



Semi-Automatic Filters

Quick and efficient
way to clean
manual filters

SEMI-AUTOMATIC FILTERS FEATURES



Available as
an upgrade kit



Simple operation



Minimal
maintenance

Scanaway and Brushaway Filters and Kits

Amiad's unique Scanaway and Brushaway semi-automatic filters providing a quick and efficient way to clean your filter with a simple turn of the handle.

- No interruption of the process water flow during cleaning
- Clogging indicator to show when cleaning is required
- Low pressure loss
- Available as an upgrade kit for Amiad manual filters (plastic filters 2"-3", steel filters 3"-8")



How the Clogging Indicator Works

The Clogging Indicator is a special feature mounted on the filter pressure check points and acts like a "traffic light". When the pressure differential across the screen reaches a pre-set value of 0.5 bar (7 psi). The red button of the Clogging Indicator pops up to visually indicate that the filter needs to be cleaned.



How the Scanaway Assembly Works

The Scanaway assembly consists of a suction-scanner and a hollow pipe with suction nozzles that face the inner side of the screen. Outside the filter, a handle is connected to the suction-scanner, allowing turning of the scanner in a spiral movement so it rotates inside the screen surface without touching the screen mesh. Opening the exhaust valve at the filter lid creates low pressure conditions in the suction-scanner, which causes the scanner nozzles to suck in the dirt particles from the screen surface and expel the dislodged particles out through the exhaust valve. Scanning is done during the filtration process without interrupting the flow of process water through the filter.



How the Brushaway Assembly Works

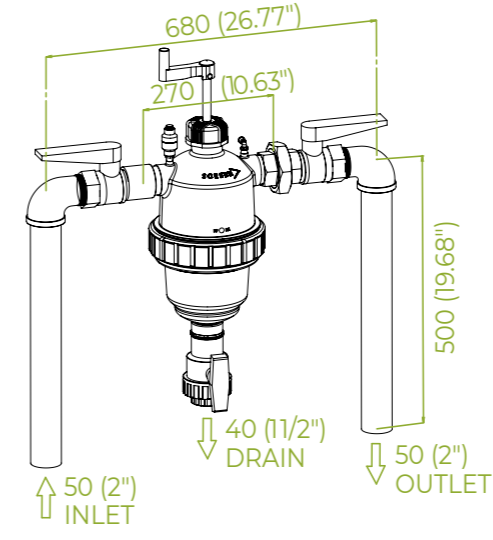
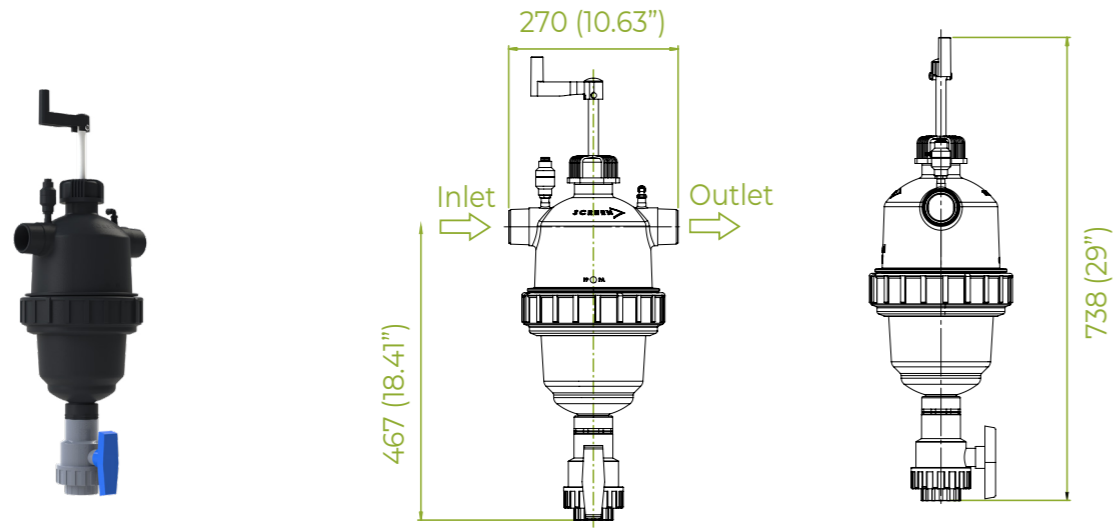
The Brushaway assembly consists of nylon brushes fitted on a frame and inserted into the filter screen. Outside the filter, a handle is connected to the brush unit, allowing rotation of the brushes to wipe the particles from the inner screen surface. Opening the exhaust valve allows the dislodged particles to then be expelled through the exhaust valve. Brushing is done during the filtering process without interrupting the flow of process water through the filter.

