

# AUTOMATIC FILTERS

AG series



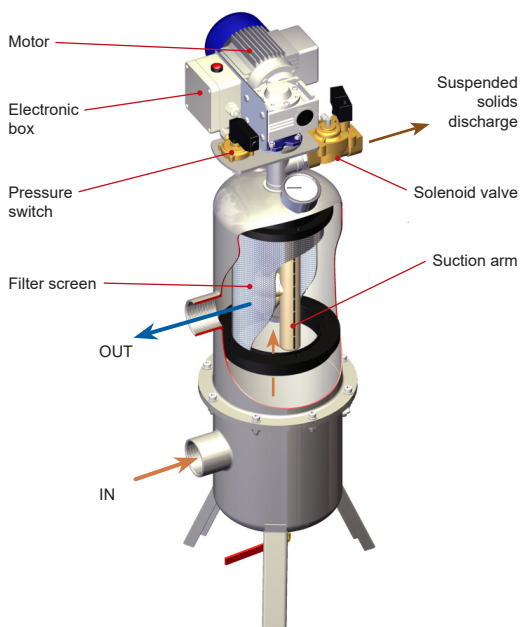
**HECTRON**

# AG series | Automatic filters

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.

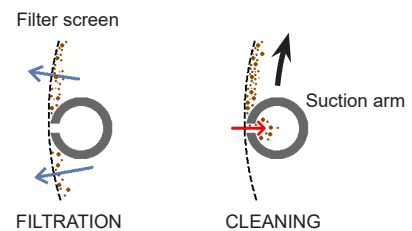
- Available filtration degree from 1 to 500 microns
- Low water consumption for cleaning
- Fully automatic operation
- Delivered completely equipped
- Wide range of products, available for high flow rates

## HOW IT WORKS

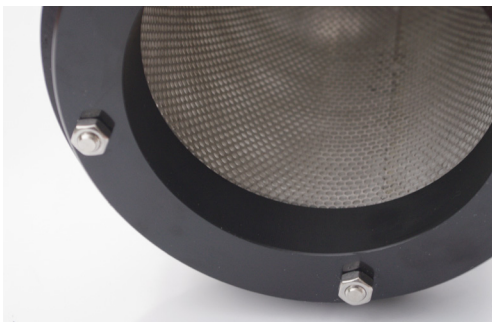


**Filtration.** Filtration is achieved through a cylindrical screen. As soon as the filter screen is clogged, a pressure switch detects the pressure difference between inlet and outlet and starts the cleaning cycle.

**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.

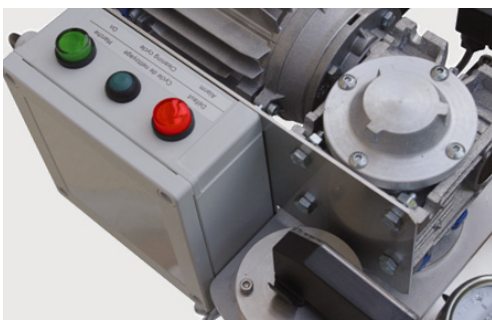


**Discharge.** During the cleaning cycle, a solenoid valve is opened and the suspended solids are drained out of the filter.



### 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



	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



	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



	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



	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	120		•	•	•	•	•	DN150 flanges
	160				•	•	•	
AG400 DN200	190				•	•	•	DN200 flanges
	260					•	•	
AG400 DN250	340						•	DN250 flanges

# TECHNICAL SPECIFICATIONS

Operationg conditions		AG100	AG200	AG300	AG400
	Maximum working pressure	Bar	5	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

Filters features	Electrical supply	V/Hz	230/50	230/50 / 120/60*	
	Degree of protection		IP53	IP53 / IP65*	
	Power	W	60	110	200
	Weight (empty)	Kg	15	26	68
	Filter area	cm²	690	1104	2813
	Volume of water rejected per cleaning cycle	L	5	6	12
	Cleaning cycle duration	s	5	4	4
	Cleaning cycle flow rate	m³/h	3,6	5,4	10,8
	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

\*optional

## Available options

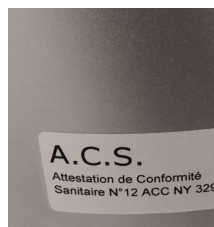


### 316L\*\*

- 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).

### 120V / 60Hz\*\*

- Version for a 120V/60Hz power supply (USA, Canada, etc. standard).



