

AS SERIES

AUTOMATIC FILTERS

FOR LOW PRESSURE NETWORKS

HECTRON

100%
AUTOMATIC

FROM
6 μ m

UP TO
340 m³/h

MADE IN
FRANCE

Hectron AS filters have the benefit of being able to operate with only 0.5 Bar upstream pressure, what makes them particularly suitable to every low pressure application, like plate heat exchanger protection.



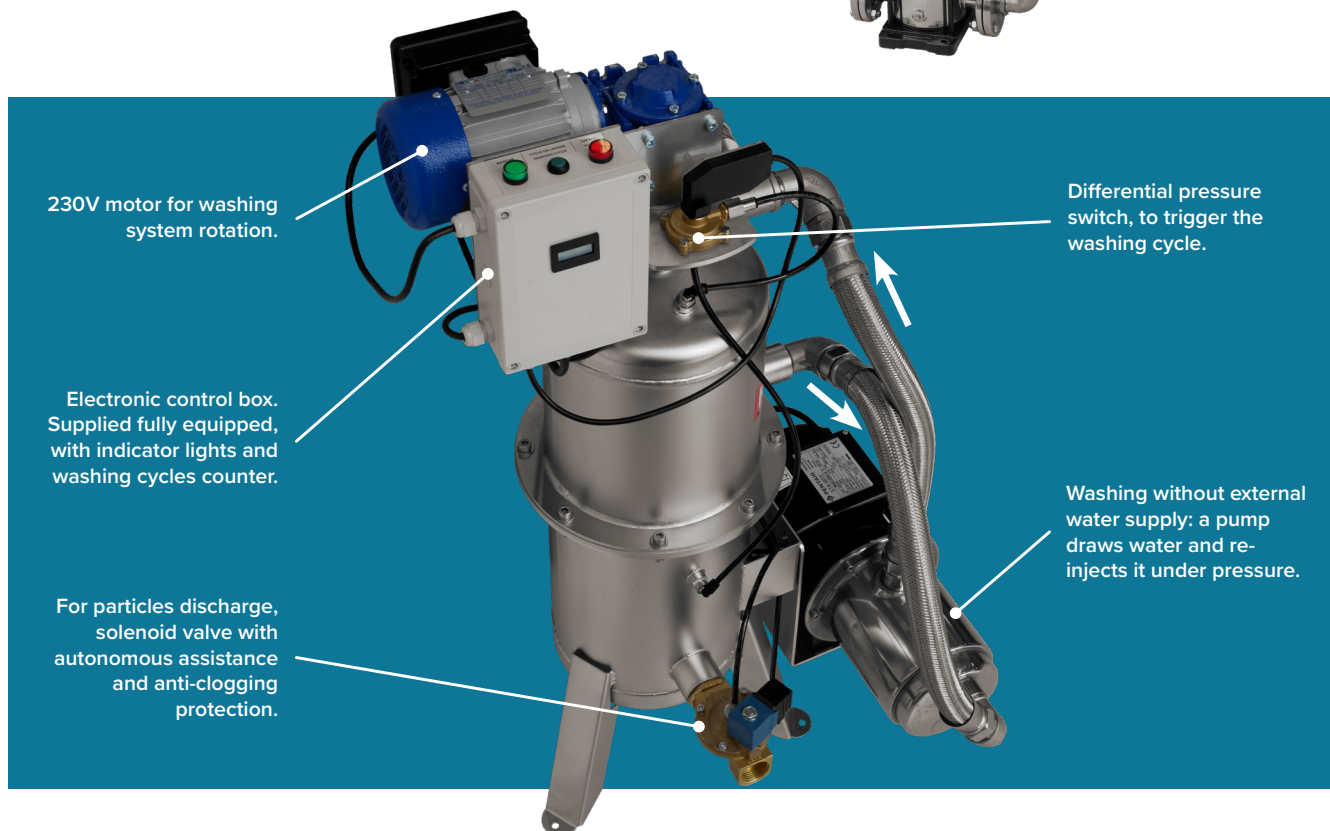
230V motor for washing system rotation.

Electronic control box. Supplied fully equipped, with indicator lights and washing cycles counter.