Scanaway [Suction] & Brushaway Screen Filters by Amiad Online orders

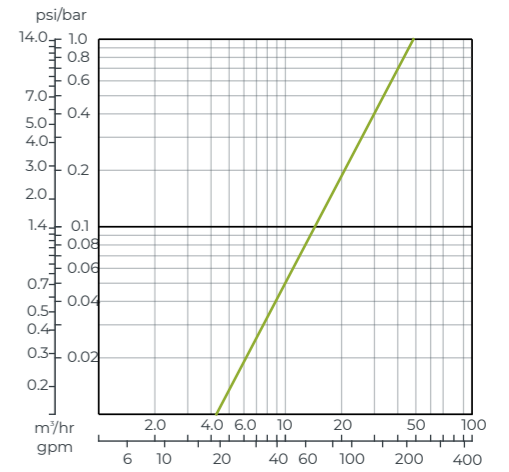
Semi-Automatic Filters: Models



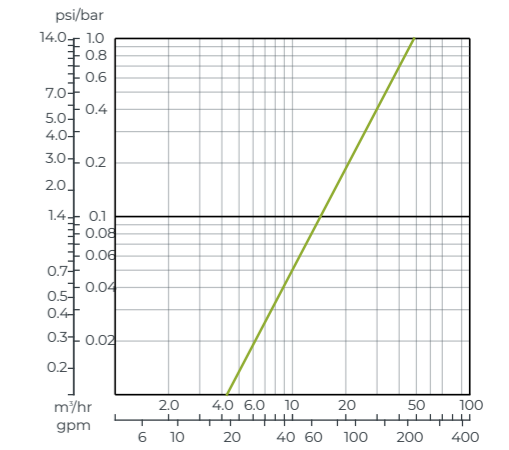
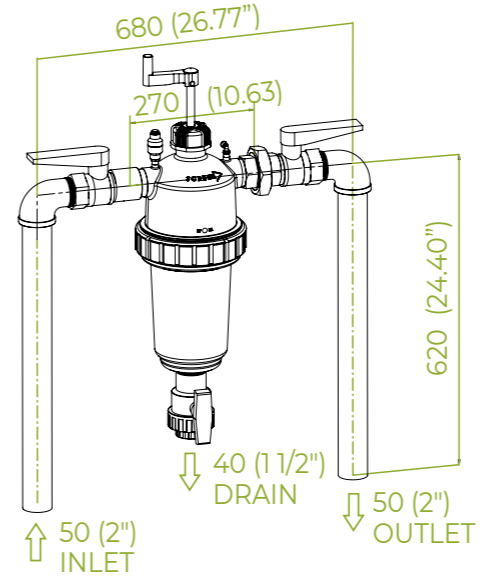
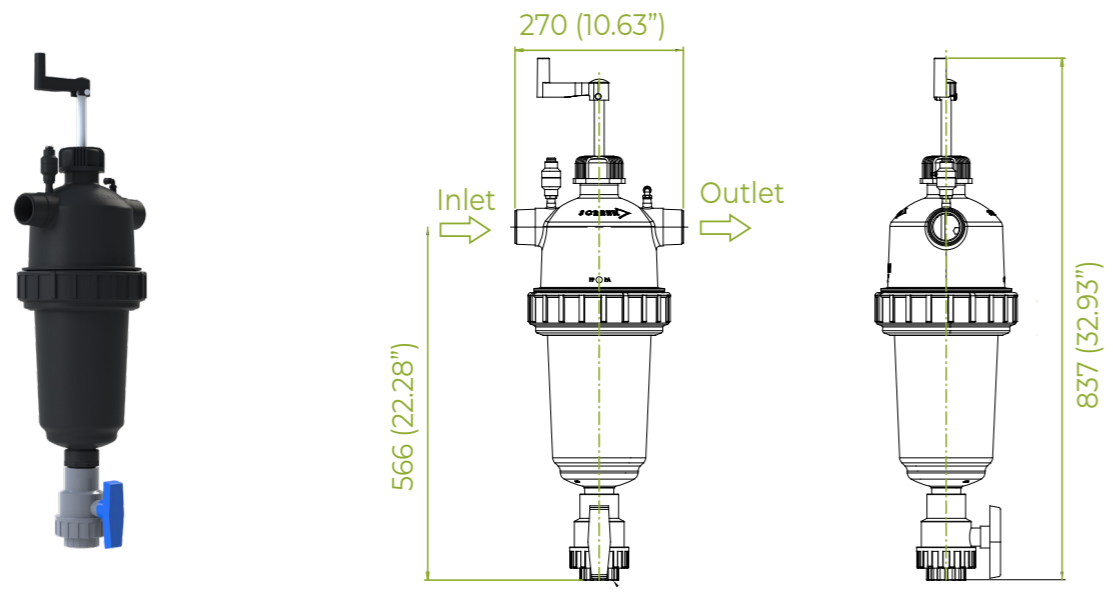
2"



