

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 0.6 Bar upstream pressure, what makes them particularly suitable to every low pressure application, like plate heat exchanger protection.



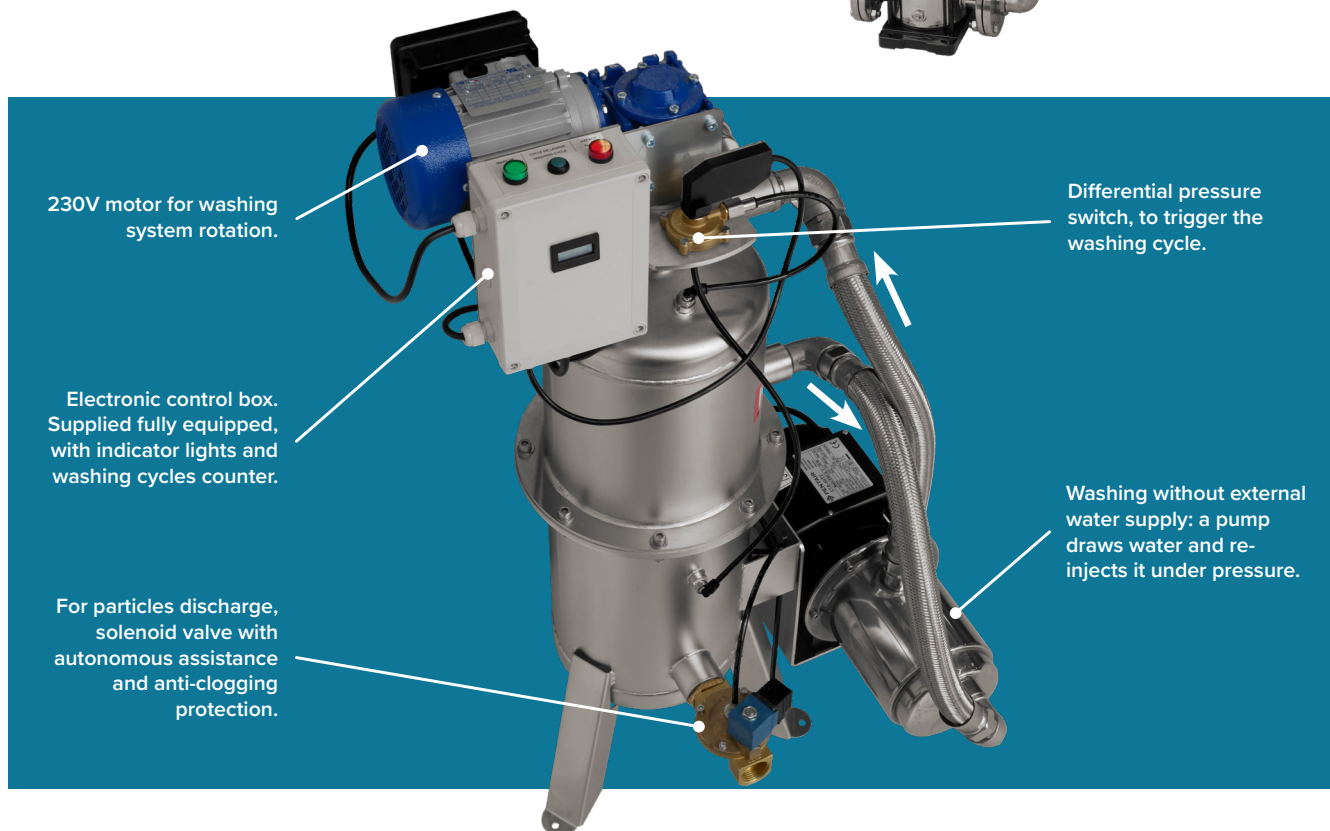
230V motor for washing system rotation.

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

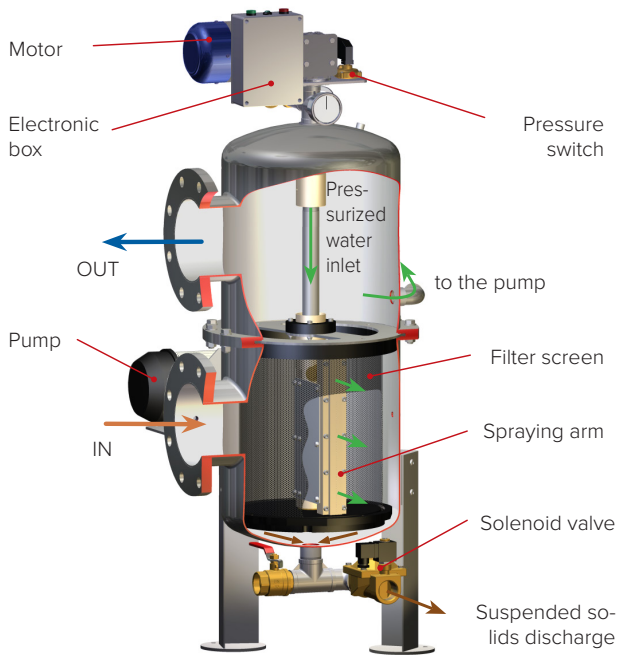
For particles discharge, solenoid valve with autonomous assistance and anti-clogging protection.

