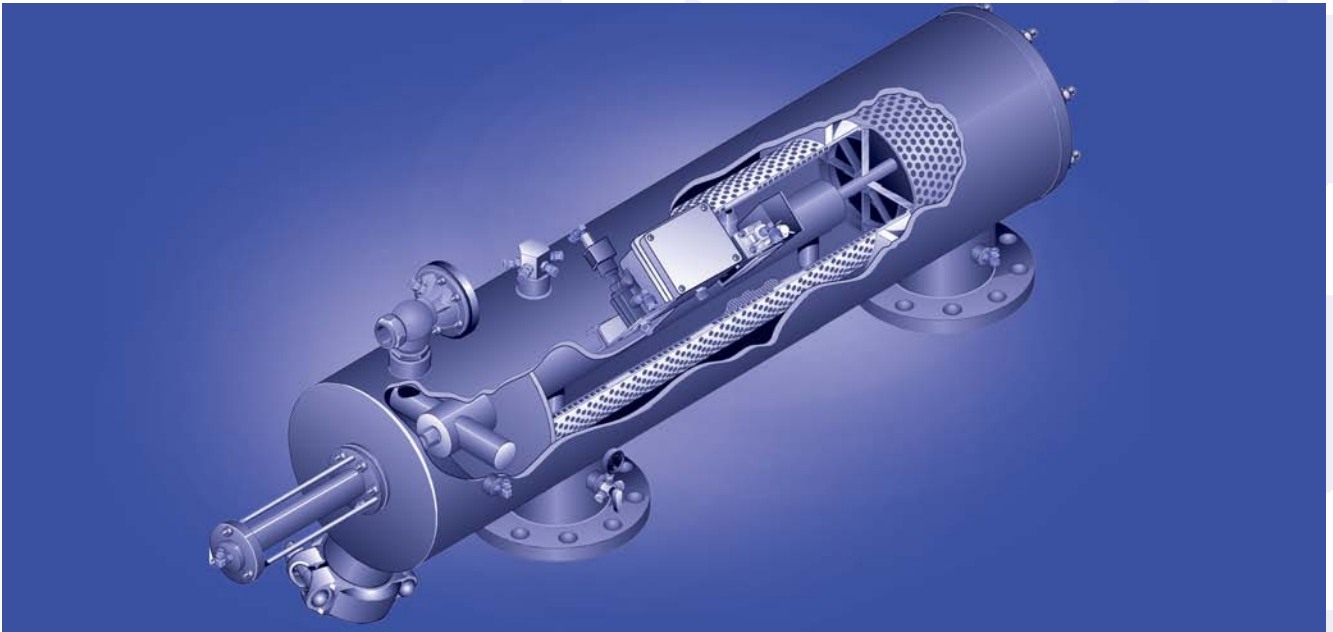


ARKAL
FILTRATION SYSTEMS



SELF-CLEANING FILTERS





Screen Filtration Technology

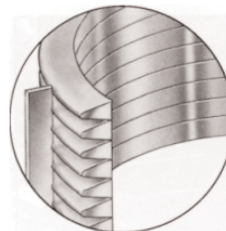
- **Screen filters can be built in almost any size and are commercially available for a wide range of flow rates.**
- **Screens are made either of a woven mesh, perforated plates or a wedge wire construction.**
- **A screen filter is a surface filter with only one retention point for solids. While dirty water passes through the filter vessel from the inside to the outside of the screen, the larger particles are physically prevented from passing and are retained on the screen.**



Woven Screen



Perforated Screen



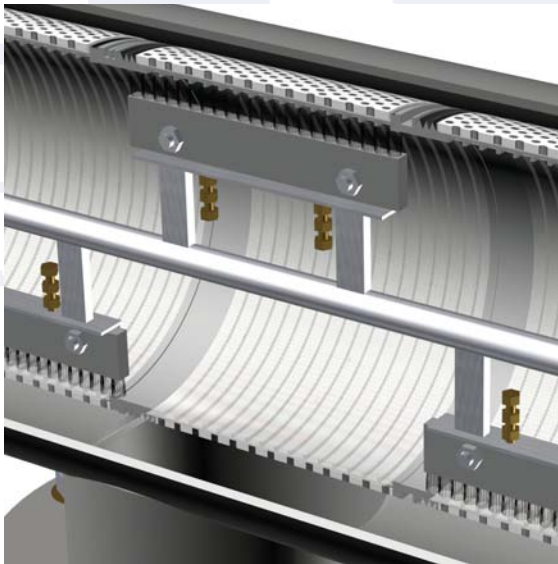
Wedge Wire Screen

Screen Filtration Technology

Screen sizes are available from 3000 to 20 micron.