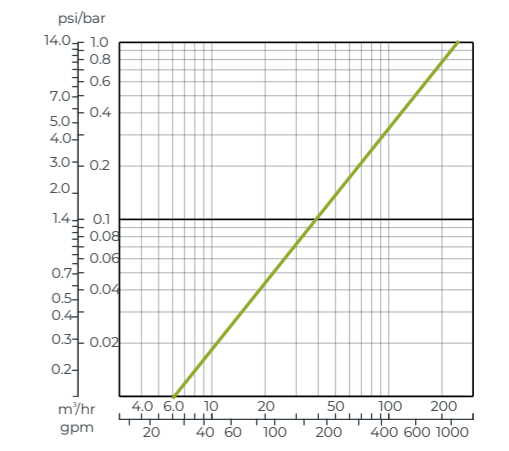
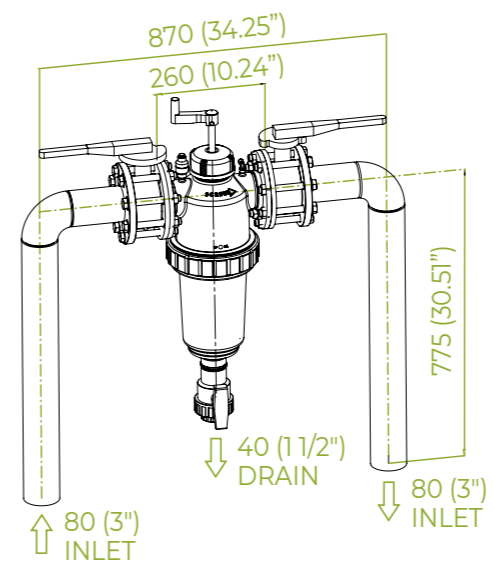
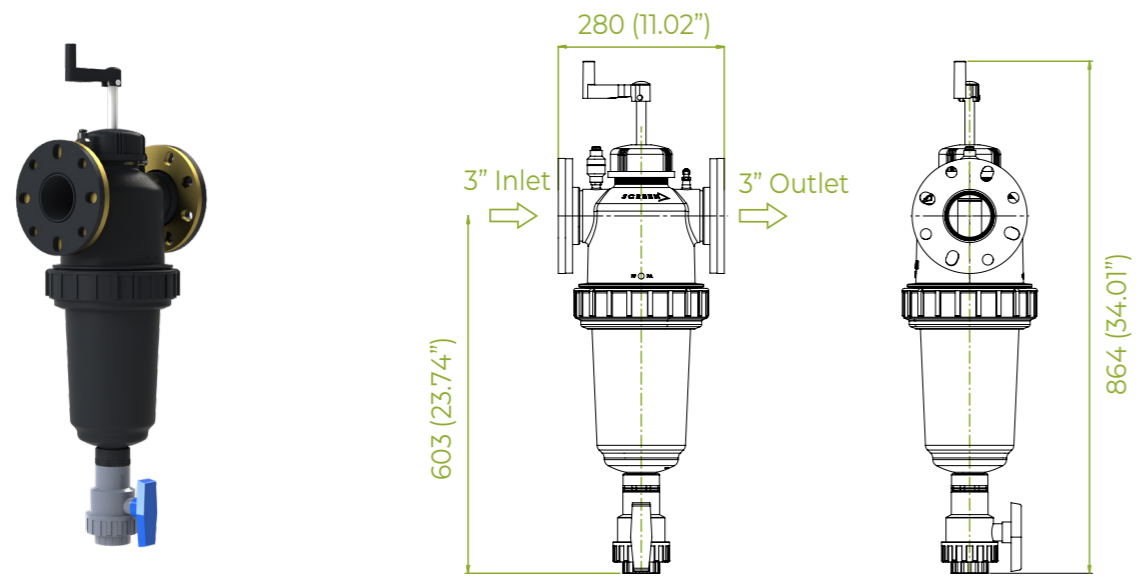
Pressure Loss Graphs (in clean water)



