



ROTOR HP

High Performance self-cleaning filter
with Flex-Suction skids
Patent filed



**MAX
PRESSURE**
10 bar



**FILTRATION
DEGREE**
10-2000 micron



**MAX FLOW
RATE**
30-600 m³/h



**FILTER
TYPE**
Automatic

TYPE



AUTOMATIC

CLEANING

FLEXIBLE
SUCTION PAD

CHARACTERISTICS

NON - STOP
FLOWDIFFERENTIAL
PRESSURE KITPOTABLE
WATER

APPLICATIONS



MUNICIPALITIES



HVAC/R



DESALINATION



INDUSTRY

SEA WATER
TREATMENTWASTE WATER
TREATMENT

PRESSURE TRANSMITTER

Inlet-outlet pressure transmitter included as standard for pressure check.

IN >

Raw water inlet.

OUT >

Filtered water outlet.

FILTRATION ELEMENT

Filtration cartridge available in polyester / nylon with AISI 316L / DUPLEX SAF 2205 / TITANIUM support, or entirely in AISI 316L.

FLEX-SUCTION SKIDS

Cleaning of filtration element is done by "Suction Scanning" technology. Flex-Suction skids generate the principle of Venturi tube and remove dirt from mesh. [patent SATI S.r.l.]

GASKET

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

DRAIN VALVE

Automatic cast iron throttle valve with pneumatic actuator and AISI 316L lens, connected to the Flex-Suction skids through the hollow shaft. Used for dirt discharge during the washing phase and for possible drain in case of ordinary or extraordinary maintenance.

DRAIN SHAFT

AISI 316L drain shaft communicates Flex-Suction skids with drain chamber.

MOTION SYSTEM

Automatic motion system with AISI 304L or AISI 316L stainless steel drain chamber and gearmotor.

*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

ROTOR HP

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 1100 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	2 bar (29 psi)					
MAX PRESSURE	10 bar (145 psi)					
MAX TEMPERATURE	80°C (176° F)					
SALINITY	< 10.000 PPM TDS					
ACIDITY	pH 3 ÷ 9					

CLEANING CYCLE

MIN CLEANING CYCLE FLOW	6 m³/h 40 US gpm	9 m³/h 57 US gpm	9 m³/h 57 US gpm	15 m³/h 88 US gpm	20 m³/h 110 US gpm	20 m³/h 110 US gpm
FILTER DRAIN FLOW RATE	15 L	25 L	25 L	66 L	90 L	90 L
CLEANING CYCLE TIME	8 - 16 s					
DRAIN VALVE (BSPP)	1" 1/2					
CLEANING CYCLE START	Differential pressure (0.8 bar), time intervals, manually					

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
COMPRESSED AIR	6 - 8 bar

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

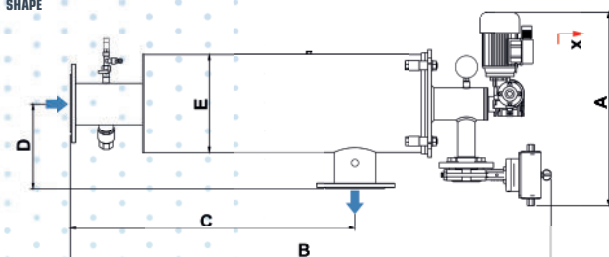
- Other filtration degrees;
- Other constructive pressures.