The effective filtration area of a screen filter can be quite high and the initial "clean" head loss is quite low. The PD however, can build up quickly, making an effective cleaning schedule essential. Screen filters can be cleaned manually or automatically, like all other types of filter.

Manual cleaning usually involves removing the filter element and hosing/brushing it clean. Automatic cleaning is activated automatically as the particles, trapped on the inside surface of the fine screen create a differential pressure buildup. A number of cleaning methods are available:

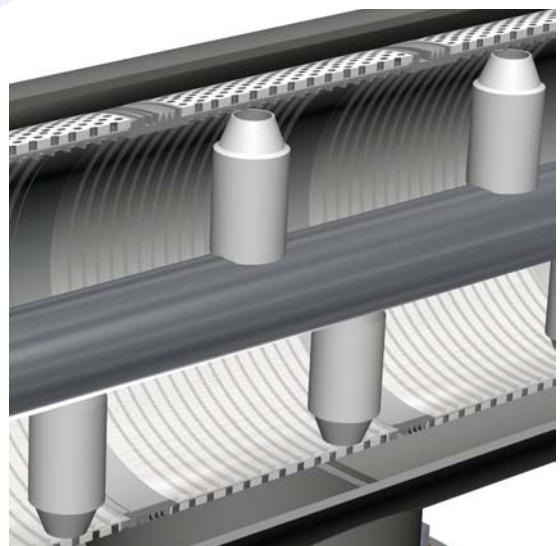


Rotating brush cleaning:

A brush rotates over the screen element dislodging the "filter cake" and a purge valve flushes the dirt out through a drain whilst the system is under pressure.

Vacuum scanner cleaning:

A rotating vacuum scanner lifts "filter cake" off the screen without actually making physical contact. The rotation and linear movement of the scanner allow it to reach every part of the screen in minimal time. This system can be very effective and does not damage the screen as a brush may do.



H Series

Hydraulic operated self cleaning screen filter

Features

- Installed in line or parallel.
- Supplied in 3"- 16" inlet / outlet diameter.
- Low backwash water consumption.



Technical Data

Model	LP	H-3	H-4	H-6	H-8	H-10	H-12	H-14	H-16	LP	H-3	H-4	H-6	H-8	H-10	H-12	H-14	H-16	
	Metric									US									
Connection diameter	mm	90	110	160	225	280	315	355	400	inch	3	4	6	8	10	12	14	16	
Screen area	cm ²	3220	5780	5780	8410	8410	11710	12990	12990	inch ²	499	896	896	1304	1304	1816	2014	2014	
Flush flow rate at min. pressure	m ³ /h	30	30	30	30	60	90	90	90	gpm	132	132	132	132	264	369	369	369	
Pressure range	bar	2-10									psi	29-145							
Max. temp.	°C	65									°F	149							
Control voltage	9 V DC or 220 V / 24 V AC									9 V DC or 110 V / 24 V AC									

