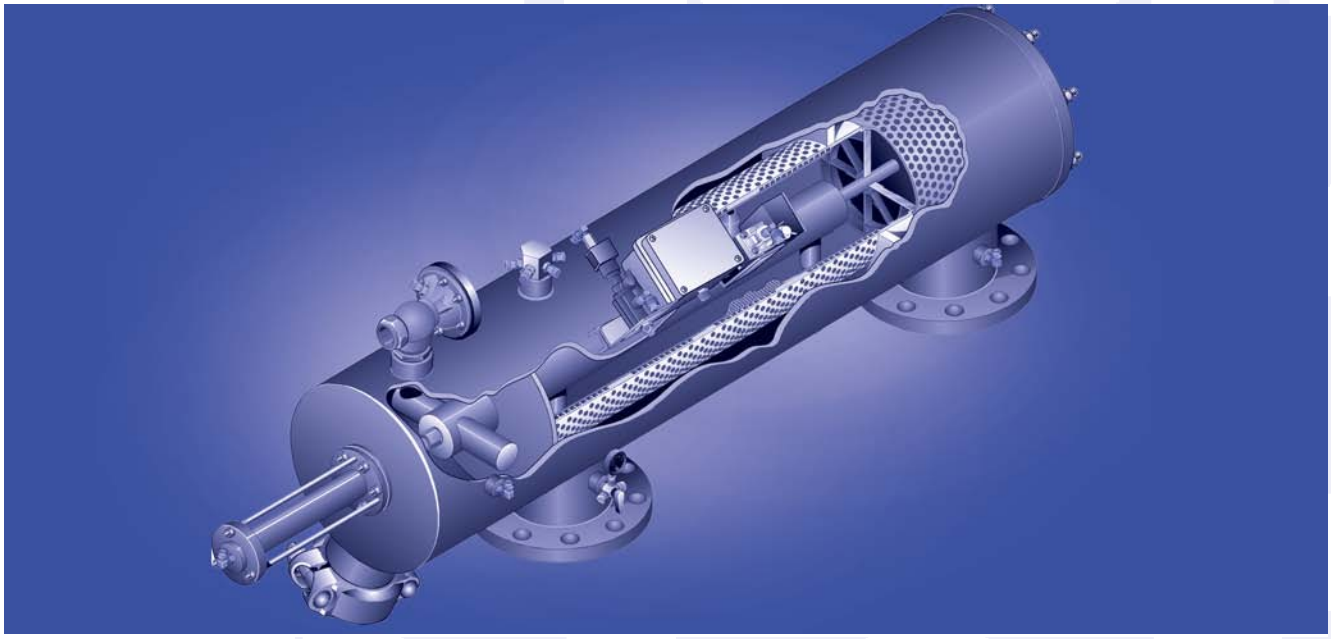
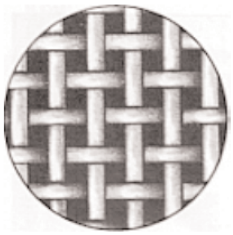
ARKAL
FILTRATION SYSTEMS

Screen Filters



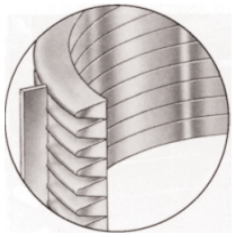
Screen Filtration Technology

- **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



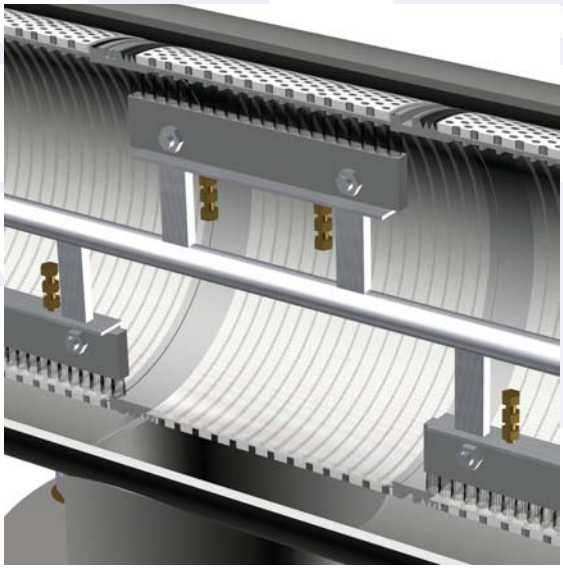
Wedge Wire Screen

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.

