



VTO

Self-cleaning filter with flexible suction pads
Covered by patent application



**MAX
PRESSURE**
10 bar



**FILTRATION
DEGREE**
10-2000 micron



**MAX FLOW
RATE**
30-600 m³/h



**FILTER
TYPE**
Automatic

TYPE



AUTOMATIC

CLEANING



VTO

CHARACTERISTICS

NON - STOP
FLOWDIFFERENTIAL
PRESSURE KITPOTABLE
WATER*

APPLICATIONS



MUNICIPALITIES



HVAC/R



DESALINATION



INDUSTRY

SEA WATER
TREATMENTWASTE WATER
TREATMENT

IN >

Raw water inlet.

PRESSURE TRANSMITTER

Inlet-outlet pressure transmitter. pressure transmitters are available as accessories for pressure prompt control.

OUT >

Filtered water outlet.

FILTRATION ELEMENT

Filtration cartridge available in polyester / nylon with AISI 316L / DUPLEX SAF2205 / TITANIUM support or entirely in AISI 316L.

DRAIN SHAFT

PVC drain shaft communicates pads with drain valve.

SUCTION PADS

Cleaning of filtration element is ensured through circular suction pads with spring-loaded shock absorbers removing dirt thanks to Venturi tube principle.

GASKET

Lid gasket in EPDM or, alternatively, in NBR. Also available in VITON, PTFE, SILICON for special applications.

HYDROVALVE

PVC drain hydrovalve connected to suction pads through the hollow shaft, for the discharge of dirt during the washing phase and for possible drain in case of maintenance.

MOTION SYSTEM

Piston is activated by water drawn from the inlet. Its movement enables pads to translate over the entire cartridge surface and clean it.

*Non-standard features available upon request.

The company reserves the right to make partial or total changes to products without prior notice and declines all liability.

TECHNICAL SPECIFICATIONS

VTO

GENERAL DATA

FILTER SIZE	/10A	/20	/35	/40P	/50	/80
MAX FLOW RATE	100 m³/h 440 US gpm	120 m³/h 528 US gpm	230 m³/h 1012 US gpm	400 m³/h 1761 US gpm	500 m³/h 2201 US gpm	600 m³/h 2641 US gpm
FILTRATION AREA	1500 cm² 233 in²	2200 cm² 341 in²	3300 cm² 512 in²	5400 cm² 837 in²	6800 cm² 1054 in²	8100 cm² 1256 in²
FILTRATION DEGREE	2000 - 1000 - 810 - 580 - 400 - 200 - 120 - 80 - 53 - 25 - 10 µm REPS: 800 - 400 - 200 - 120 - 55 µm					
MIN PRESSURE	1.5 bar (22 psi)					
MAX PRESSURE	10 bar (145 psi)					
MAX TEMPERATURE	60°C (140° F)					
SALINITY	< 10.000 PPM TDS					
ACIDITY	pH 3 ÷ 9					

CLEANING CYCLE

MIN CLEANING CYCLE FLOW	4 m³/h 18 US gpm	8 m³/h 35 US gpm	8 m³/h 35 US gpm	12 m³/h 53 US gpm	18 m³/h 66 US gpm	18 m³/h 66 US gpm
FILTER DRAIN FLOW RATE	17 L	31 L	31 L	45 L	70 L	75 L
CLEANING CYCLE TIME	15 - 25 s					
DRAIN VALVE (BSPP)	1"			1" 1/2		
CLEANING CYCLE START	Differential pressure (0.8 bar), time intervals and manually operation					

FILTRATION ELEMENT

FILTRATION MESH	Polyester / nylon fabric sandwich cartridge Triple-layer REPS cartridge (AISI 316L)
CARTRIDGE GASKETS	EPDM / NBR / VITON / PTFE / SILICON

POWER SUPPLY AND CONTROL

POWER SUPPLY	230 Vac 50/60Hz
CONTROL VOLTAGE	230 Vac

MATERIALS

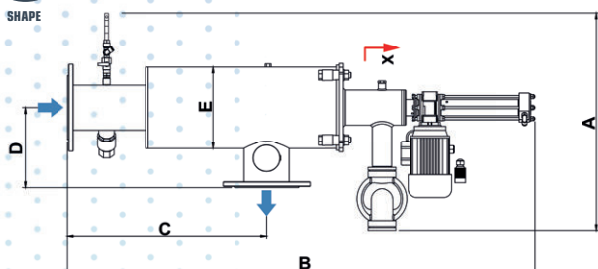
FILTER BODY	AISI 304L / AISI 316L / DUPLEX SAF 2205
LID	AISI 304L / AISI 316L / DUPLEX SAF 2205
MESH SUPPORT	AISI 316L / DUPLEX SAF 2205 / TITANIUM
GASKETS	EPDM / NBR / VITON / PTFE / SILICON
SURFACE TREATMENT	Micro shot-peening and passivation

ON REQUEST

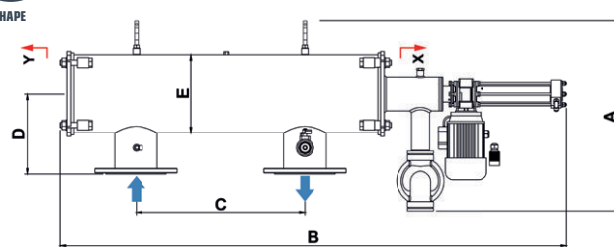
- Other filtration degrees;
- Other constructive pressures.