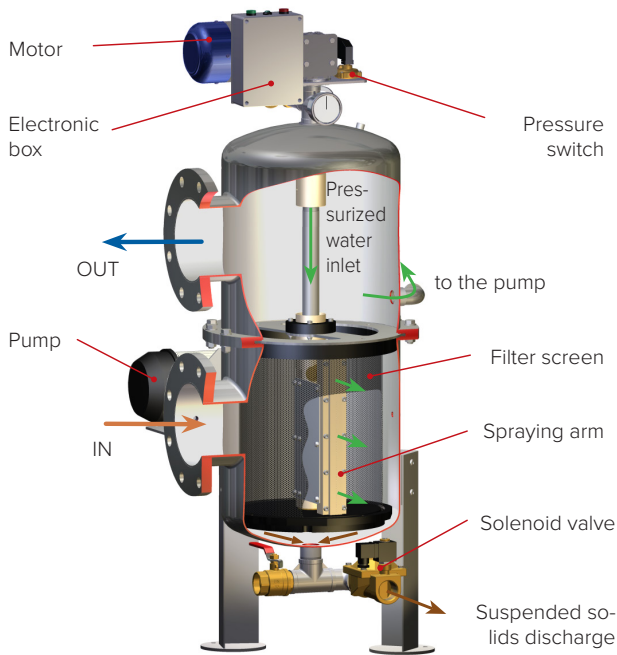
For particles discharge, solenoid valve with autonomous assistance and anti-clogging protection.

Differential pressure switch, to trigger the washing cycle.

Washing without external water supply: a pump draws water and re-injects it under pressure.

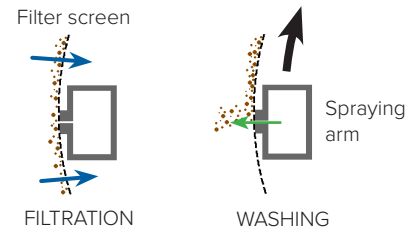


HOW IT WORKS

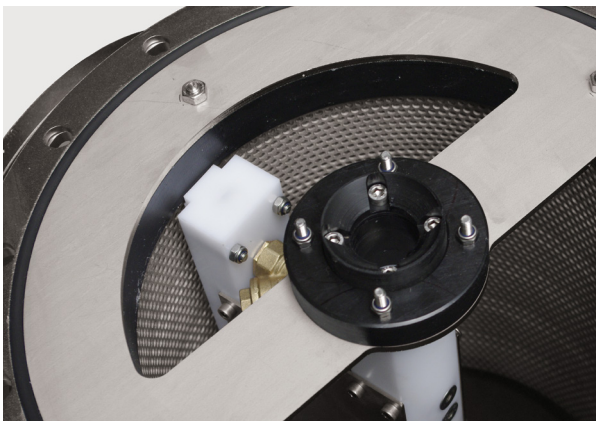


Filtration. Filtration is achieved through a cylindrical screen. As soon as the filter screen is clogged, a pressure switch detects the pressure difference between inlet and outlet and starts the washing cycle.

Washing. Washing is performed by means of a water spraying arm. Clean water from filter outlet is pressurized with a centrifugal pump and sent to the water spraying arm. A complete rotation of the water spraying arm is achieved, so that the whole surface is washed in one cycle.

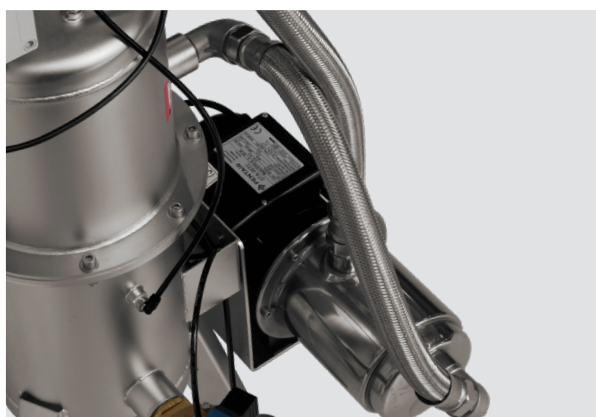


Discharge. At the end of the washing cycle, a solenoid valve is opened and the suspended solids are drained out of the filter.



Efficient filtration

- Cylindrical screen
- A perforated plate supports and protects filter fabric.
- Filtering media in PET fabric.



Pressurized water washing

- Cleaning with water spray at more than 2 Bar.
- No water supply needed : cleaning is achieved using filtered water from filter outlet.
- Built-in pump and control system.