B Series

Compact, self-flushing screen filter

Features

- Installed in angle position
- Supplied in 2"- 8" inlet / outlet connections
- Low backwash water consumption

Technical Data

Model		B-2	B-3	B-4	B-6	B-8		B-2	B-3	B-4	B-6	B-8
	Metric						US					
Connection diameter	mm	50	90	110	160	225	inch	2	3	4	6	8
Screen area	cm^2	1100	1100	1630	4120	5240	$inch^2$	170	170	253	639	812
Flush flow rate at min. pressure	m^3/h	6	6	6	20	20	gpm	26	26	26	88	88
Pressure range	bar	2-10					psi	29-145				
Max. temp.	^0C	65					^0F	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

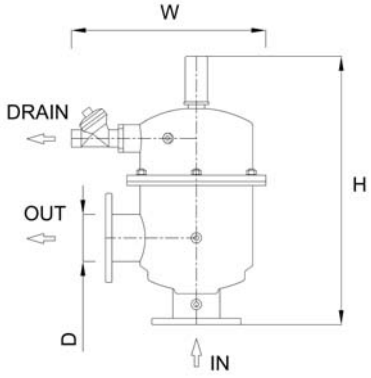
Model		B-2	B-3	B-4	B-6	B-8	B-2	B-3	B-4	B-6	B-8
Filtration Grade	Water Quality	m^3/h					gpm				
400 µ	Good	25	40	80	130	200	110	176	352	572	880
	Average	25	40	80	130	200	110	176	352	572	880
	Poor	25	40	80	130	200	110	176	352	572	880
200 µ	Good	25	40	80	130	200	110	176	352	572	880
	Average	20	35	70	90	170	88	154	308	396	748
	Poor	15	25	40	70	130	66	110	176	308	572
150-100 µ	Good	25	40	80	130	200	110	176	352	572	880
	Average	15	25	40	70	150	66	110	176	308	660
	Poor	10	20	35	60	120	44	88	154	264	528
80-50 µ	Good	10	20	35	60	120	44	88	154	264	528
	Average	8	18	25	50	90	35	79	110	220	396
	Poor	6	15	20	40	60	26	66	88	176	264

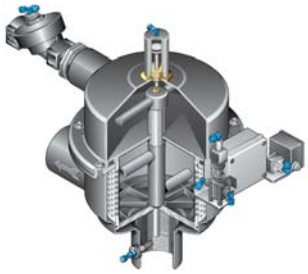
B Series

Compact, self-flushing screen filter

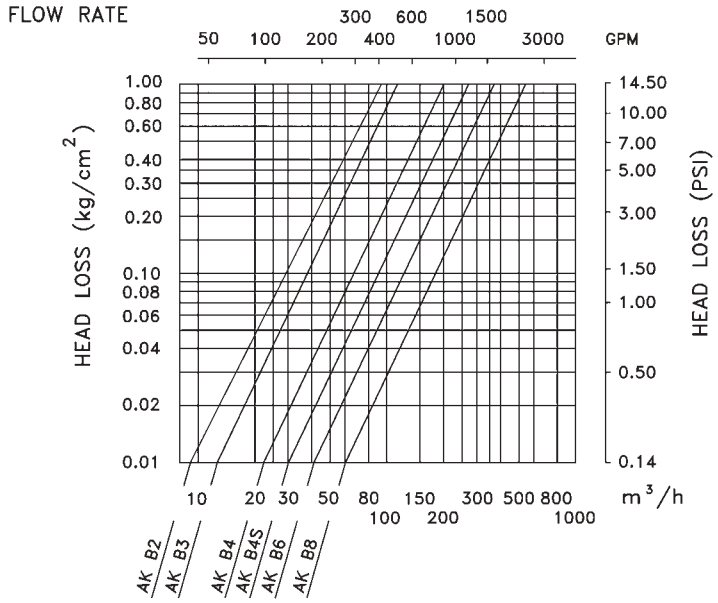
Dimensions and Weights

Model		B-2	B-3	B-4	B-6	B-8		B-2	B-3	B-4	B-6	B-8
D	mm	50	80	100	165	225	inch	2	3	4	6	8
H	mm	480	495	495	1025	1330	inch	25	25	35	43	47
W	mm	471.5	471.5	471.5	459	470	inch	19	19	19	18	18.5
Approximate shipping weight	kg	24	25	28	76	130	lbs	53	55	61	167	286





Head Loss Chart at, Clean State



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