DIMENSIONS

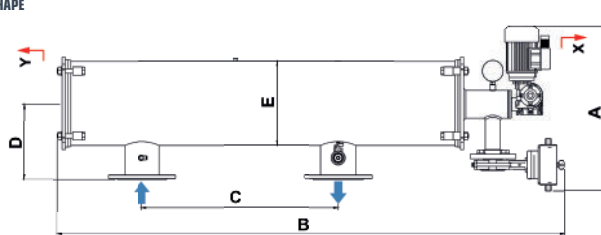
ROTOR HP



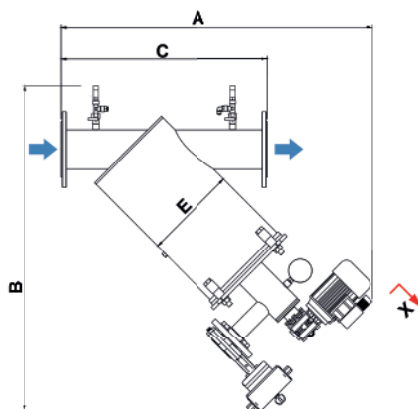
SHAPE



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	515	830	296	203	206	500	-	33
	3"/10A	3"BSPP	1"BSPP	1500	233	60	264	515	830	296	203	206	500	-	34
	80/10A	DN80	1"BSPP	1500	233	60	264	515	830	296	203	206	500	-	38
	100/10A	DN100	1"BSPP	1500	233	100	440	515	880	346	203	206	500	-	39
	3"/20	3"BSPP	1½"BSPP	2200	341	60	264	515	980	456	203	206	650	-	37
	80/20	DN80	1½"BSPP	2200	341	60	264	515	980	456	203	206	650	-	41
	100/20	DN100	1½"BSPP	2200	341	120	528	515	1040	506	203	206	650	-	43
	100/35	DN100	1½"BSPP	3300	512	130	572	515	1040	506	236	273	650	-	51
	150/35	DN150	1½"BSPP	3300	512	230	1012	530	1040	506	236	273	650	-	55
	100/40P	DN100	1½"BSPP	5400	837	140	616	530	1340	796	236	273	1000	-	62
	150/40P	DN150	1½"BSPP	5400	837	250	1100	540	1340	796	236	273	1000	-	66
	200/40P	DN200	1½"BSPP	5400	837	400	1761	555	1340	796	236	273	1000	-	70
	200/50	DN200	1½"BSPP	6800	1100	450	1981	620	1600	900	236	273	1200	-	75
	250/50	DN250	1½"BSPP	6800	1100	500	2201	620	1600	900	312	324	1200	-	96
	200/80	DN200	1½"BSPP	8100	1256	450	1981	620	1600	900	328	356	1200	-	120
	250/80	DN250	1½"BSPP	8100	1256	600	2641	620	1600	900	328	356	1200	-	128
O	2"/10A	2"BSPP	1"BSPP	1500	233	30	132	515	1180	450	213	206	500	650	47
	3"/10A	3"BSPP	1"BSPP	1500	233	60	264	515	1180	450	213	206	500	650	48
	80/10A	DN80	1"BSPP	1500	233	60	264	515	1180	450	213	206	500	650	52
	100/10A	DN100	1"BSPP	1500	233	100	440	515	1180	450	213	206	500	650	53
	3"/20	3"BSPP	1½"BSPP	2200	341	60	264	515	1180	450	213	206	650	500	48
	80/20	DN80	1½"BSPP	2200	341	60	264	515	1180	450	213	206	650	500	53
	100/20	DN100	1½"BSPP	2200	341	120	528	515	1180	450	213	206	650	500	54
	100/35	DN100	1½"BSPP	3300	512	130	572	550	1640	640	246	273	650	1000	81
	150/35	DN150	1½"BSPP	3300	512	230	1012	550	1640	640	246	273	650	1000	86
	100/40P	DN100	1½"BSPP	5400	837	140	616	550	1640	640	246	273	1000	650	83
	150/40P	DN150	1½"BSPP	5400	837	250	1100	550	1640	640	246	273	1000	650	88
	200/40P	DN200	1½"BSPP	5400	837	400	1761	550	1640	640	286	273	1000	650	91
	200/50	DN200	1½"BSPP	6800	1100	450	1981	620	1840	670	286	273	1200	650	100
	250/50	DN250	1½"BSPP	6800	1100	500	2201	620	1840	670	317	324	1200	650	135
	200/80	DN200	1½"BSPP	8100	1256	450	1981	620	1840	670	328	356	1200	650	150
	250/80	DN250	1½"BSPP	8100	1256	600	2641	620	1840	670	328	356	1200	650	155