Maximum Filtration Flow Rate / Water Quality

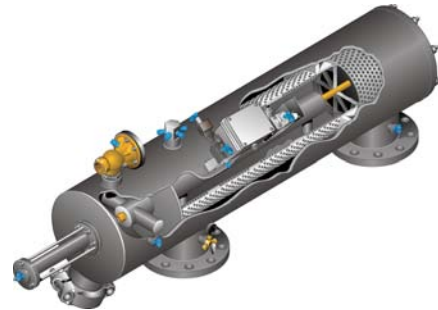
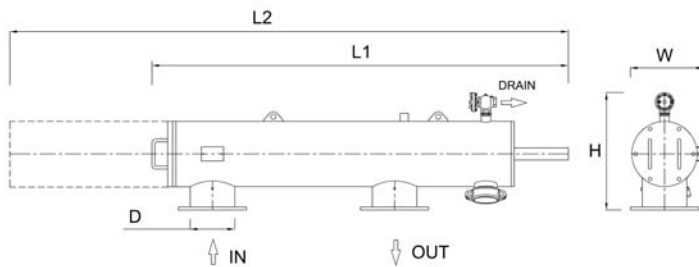
Model		H3	H4	H6	H8	H10	H12	H14	H16	H3	H4	H6	H8	H10	H12	H14	H16	
400 μ	Water Quality	m ³ /h									gpm							
	Good	50	100	150	300	400	600	900	1100	220	440	660	1321	1760	2640	3960	4840	
	Average	50	100	150	300	400	600	900	1100	220	440	660	1321	1760	2640	3960	4840	
200 μ	Poor	50	100	150	300	400	600	900	1100	220	440	660	1321	1760	2640	3960	4840	
	Good	50	100	150	300	400	600	900	1100	220	440	660	1321	1760	2640	3960	4840	
	Average	30	60	90	180	240	360	540	660	132	264	396	793	1056	1584	2376	2904	
150-100 μ	Poor	29	56	85	150	225	338	506	619	128	246	374	660	990	1487	2226	2724	
	Good	50	100	150	300	400	600	900	1100	220	440	660	1321	1760	1487	3960	4840	
	Average	23	45	68	145	180	270	405	495	101	198	299	638	792	1188	1782	2178	
80-50 μ	Poor	22	42	64	130	169	254	380	464	97	185	282	572	744	1118	1672	2042	
	Good	22	42	64	130	169	254	380	464	97	185	282	572	744	1118	1672	2042	
	Average	18	34	51	90	135	203	304	371	79	150	224	396	594	893	1338	1632	
	Poor	14	27	41	75	108	162	243	297	62	119	180	330	475	713	1069	1307	

H Series

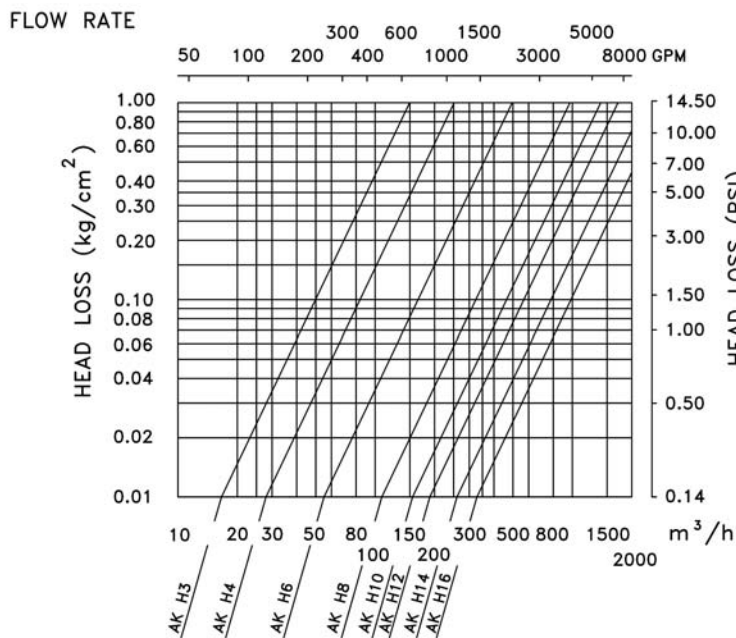
Hydraulic operated self cleaning screen filter

Dimensions and Weights

Model		H-3	H-4	H-6	H-8	H-10	H-12	H-14	H-16		H-3	H-4	H-6	H-8	H-10	H-12	H-14	H-16
D	mm	90	110	160	200	280	315	355	400	inch	3	4	6	8	10	12	14	16
L1	mm	1410	1870	1870	2460	2460	2990	2990	2990	inch	56	71	74	97	97	118	118	118
L2	mm	1750	2570	2570	3560	3560	5200	5200	5200	inch	69	98	101	140	140	205	205	205
H	mm	580	580	640	670	670	720	770	770	inch	23	23	25	26	26	28	30	30
W	mm	330	330	356	362	413	611	639	639	inch	13	13	14	14	17	24	25	25
Approximate shipping weight	kg	85	110	130	140	200	350	420	450	lbs	187	242	286	308	440	771	925	990



Head Loss Chart at, Clean State



H filtration units can be supplied in:
Polyester coated steel or
Stainless steel.