

# AG SERIES

## AUTOMATIC FILTERS

**HECTRON**

**100%**  
AUTOMATIC

DOWN TO  
**1  $\mu$ m**

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

MADE IN  
FRANCE

Fully automatic filtration for numerous applications. Hectron AG series are available from 1 to 500 microns ratings. The cleaning system with suction arm offers an optimum cleaning efficiency with low water use.



Built-in electronic control system. Supplied with indicator lights and cleaning cycles counter.

Membrane differential pressure switch, to trigger the cleaning cycle.

High-performance filtration screen, designed with a stainless steel perforated plate support and a filter media in synthetic material.

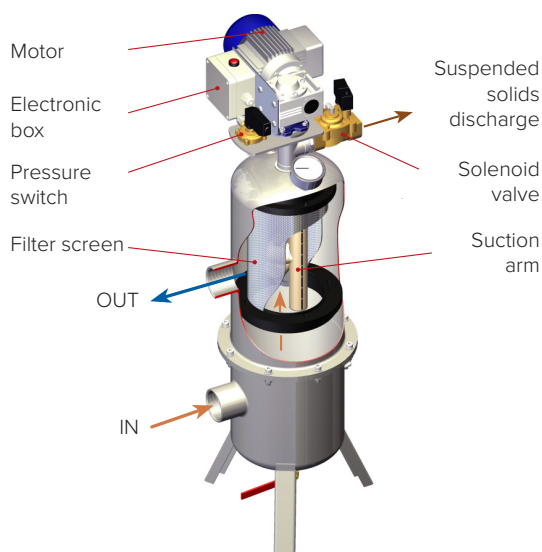
230V motor, for cleaning system rotation.

For suspended solids discharge, solenoid valve with anti-clogging autonomous assistance.

Stainless steel housing.

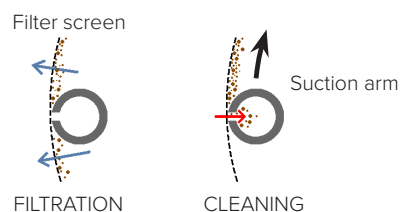
AG200 316L

## HOW IT WORKS



**Filtration.** Filtration is achieved through a cylindrical screen. As soon as the filter 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.

## MODELS

### AG100

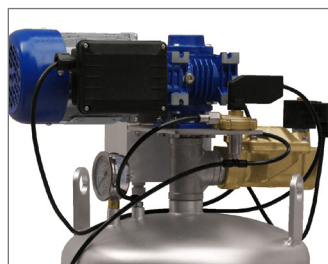


			Filtration degree (µm)														
Model	Inlet / outlet		0,5-1	1-3	5-8	6	11	20	30	40	50	60	80	100	200	300	400
AG100	1" BSPF	Max flow rate (m³/h)	3	6							8						

### AG200

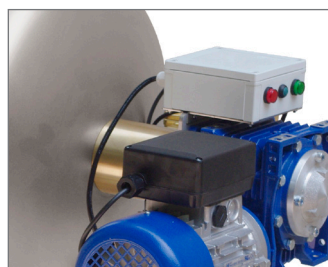


		Filtration degree (µm)																
Model	Inlet / outlet	Max flow rate (m³/h)	0,5-1	1-3	5-8	6	11	20	30	40	50	60	80	100	200	300	400	
AG200 2"	2"BSPF		7	15	20	20	20	25										
AG200 3"	3" BSPM		7	15	20	20	20	25	30	35	35	45						
AG200 DN80	DN80 flanges		7	15	20	20	20	25	30	35	35	45						



**AG300**

			Filtration degree (µm)															
Model	Inlet / outlet		0,5-1	1-3	5-8	6	11	20	30	40	50	60	80	100	200	300	400	
AG300 3"	3" BSPM	Max flow rate (m³/h)	18	35	45													
AG300 DN100	DN100 flanges		18	35	45	45	45	70										
AG300 DN150	DN150 flanges		18	35	45	45	45	70	85	100	105	120						



**AG400**

			Filtration degree (µm)															
Model	Inlet / outlet		0,5-1	1-3	5-8	6	11	20	30	40	50	60	80	100	200	300	400	
AG400 DN100	DN100 flanges	Max flow rate (m³/h)	50	70														
AG400 DN150	DN150 flanges		50	70	140	140	140	160										
AG400 DN200	DN200 flanges		50	70	140	140	140	190	220	260								
AG400 DN250	DN250 flanges		50	70	140	140	140	190	220	260	290	340						

#### 0,5-1 à 5-8 µm : non-woven membrane

- Nettoyages moins fréquents ; on supporte donc des eaux plus chargées
- Seuils de filtration très fins.
- Les seuils de filtration sont moins précis.



