)

\*\*not available on AG100

## OPTIONS

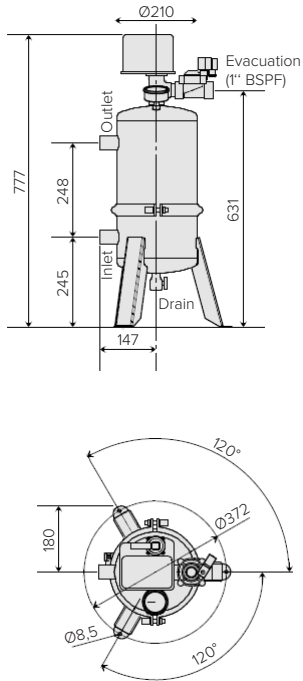
		AG100	AG200 AG300	AG400
<b>Micro-filtration</b>	<ul style="list-style-type: none"> <li>0.5 or 1 µm membrane: excellent turbidity reduction</li> <li>Specific internal components and operating constraints</li> </ul>	not available	option	not available
<b>ACS</b>	<ul style="list-style-type: none"> <li>ACS (French certificate; EU validity)</li> <li>For use on drinking water networks</li> </ul>	option	option	option
<b>PN10</b>	<ul style="list-style-type: none"> <li>Maximum service pressure: 10 Bar</li> <li>A suction pressure limiter automatically controls the pressure in the washing arm.</li> </ul>	not available	option	option
<b>PN16</b>	<ul style="list-style-type: none"> <li>Maximum service pressure: 16 Bar</li> <li>Suction pressure limiter</li> <li>Reinforced housing</li> </ul>	not available	option	not available
<b>90 °C</b>	<ul style="list-style-type: none"> <li>Maximum water temperature 90 °C</li> <li>Electrical part thermally insulated from the housing</li> </ul>	not available	option	option
<b>Industry</b>	<ul style="list-style-type: none"> <li>Separate electronic unit, with indicator lights and cycle counter</li> <li>Feedback can be connected to a supervision unit.</li> </ul>	option	standard feature	standard feature
<b>IP65</b>	<ul style="list-style-type: none"> <li>Reinforced IP on the various items of electrical equipment</li> </ul>	not available	option	option