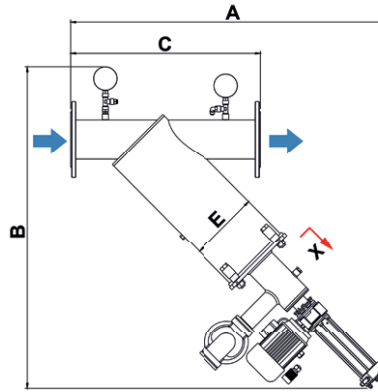
SHAPE



SHAPE



	MODEL	IN/OUT	DRAIN	FILTRATION AREA		Qmax*		DIMENSIONS (mm)							WEIGHT** kg
				cm ²	in ²	m ³ /h	US gpm	A	B	C	D	E	X	Y	
L	2"/10A	2"BSPP	1"BSPP	1500	233	30	132	530	990	296	203	206	500	-	25
	3"/10A	3"BSPP	1"BSPP	1500	233	60	264	550	990	296	203	206	500	-	26
	80/10A	DN80	1"BSPP	1500	233	60	264	550	990	296	203	206	500	-	30
	100/10A	DN100	1"BSPP	1500	233	100	440	560	1040	346	203	206	500	-	31
	3"/20	3"BSPP	1 1/2"BSPP	2200	341	60	264	550	1140	456	203	206	650	-	29
	80/20	DN80	1 1/2"BSPP	2200	341	60	264	550	1140	456	203	206	650	-	34
	100/20	DN100	1 1/2"BSPP	2200	341	120	528	560	1190	506	203	206	650	-	34
	100/35	DN100	1 1/2"BSPP	3300	512	130	572	560	1190	506	236	273	650	-	43
	150/35	DN150	1 1/2"BSPP	3300	512	230	1012	580	1190	506	236	273	650	-	47
	100/40P	DN100	1 1/2"BSPP	5400	837	140	616	560	1500	796	236	273	1000	-	51
	150/40P	DN150	1 1/2"BSPP	5400	837	250	1100	580	1500	796	236	273	1000	-	55
	200/40P	DN200	1 1/2"BSPP	5400	837	400	1761	610	1500	796	236	273	1000	-	59
	200/50	DN200	1 1/2"BSPP	6800	1100	450	1981	610	1710	900	236	273	1200	-	67
	250/50	DN250	1 1/2"BSPP	6800	1100	500	2201	650	1710	900	312	324	1200	-	85
	200/80	DN200	1 1/2"BSPP	8100	1256	450	1981	655	1710	900	328	356	1200	-	90
	250/80	DN250	1 1/2"BSPP	8100	1256	600	2641	660	1710	900	328	356	1200	-	100
O	2"/10A	2"BSPP	1"BSPP	1500	233	30	132	515	1350	450	213	206	500	650	39
	3"/10A	3"BSPP	1"BSPP	1500	233	60	264	515	1350	450	213	206	500	650	40
	80/10A	DN80	1"BSPP	1500	233	60	264	515	1350	450	213	206	500	650	44
	100/10A	DN100	1"BSPP	1500	233	100	440	515	1350	450	213	206	500	650	45
	3"/20	3"BSPP	1 1/2"BSPP	2200	341	60	264	515	1350	450	213	206	650	500	40
	80/20	DN80	1 1/2"BSPP	2200	341	60	264	515	1350	450	213	206	650	500	44
	100/20	DN100	1 1/2"BSPP	2200	341	120	528	515	1350	450	213	206	650	500	45
	100/35	DN100	1 1/2"BSPP	3300	512	130	572	550	1820	640	246	273	650	1000	73
	150/35	DN150	1 1/2"BSPP	3300	512	230	1012	550	1820	640	246	273	650	1000	78
	100/40P	DN100	1 1/2"BSPP	5400	837	140	616	550	1820	640	246	273	1000	650	77
	150/40P	DN150	1 1/2"BSPP	5400	837	250	1100	550	1820	640	246	273	1000	650	77
	200/40P	DN200	1 1/2"BSPP	5400	837	400	1761	550	1820	640	286	273	1000	650	83
	200/50	DN200	1 1/2"BSPP	6800	1100	450	1981	550	2020	670	286	273	1200	650	90
	250/50	DN250	1 1/2"BSPP	6800	1100	500	2201	580	2030	670	317	324	1200	650	125
	200/80	DN200	1 1/2"BSPP	8100	1256	450	1981	580	2030	900	328	356	1200	650	135
	250/80	DN250	1 1/2"BSPP	8100	1256	600	2641	580	2030	900	328	356	1200	650	150