Differential pressure switch, to trigger the washing cycle.

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

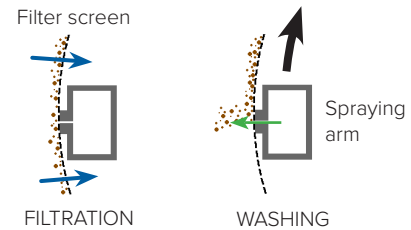


HOW IT WORKS



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.

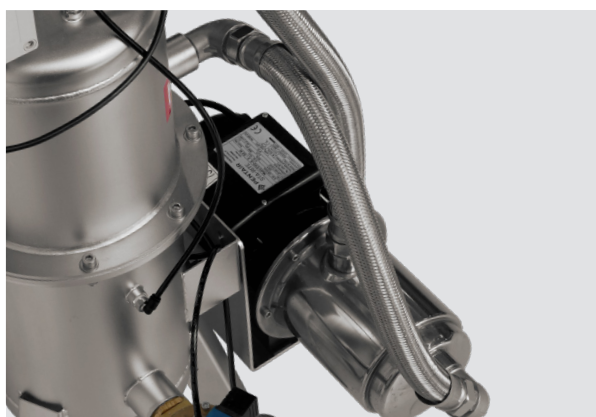


Discharge. At the end of the washing cycle, a solenoid valve is opened and the suspended solids are drained out of the filter.



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

Model	Inlet / outlet		Filtration degree (µm)											
			6	11	20	30	40	50	60	80	100	150	200	400
AS200 2"	2" BSPF	Max flow rate (m³/h)	15	15	20	25								
AS200 3"	3" BSPM		15	15	20	25	25	30	35		45			



AS300

Model	Inlet / outlet		Filtration degree (µm)											
			6	11	20	30	40	50	60	80	100	150	200	400
AS300 DN100	DN100 flanges	Max flow rate (m³/h)	35	35	55	65	70							
AS300 DN150	DN150 flanges		35	35	55	65	70	80	90		120			



AS400

Model	Inlet / outlet		Filtration degree (µm)											
			6	11	20	30	40	50	60	80	100	150	200	400
AS400 DN150	DN150 flanges	Max flow rate (m³/h)	100	100	150	160								
AS400 DN200	DN200 flanges		100	100	150	180	200	230	260					
AS400 DN250	DN250 flanges		100	100	150	180	200	230	270		340			

TECHNICAL SPECIFICATIONS

	unit	AS200	AS300	AS400
Operating parameters	Maximum working pressure	Bar	7	70
	Minimum inlet pressure	Bar	0.6	0.6
	Minimum pressure downstream filter	Bar	0.1	0.1
	Water maximal temperature	°C	50	70
	Suspended solids maximum size	mm	6 / 15*	8 / 20*
Filters specifications	Electrical supply	V/Hz	230/50	230/50
	IP rating		IP54	IP54
	Power rating	W	1610	2450
	Weight (empty)	Kg	39	90
	Weight (full)	Kg	64	177
	Filter surface area	cm ²	1104	2813
	Discharge rejected water volume	L	11 / 170*	23 / 300*
	Discharge duration	s	5 / 30*	5 / 30*
	Discharge instantaneous flow rate	m ³ /h	7,9 / 20,0*	16,6 / 35,0*
	Maximum pressure loss	Bar	0,5	0,5

*with motorized valve option

				VERSIONS		
				Standard	316L	Marine
				Stainless steel 304, brass	Full stainless steel 316L	S.S. 316L + coating, duplex, plastics
Requested water quality	Free chlorine max.	permanently	mg/L	0,3	3	10
		occasionally	mg/L	3	12	20
	Salinity max.		g/L	0,3	5	50
	Chlorides Cl ⁻ max.		mg/L	200	2700	27000
	pH min. / max.	permanently		6 / 8	5 / 10	4 / 10
		occasionally		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	
	Discharge motorized valve* : butterfly / collar			Cast iron / EPDM	S.S. 316L / EPDM	PP/EPDM
	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