**Suitable for water loaded with:**

- fine mineral solids (clay, silt)



**Not suitable for water loaded with:**

- iron, manganese
- organic suspended solids
- polymer flocculants

#### 6 à 500 µm : woven membrane

- Precision weave fabric, square mesh.
- Suitable for all types of suspended solids, with excellent service life.



**Suitable for water loaded with:**

- mineral suspended solids
- organic suspended solids



**Not suitable for water loaded with:**

- polymer flocculants

# TECHNICAL SPECIFICATIONS

	unit	AG100	AG200	AG300	AG400
Operating parameters	Maximum working pressure	Bar	5	5 / 10* / 16*	5 / 10*
	Inlet minimum pressure	Bar	2,5	2,5	2,5
	Outlet minimum pressure	Bar	2	2	2
	Water maximum temperature	°C	50	70 / 90*	70 / 90*
	Suspended solids maximum size	mm	3	3	4
Filters specifications	Electrical supply	V/Hz	230/50	230/50	230/50
	IP rating		IP53	IP53 / IP65*	IP53 / IP65*
	Power rating	W	60	110	250
	Weight (empty)	Kg	15	26	68
	Weight (full)	Kg	27	51	155
	Filter surface area	cm <sup>2</sup>	690	1104	2813
	Backwash water volume	L	5	8	18
	Backwash cycle duration	s	5	5	6
	Instantaneous backwash flow rate	m <sup>3</sup> /h	3,6	5,8	10,8
	Maximum pressure loss	Bar	0,5	0,5	0,5

\*optional

				Standard range	316L range*
Requested water quality	Free chlorine maximum	Permanently	mg/L	0,3	3
		Occasionally	mg/L	3	12
	NaCl maximum	Without coating	mg/L	5	20
		With Rilsan coating	mg/L		40
	pH minimum / maximum	Permanently	mg/L	6 / 8	5 / 10
		Occasionally	mg/L	3 / 12	2 / 12
Materials	Filter housing			S.S. 304	S.S. 316L
	Suction arm assembly			PET-P (ertalyte) Except AG100 : PVC	PET-P (ertalyte)
	Solenoid valve			Brass	S.S. 316L
	Differential pressure switch			Brass	S.S. 316L
	Support du tamis filtrant			S.S. 316L, PE	S.S. 316L, PE
	Woven filtration membrane			PETP or nylon (PA 6.6)	PETP ou nylon (PA 6.6)
	Non-woven filtration membrane: 0.5-1 µm			PP	PP
	Non-woven filtration membrane: other filtration degrees			Polyester	Polyester
	Seals			EPDM, nitrile (NBR)	EPDM, nitrile (NBR)

\*optional

## OPTIONS

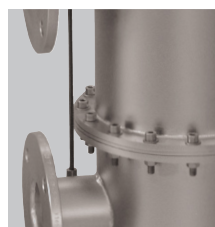


### 316L\*\*

- Version for use with aggressive water
- 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 (necessary for seawater).

### ACS

- Version for potable water networks
- ACS certificated models (french certification for potable water networks)