MODELS

AS200



			Filtration degree (µm)											
Model	Inlet / outlet		6	11	20	30	40	50	60	80	100	200	300	400
AS200 2"	2" BSPF	Max flow rate (m³/h)	20	20	25									
AS200 3"	3" BSPM		20	20	25	30	35	35	45					


AS300



		Filtration degree (µm)												
Model	Inlet / outlet		6	11	20	30	40	50	60	80	100	200	300	400
AS300 DN100	DN100 flanges	Max flow rate (m³/h)	45	45	70									
AS300 DN150	DN150 flanges		45	45	70	85	100	105	120					

AS400



			Filtration degree (µm)											
Model	Inlet / outlet		6	11	20	30	40	50	60	80	100	200	300	400
AS400 DN150	DN150 flanges	Max flow rate (m³/h)	140	140	160									
AS400 DN200	DN200 flanges		140	140	190	220	260							
AS400 DN250	DN250 flanges		140	140	190	220	260	290	340					

TECHNICAL SPECIFICATIONS

		unité	AS200	AS300	AS400
Operating parameters	Maximum working pressure	Bar	7	7	10
	Minimum inlet pressure	Bar	0,5	0,5	0,5
	Minimum pressure downstream filter	Bar	0	0	0
	Water maximal temperature	°C	50	50	70
	Suspended solids maximum size	mm	6 / 15*	8 / 20*	20
Filters specifications	Electrical supply	V/Hz	230/50	230/50	400/50 (3-phase)
	IP rating		IP54	IP54	IP54
	Power rating	W	1560	2250	3600
	Weight (empty)	Kg	39	90	280
	Weight (full)	Kg	64	177	445
	Filter surface area	cm ²	1104	2813	7960
	Discharge rejected water volume	L	11 / 167*	23 / 292*	292
	Discharge duration	s	5 / 30*	5 / 30*	30
	Discharge instantaneous flow rate	m ³ /h	7,9 / 20,0*	16,6 / 35,0*	35,0
	Maximum pressure loss	Bar	0,5	0,5	0,5

*with motorized valve option

				VERSIONS		
				Standard	316L	Eau de mer
				Stainless steel 304, brass	Full stainless steel 316L	S.S. 316L + coating, duplex, plastics
Requested water quality	Free chlorine maximum	permanently	mg/L	0,3	3	5
		occasionally	mg/L	3	12	20
	NaCl maximum		g/L	3	15	50
	pH minimum / maximum	permanently	mg/L	6 / 8	5 / 10	4 / 10
		occasionally	mg/L	3 / 12	2 / 12	1,5 / 12
Materials	Filter housing			S.S. 304	S.S. 316L	S.S. 316L + Rilsan
	Pump			S.S. 304, cast iron	S.S. 316L	S.S. 316L
	Washing arm			PE	PE	PE
	Discharge solenoid valve			Brass	S.S. 316L	PE
	Discharge motorized valve* : butterfly / collar			Cast iron / EPDM	S.S. 316L / EPDM	Cupro-alu / NBR
	Differential pressure switch			Brass	S.S. 316L	S.S. 316L
	Filter screen support			S.S. 316L, PE	S.S. 316L, PE	Duplex, PE
	Screws and bolts in contact with water			S.S. A4	S.S. A4	Duplex
	Filter media: fabric			PETP or nylon (PA 6.6)	PETP or nylon (PA 6.6)	PETP or nylon (PA 6.6)
	Seals			EPDM or nitrile (NBR)	EPDM or nitrile (NBR)	EPDM or nitrile (NBR)

* In AS200 and AS300 as an option. In AS400 as standard.

OPTION



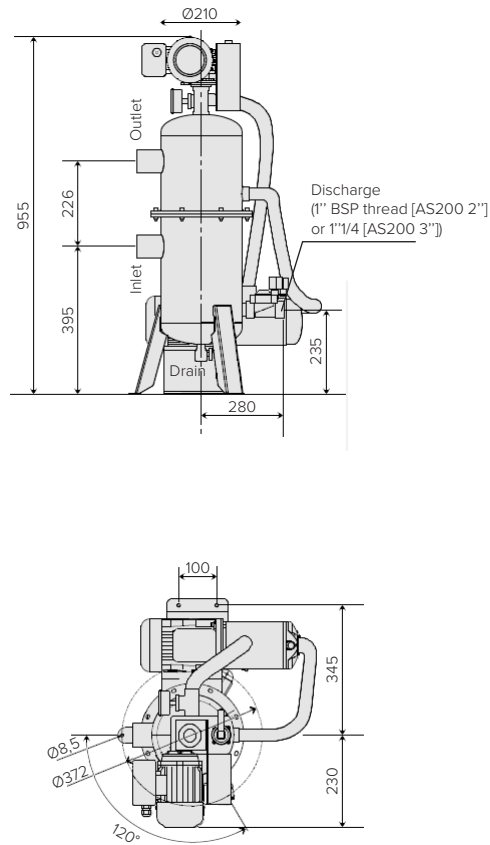
Motorized valve

- Discharge operated by motorized valve, instead of solenoid valve
- Can filter water with big size suspended solids, up to 20mm.
- Valve DN50 on AS200, DN65 on AS300.
- In AS200 and AS300 as an option. In AS400 as standard.