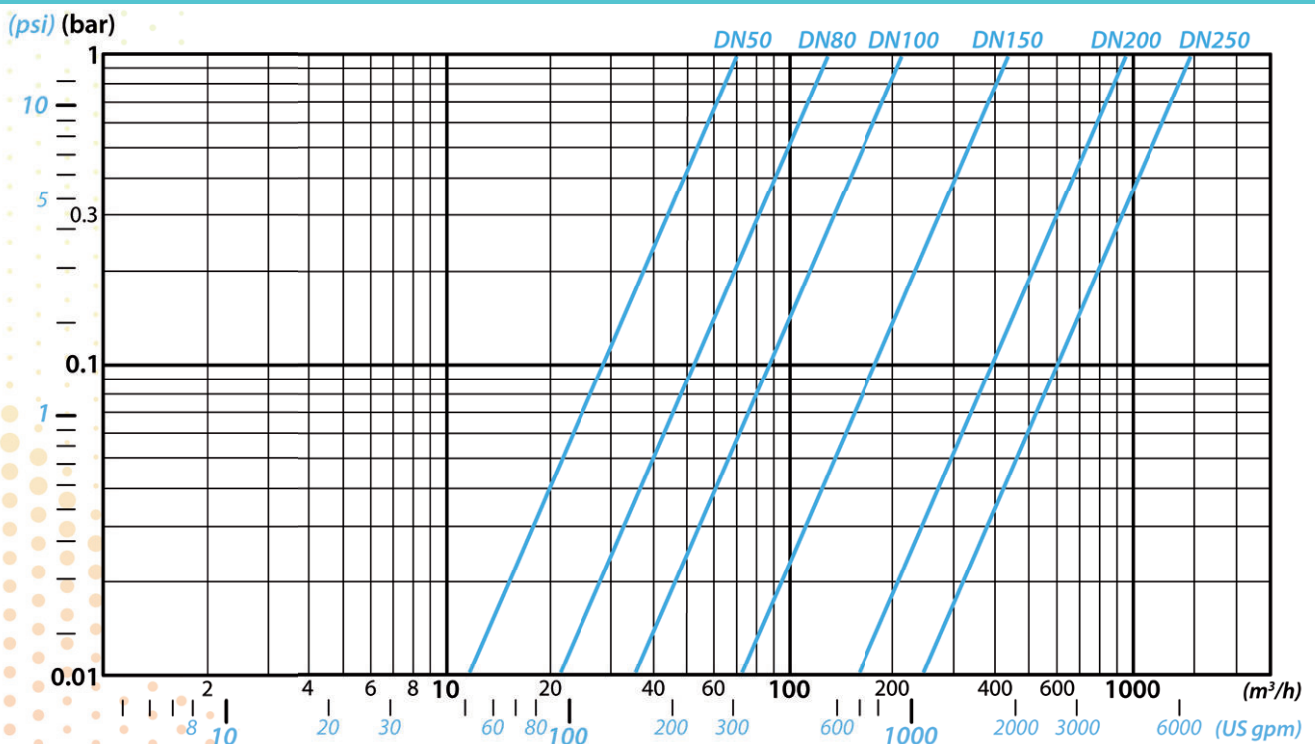
MODEL		IN/OUT	DRAIN	FILTRATION AREA		Qmax*		DIMENSIONS (mm)						WEIGHT** kg
				cm²	in²	m³/h	US gpm	A	B	C	D	E	X	
Y	2"/10A	2"BSPP	1"BSPP	1500	233	30	132	740	795	400	-	206	500	23
	3"/10A	3"BSPP	1"BSPP	1500	233	60	264	770	810	450	-	206	500	25
	80/10A	DN80	1"BSPP	1500	233	60	264	770	810	450	-	206	500	29
	100/10A	DN100	1"BSPP	1500	233	100	440	810	830	555	-	206	500	30
	3"/20	3"BSPP	1½"BSPP	2200	341	60	264	880	920	450	-	206	650	28
	80/20	DN80	1½"BSPP	2200	341	60	264	880	920	450	-	206	650	34
	100/20	DN100	1½"BSPP	2200	341	120	528	920	940	555	-	206	650	34
	100/35	DN100	1½"BSPP	3300	512	130	572	920	940	600	-	273	650	42
	150/35	DN150	1½"BSPP	3300	512	230	1012	990	950	745	-	273	650	48
	100/40P	DN100	1½"BSPP	5400	837	140	616	1140	1140	600	-	273	1000	50
	150/40P	DN150	1½"BSPP	5400	837	250	1100	1200	1180	745	-	273	1000	57

Dimensions are indicative. We advise to contact SATI technical support for further information.

* Qmax flow rates are referred to filters with 120 µm filtration degree and 20 °C, NTU < 1 water.

** Weight excluding automation and packaging.

PRESSURE LOSS



Pressure drop is referred to filters with 120 µm filter mesh and clean water.