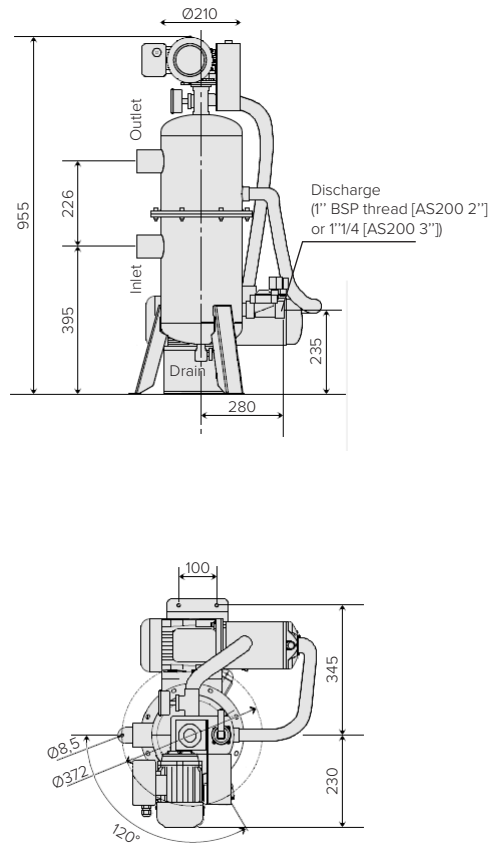
Motorized valve

- 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 and seawater version as standard.

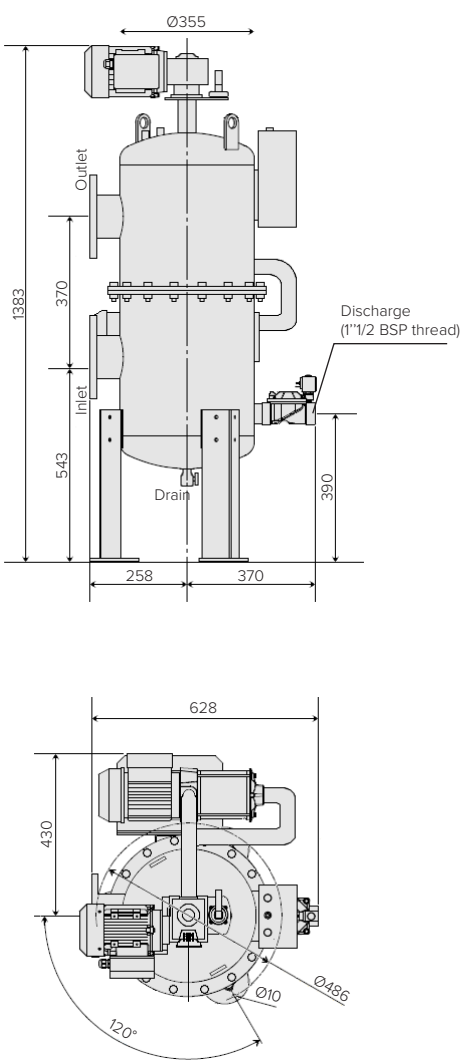
DIMENSIONS

In mm

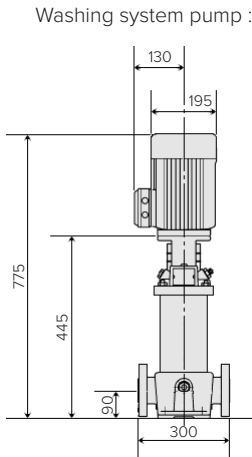
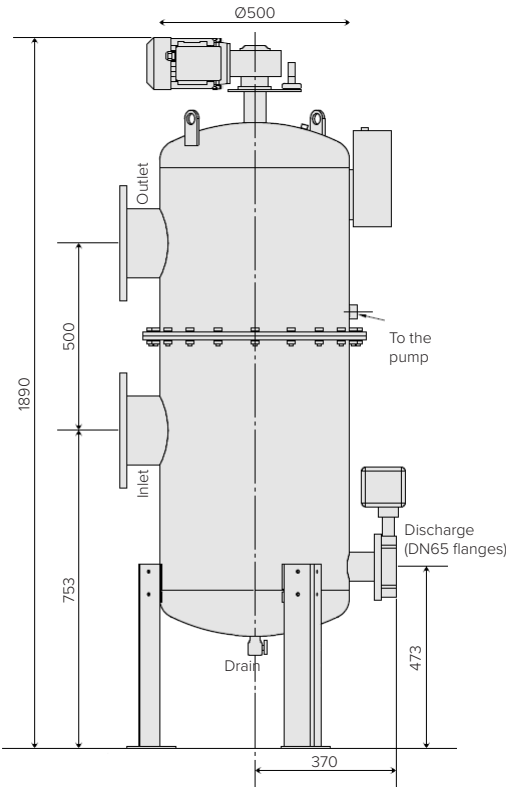
AS200



AS300

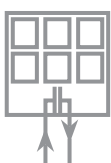


AS400



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.

Seawater



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