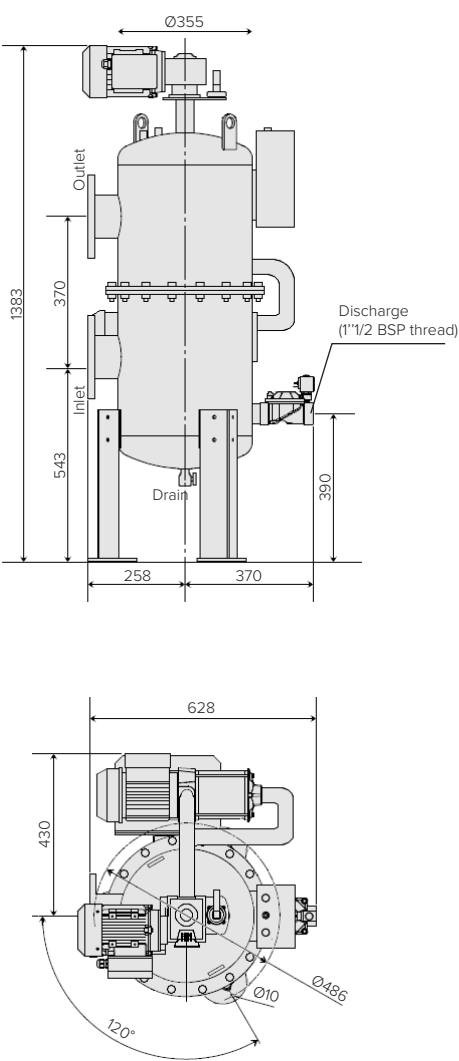
DIMENSIONS

In mm

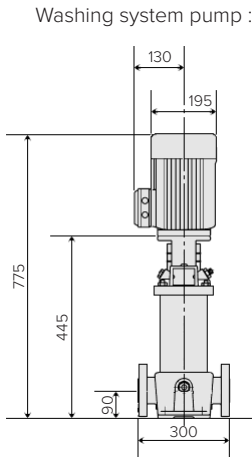
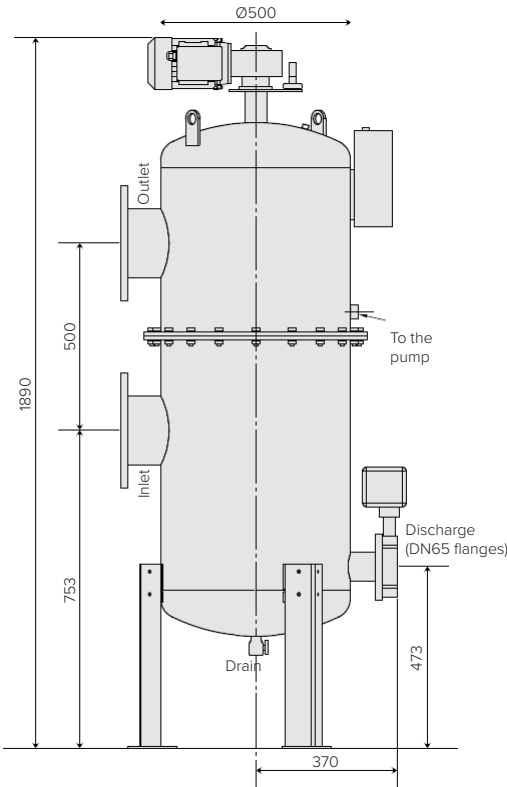
AS200



AS300

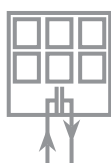


AS400



APPLICATIONS

Heat exchangers in buildings



In water / water geothermal heat pumps on wellwater, exchangers are sensitive to fouling, as soon as the water used contains suspended solids. These suspended solids gradually plug the exchangers and reduces its efficiency; disassembly and cleaning are then necessary.

Installing an AS Series filter reduces this maintenance. As they can operate at low pressure, they can be installed directly between the pump and the exchanger, without need to oversize the pump nor to add a pressure sustainer.

Lakes and river 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.

Networks in factories



These filters can be used in water networks in factories, in case the network operates at low pressure: borehole water before tank filling or cooling tower.

Wastewater plant



Installing a filter secures the discharge after the clarifier. Choosing an automatic filter avoids the hassle of replacing cartridges. A filtration degree of 100 or 200 microns is most frequently chosen.

Seawater



A specific version for seawater is available, resistant to corrosion. These filters are used to protect seawater heat pumps.