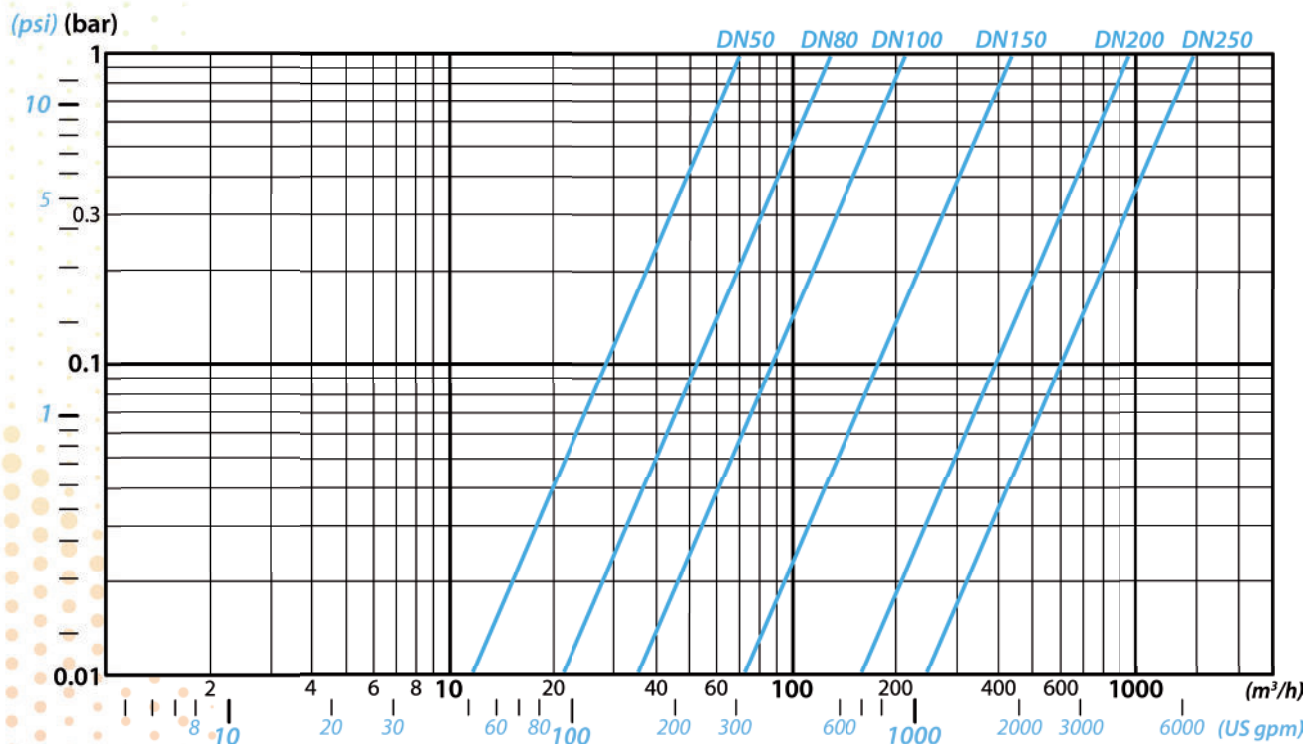
MODEL		IN/OUT	DRAIN	FILTRATION AREA		Qmax*		DIMENSIONS (mm)						WEIGHT** kg
				cm²	in²	m³/h	US gpm	A	B	C	D	E	X	
Y	2"/10A	2"BSPP	1"BSPP	1500	233	30	132	720	840	400	-	206	500	31
	3"/10A	3"BSPP	1"BSPP	1500	233	60	264	745	860	450	-	206	500	33
	80/10A	DN80	1"BSPP	1500	233	60	264	750	860	450	-	206	500	37
	100/10A	DN100	1"BSPP	1500	233	100	440	790	870	555	-	206	500	38
	3"/20	3"BSPP	1½"BSPP	2200	341	60	264	860	965	450	-	206	650	36
	80/20	DN80	1½"BSPP	2200	341	60	264	860	965	450	-	206	650	40
	100/20	DN100	1½"BSPP	2200	341	120	528	910	980	550	-	206	650	42
	100/35	DN100	1½"BSPP	3300	512	130	572	910	980	600	-	273	650	50
	150/35	DN150	1½"BSPP	3300	512	230	1012	970	1010	740	-	273	650	57
	100/40P	DN100	1½"BSPP	5400	837	140	616	1120	1200	600	-	273	1000	61
	150/40P	DN150	1½"BSPP	5400	837	250	1100	1190	1220	745	-	273	1000	67

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 filtration degree and clean water.