AG SERIES
AUTOMATIC FILTERS

HECTRON

100%
AUTOMATIC

DOWN TO
0,5 µm

UP TO
340 m³/h

MADE IN
FRANCE

Fully automatic filtration for numerous applications. Hectron AG series are available from 0,5 to 500 microns ratings. The cleaning system with suction arm offers an optimum washing efficiency with low water use.

Built-in electronic control system. Supplied with indicator lights and cleaning cycles counter (except on the AG100).

Membrane differential pressure switch, to trigger washing cycles.

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

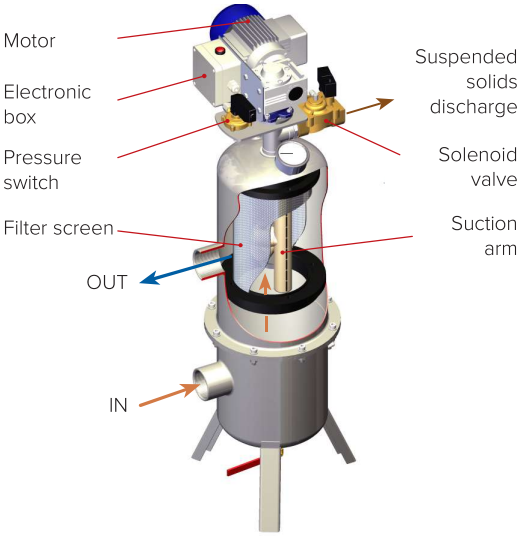
230V motor, for washing system rotation.

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

Stainleess steel housing.

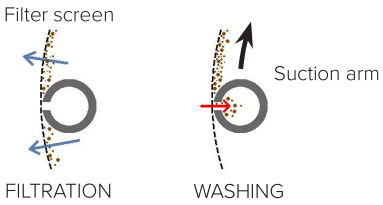
AG200 316L

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 washing cycle.

Washing. Washing 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 washing cycle.



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

MODELS

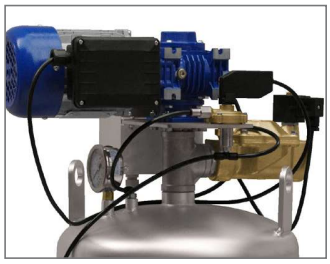
AG100

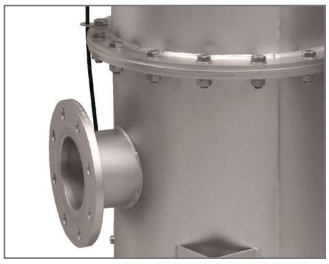
Model	Inlet / outlet		Filtration degree (µm) 2	3	6	11	20	30	40	50	60	80	100	200	300	400
AG100 1"	1" BSPF	Max flow rate (m^3/h)	6	4	8											
AG100 1"1/4	1"1/4 BSPF		6	4	8	8	12									

AG200

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

0.5 µm and 1 µm membranes available as options.

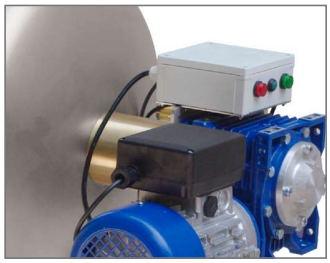




AG300

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

0.5 µm and 1 µm membranes available as options.



AG400

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

⊕ **Suitable for water loaded with:**

- fine mineral solids (clay, silt)

⊖ **Not suitable for water loaded with:**

- iron, manganese
- organic suspended solids
- polymer flocculants

3 to 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* / 16*	5 / 10*
	Inlet minimum pressure		Bar	2,5	2,5	2,5	2,5
	Outlet minimum pressure		Bar	2	2	2	2
	Water maximum temperature		°C	50	70 / 90*	70 / 90*	70 / 90*
	Suspended solids maximum size		mm	3	3	4	4
Filters specifications	Electrical supply		V/Hz	230/50	230/50	230/50	230/50
	IP rating			IP40	IP40 / IP65*	IP40 / IP65*	IP40 / IP65*
	Power rating		W	60	110	270	390
	Weight (empty)		Kg	15	26	68	190
	Weight (full)		Kg	27	51	155	355
	Filter surface area		cm^2	690	1 104	2 813	7 960
	Backwash water volume		L	5	8	18	60
	Backwash cycle duration		s	5	5	6	10
	Instantaneous backwash flow rate		m^3/h	3,6	5,8	10,8	21,6
	Maximum pressure loss		Bar	0,5	0,5	0,5	0,5

*optional

				VERSIONS		
				Standard	316L**	Seawater**
				Stainless steel 304 + brass	Full stainless steel 316L	coated S.S. 316L, duplex, plastics
Requested water quality	Free chlorine max.	permanently	mg/L	0,3	3	10
		occasionnally	mg/L	3	12	20
	Salinity max.		g/L	0,3	5	50
	Chlorides Cl^- max.		mg/L	200	2 700	27 000
	pH minimum / maximum	Permanently		6 / 8	5 / 10	4 / 10
		Occasionnally		3 / 12	2 / 12	2 / 12
Materials	Filter housing			S.S. 304	S.S. 316L	S.S. 316L + Rilsan
	Suction arm			POM	POM	POM
	Evacuation solenoid valve			Brass	S.S. 316L	Nylon (PA 6.6)
	Differential pressure switch			Brass	S.S. 316L	S.S. 316L
	Filter screen holder			S.S. 316L, PE	S.S. 316L, PE	Duplex, PE
	Fasteners in contact with water			S.S. A4	S.S. A4	Duplex
	Woven 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