### ACS certification

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

### 90°C\*\*

- Higher water temperature is admitted with this option : up to 90°C



### 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: strengthened housing

### IP65\*\*

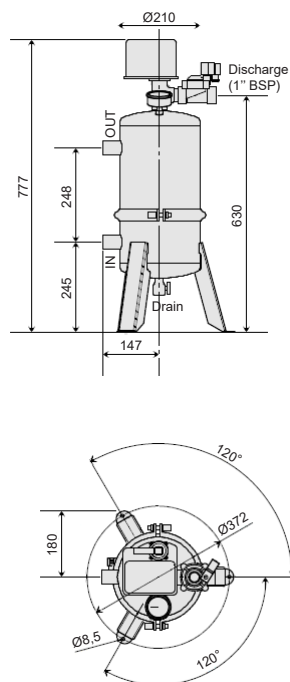
- Better protection of electrical elements : IP65
- Can be used outdoor (in frost-free conditions)

\*\*not available on AG100

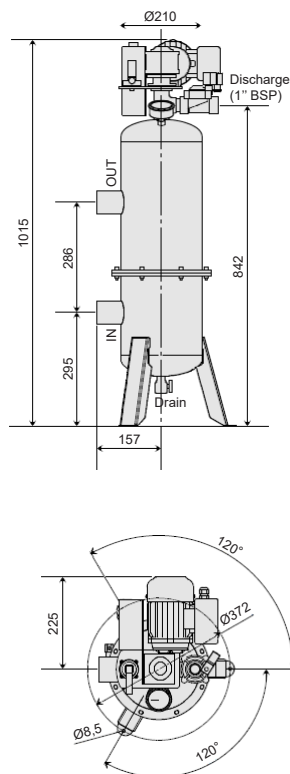
# DIMENSIONS

In mm

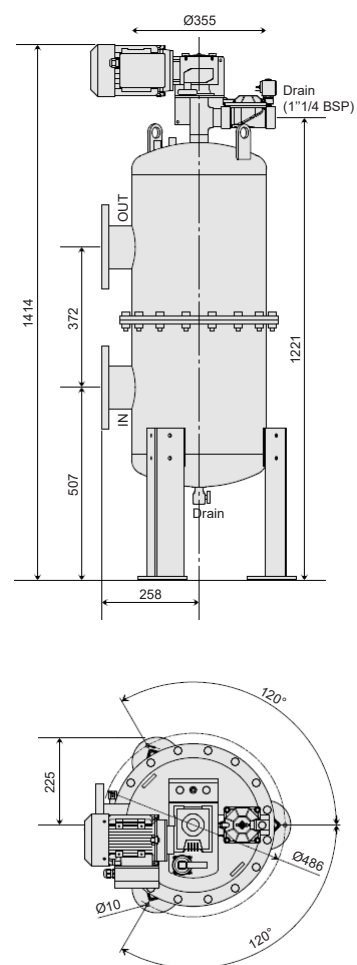
## AG100



## AG200

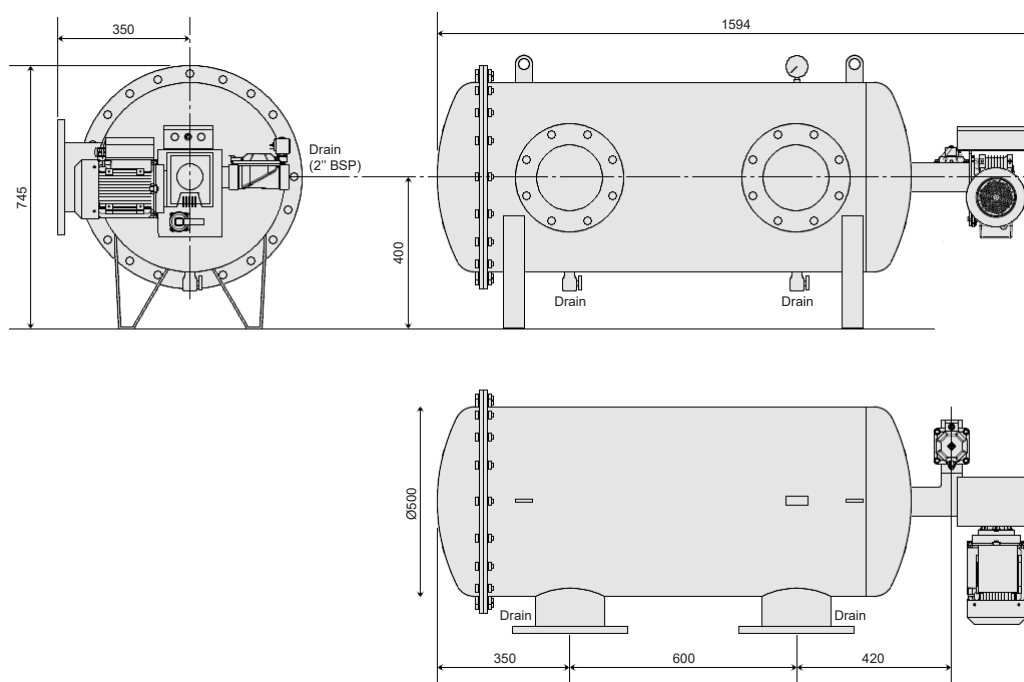


## AG300



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

## AG400



# APPLICATIONS



**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.