2" Super



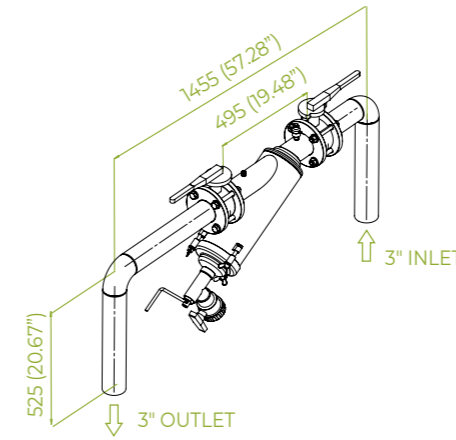
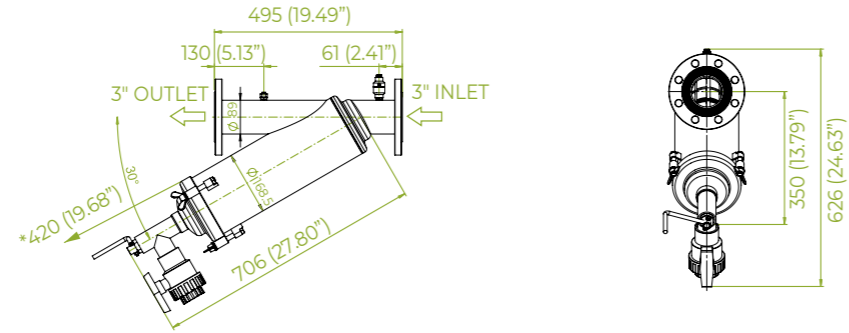
3"



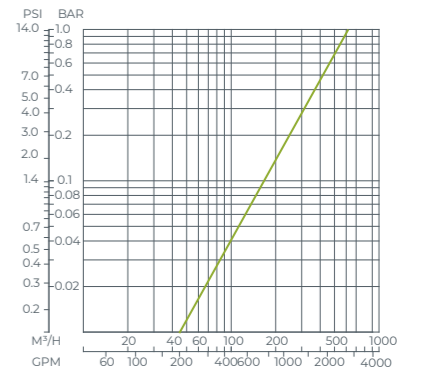
Semi-Automatic Filters: Models



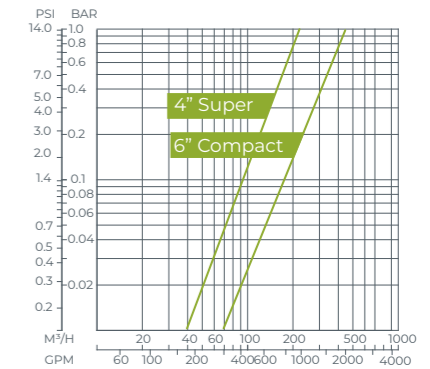
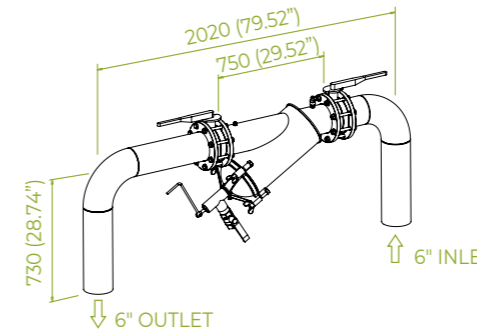
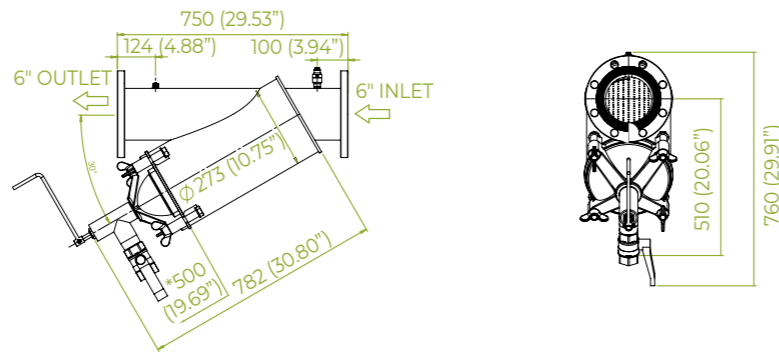
3" in-line