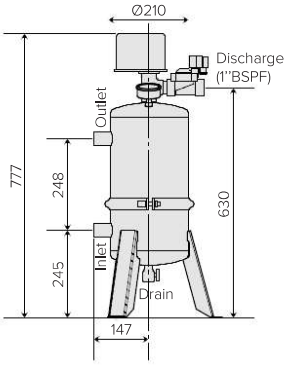
OPTIONS

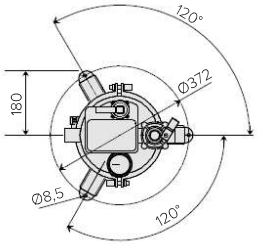
		AG100	AG200 AG300	AG400
Micro-filtration	▪ 0.5 or 1 µm membrane: excellent turbidity reduction ▪ Specific washing system and specific operating constraints	not available	**option**	not available
ACS	▪ ACS models (french certification for potable water networks) ▪ For use on potable water networks. EU only.	**option**	**option**	**option**
PN10	▪ Maximum working pressure : 10 Bar ▪ A suction pressure limiter automatically regulates suction pressure in the cleaning system.	not available	**option**	**option**
PN16	▪ Maximum working pressure : 16 Bar ▪ Suction pressure limiter ▪ reinforced housing	not available	**option**	not available
90°C	▪ Maximum water temperature : 90°C ▪ Electric elements thermally isoleted from housing	not available	**option**	**option**
Industry	▪ Separate electronic box, with indicator lights and cycle counter ▪ electric signal feedback that can be connected to a supervision.	**option**	series	series
IP65	▪ Reinforced waterproof on the various electrical equipment	not available	**option**	**option**

DIMENSIONS

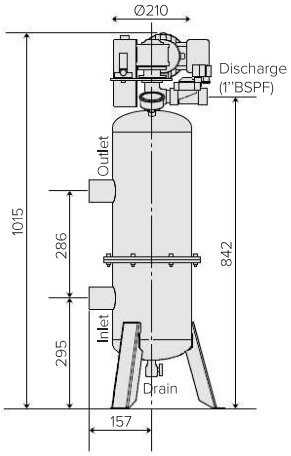
In mm

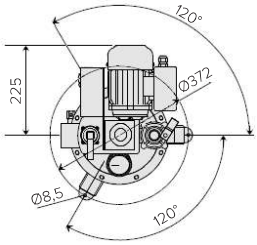
AG100



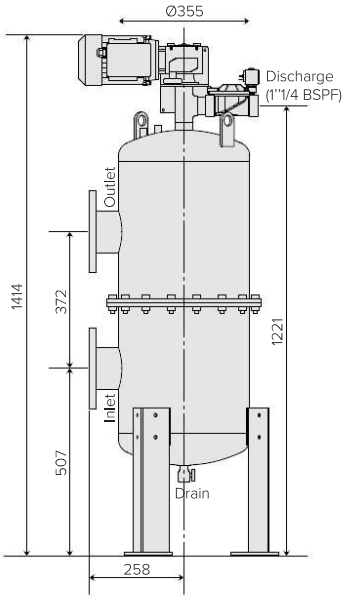


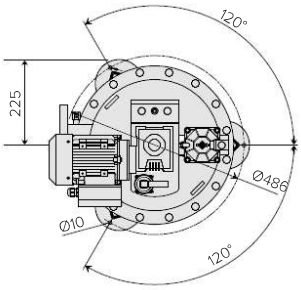
AG200





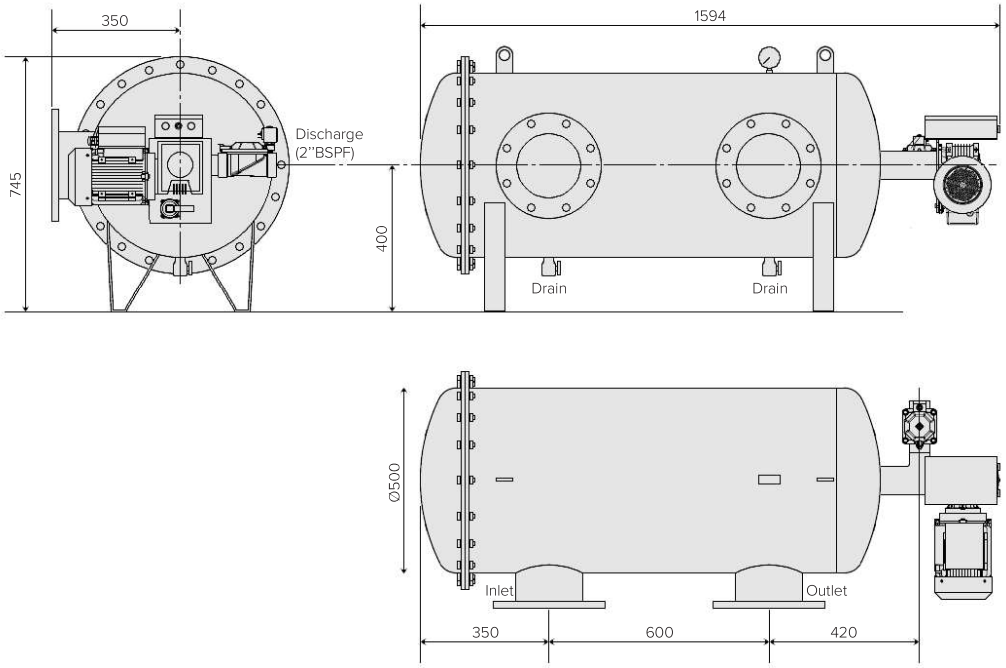
AG300





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 filtres 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 iltration 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.

HECTRON

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