North America versions on request: 120V power, NPT threads

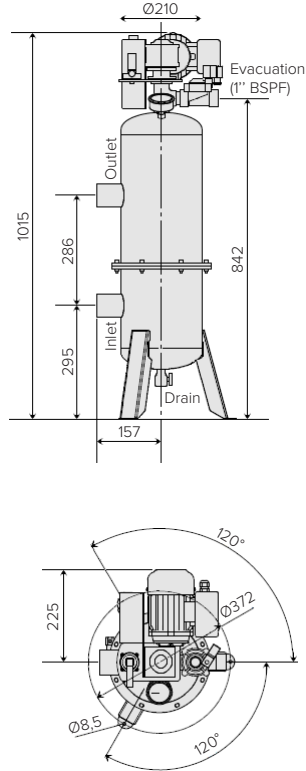
# DIMENSIONS

In mm

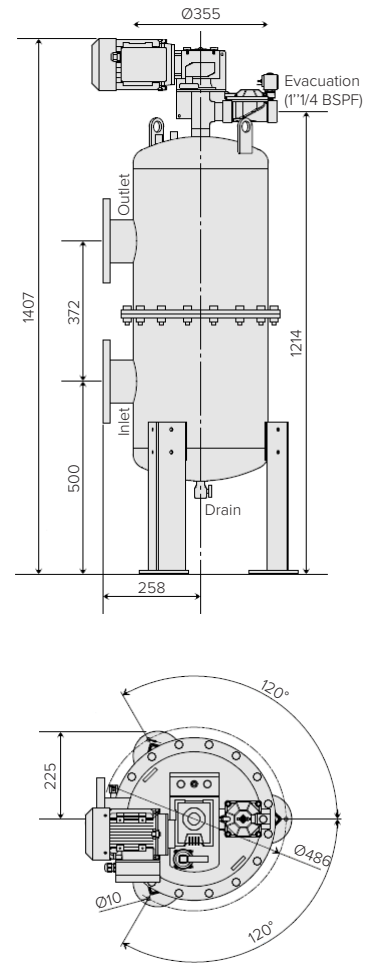
## AG100



## AG200

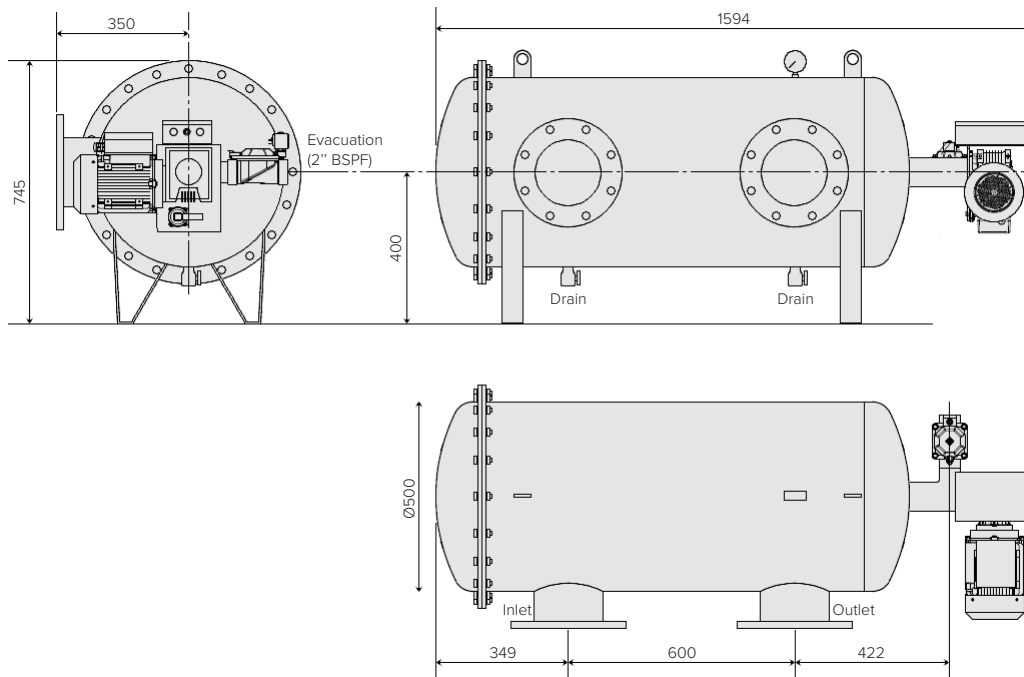


## AG300



The inlet and outlet can be rotated relative to each other ( $180^\circ$ ,  $90^\circ$ , etc.)

## AG400



# APPLICATIONS

## Well water



Well water for domestic or commercial use. By choosing the finest filtration degrees, these filters enable to eliminate most of the SS present in these waters: sand, earth but also clays. Use in geothermal, potabilisation, watering.

## Potable water



These filters are used in potabilisation units. In reverse osmosis protection, thanks to their very fine filtration degree, they provide an optimum protection of membranes. They can also be used before ultra filtration or a UV system.

## Wastewater



Installing a filter enables to secure the rejections after clarifier. Choosing an automatic filter avoid the constraint of cartridges replacement. A filtration degree of 100 or 200 microns is most frequently chosen.

## Networks in factories



Most factories have large water networks, whether used for the process (in papermaking for example) or for cooling. Cooling networks are frequently loaded with dust, fine metal particles or other materials, which can be removed by a filter.

## Lakes and rivers water



Rivers generally have a very variable turbidity, with a heavy suspended solids load on certain periods of floods or thunderstorms. Regarding lakes and ponds, they contain highly clogging organic solids, requiring the use of an efficient cleaning system.

## 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.