PRODUCT DATA SHEET

Screen Filtration (SF)

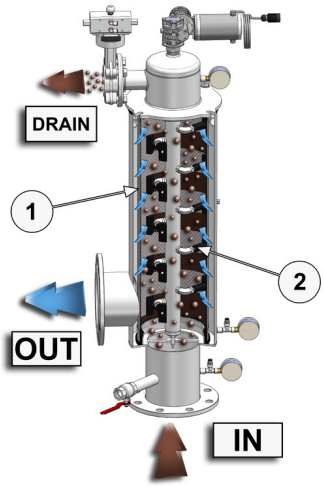
water | wastewater | sewage

OVERVIEW

MAK Water's Screen Filters are designed to filter liquids with suspended solids. MAK Water's innovative suction pad design:

- Enables the filter to be cleaned without stopping the filtration process
- Automatically cleans the filter depending on differential pressure or time
- Manufactured from high grade stainless steel; and
- Minimises water used for backwash

They can be supplied in three different configurations (O, L and Y) depending on the position of in/out connections. The filter element can be supplied either as a polyester mesh inserted between two 316 net tubes or as a three layer 316 stainless steel element, with the filtration degree ranging from 25 µm to 810 µm. All filters are supplied with valves, pressure gauges, differential pressure sensor, cleaning system and an electronic controller.



Raw water flows into the filter under pressure across the filtering element, trapping the suspended solids inside the housing prior to the filtered water exiting the filter housing. The cleaning of the filtration element can be performed by preset time or when the progressive build-up of suspended solid causes an excessive differential pressure between inlet and outlet (0.8 bar). During the cleaning cycle the opening of the drain valve and the engine rotation actuate the suction scanning system. The adherence of scanners to the internal surface of the element removes the particles trapped by the filter element. Dirty water and solids are purged through the drain.

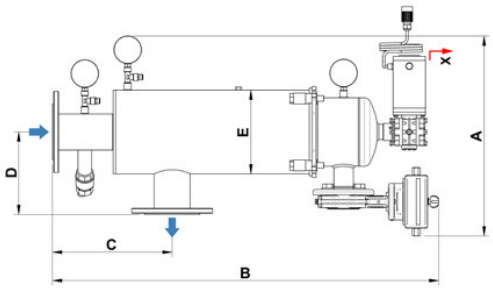
STANDARD SPECIFICATIONS

Parameter	Units	SF-40	SF-80	SF-100	SF-150	SF-250	SF-300	SF-400
Filtrate Flow Rate	m^3/hour	40	80	100	150	250	300	400
Minimum Operating Pressure	Bar	3						
Maximum Operating Pressure	Bar	10						
Maximum Operating Temperature	^{0}C	80 (Ambient)						
pH Range	-	3 – 9						
Backwash Duration	seconds	Typically 20 – 45 (operator adjustable)						
Flushing Criteria	-	Differential Pressure (0.8 bar), time intervals and manual operation						
Filtration Degree	micron	810 / 580 / 400 / 200 / 120 / 80 / 53 / 25						
Screen Types	-	Sandwich element with polyester inner mesh, triple layer element (stainless steel 316)						
Filter Body	-	SS 304 / SS 316 / Duplex						
Cover	-	SS 304 / SS 316 / Duplex						
Support screen	-	SS 316 / DUPLEX						
Surface finishing	-	Micro shot peening and passivation						
Power Supply	-	AC 200~240 V 50/60Hz						
Control Voltage	-	24 V						
Compressed Air Supply	Bar	6 – 8 (if required)						

EQUIPMENT DIMENSIONS

NOTE: Flow rates calculated for the 3 configurations are based on filters with 120 µm filtrating mesh, water with temperature of 20 °C and turbidity of < 1 NTU

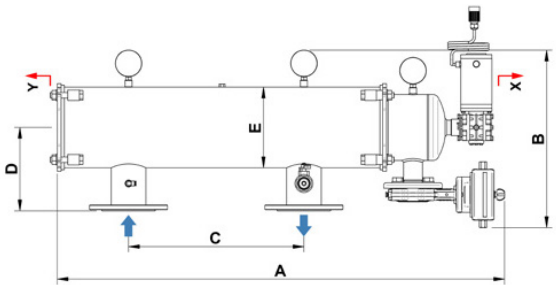
Shape L



Flow Rate (m^3/hr)	In / Out	Drain	Dimensions [mm]						Weight (kg)
			A	B	C	D	E	X	
40	2” BSPP	DN40	500	800	296	203	206	500	27
80	3” BSPP	DN40	500	800	296	203	206	500	27
80	DN80	DN40	500	800	296	203	206	500	32
100	DN100	DN40	500	850	346	203	206	500	33
80	3” BSPP	DN40	500	960	296	203	206	650	31
80	DN80	DN40	500	960	296	203	206	650	35
130	DN100	DN40	500	1010	346	203	206	650	36
140	DN100	DN50	550	1025	346	236	273	650	45
250	DN150	DN50	550	1025	346	236	273	650	49
150	DN100	DN50	550	1330	346	236	273	650	54
300	DN150	DN50	550	1330	346	236	273	1000	58
400	DN200	DN50	550	1330	366	236	273	1000	63

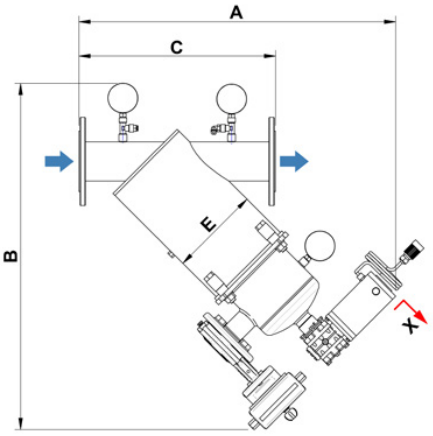
EQUIPMENT DIMENSIONS cont.

Shape O



Flow Rate (m³/hr)	In / Out	Drain	Dimensions [mm]							Weight (kg)
			A	B	C	D	E	X	Y	
40	2" BSPP	DN40	1150	450	450	213	206	500	650	27
80	3" BSPP	DN40	1150	450	450	213	206	500	650	27
80	DN80	DN40	1150	450	450	213	206	500	650	32
100	DN100	DN40	1150	450	450	213	206	500	650	33
80	3" BSPP	DN40	1150	450	450	213	206	650	500	31
80	DN80	DN40	1150	450	450	213	206	650	500	35
130	DN100	DN40	1150	450	450	213	206	650	500	36
140	DN100	DN50	1630	510	640	246	273	650	1000	45
250	DN150	DN50	1630	510	640	246	273	650	1000	49
150	DN100	DN50	1630	510	640	246	273	1000	650	54
300	DN150	DN50	1630	510	640	246	273	1000	650	58
400	DN200	DN50	1630	510	640	286	273	1000	650	63

Shape Y



Disclaimer: MAK Water is continuously updating and improving its products and services, so please contact us for more detailed information or to confirm specifications. MAK Water takes no responsibility for any errors resulting from the use of information contained within this document .

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100	DN100	DN40	500	850	346	203	206	500	33
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