### PN10 or PN16\*\*

- 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

Electrical supply 120V / 60 Hz\*\*

Water temperature 90°C\*\*

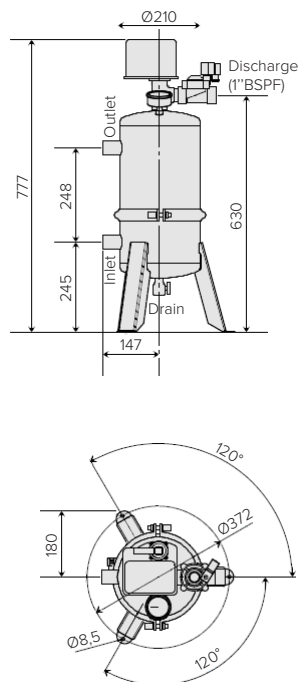
IP rating IP65\*\*

\*\*not available on AG100

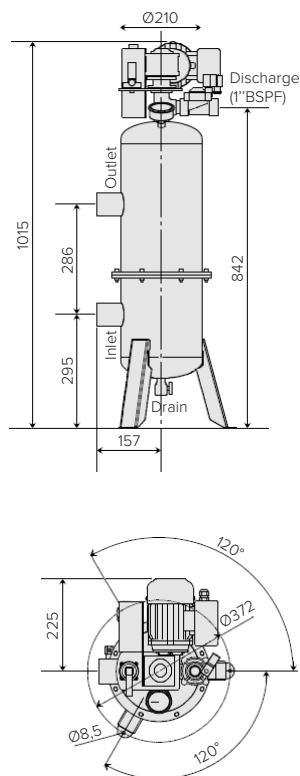
# DIMENSIONS

In mm

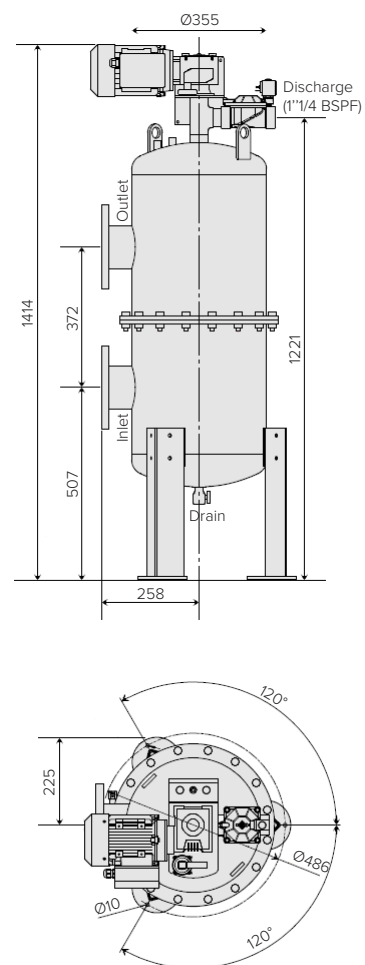
## AG100



## AG200

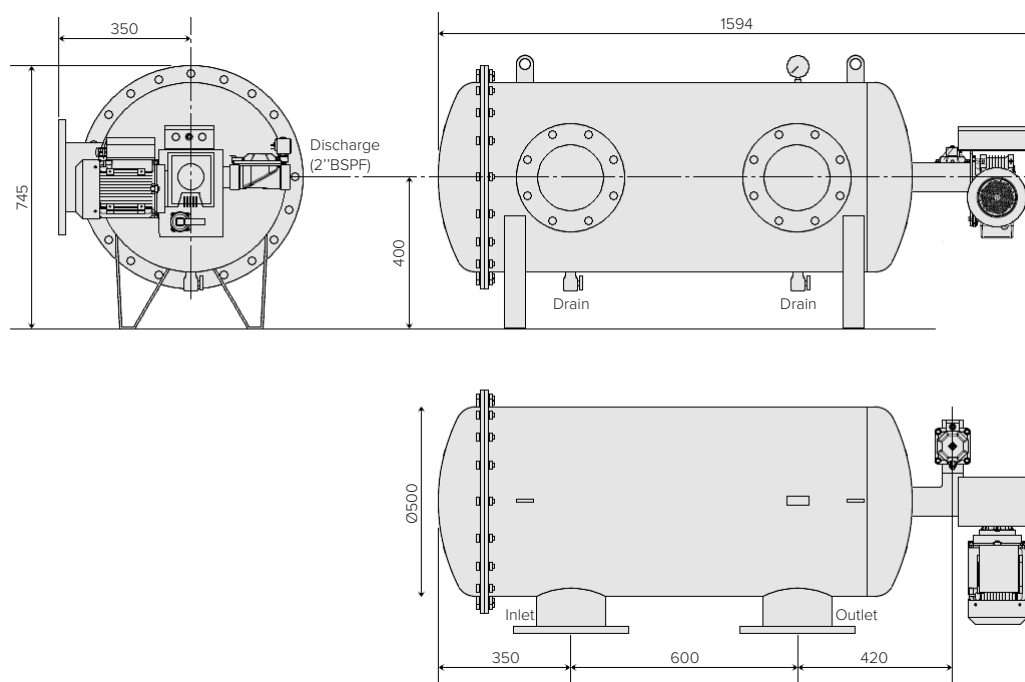


## AG300



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

## 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.