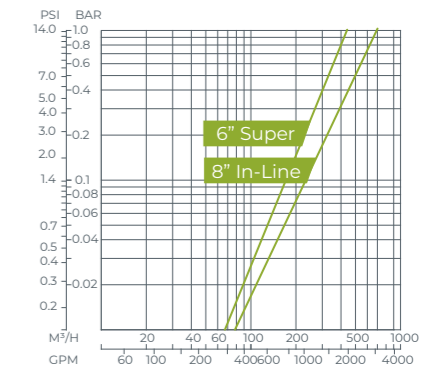
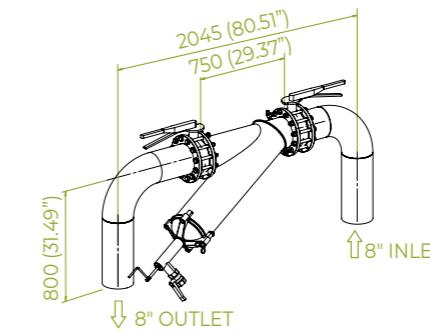
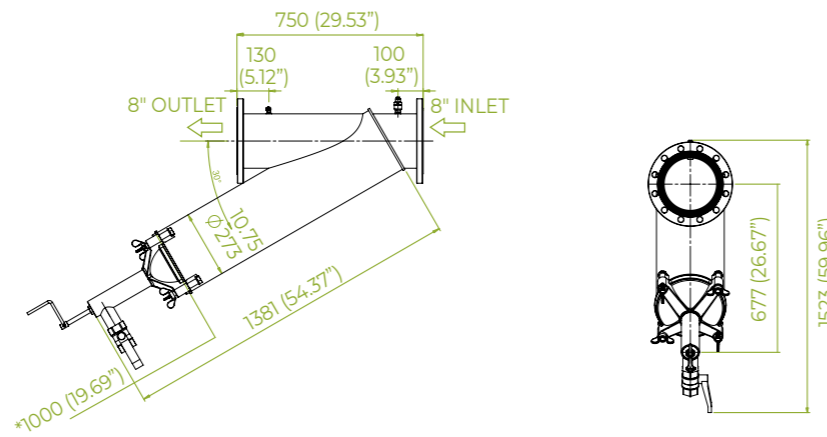
Pressure Loss Graphs (in clean water)



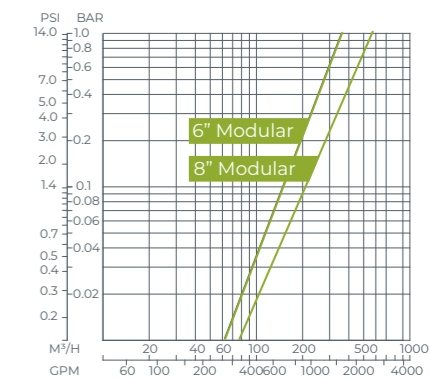
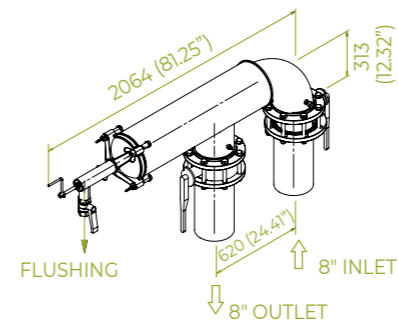
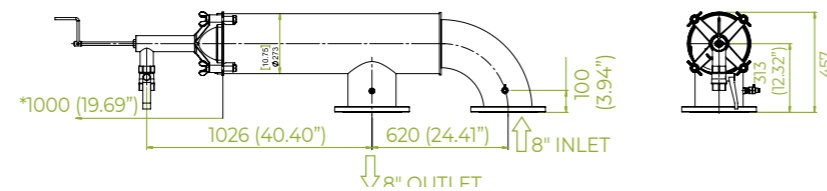
4" Super in-line | 6" Compact



6" Super in-line | 8" in-line



6" Super modular | 8" modular



Semi-Automatic Filters: Technical Specifications

Technical Specifications **Plastic**

Filter Type		2"	2" Super	3"
General Data				
Maximum flow rate*		30 m ³ /h (132 gpm)	35 m ³ /h (154 gpm)	60 m ³ /h (264 gpm)
Inlet/outlet diameter		50 mm (2")		80 mm (3")
Max. operating pressure		10 bar (145 psi)		
Max. operating temperature		60°C (140°F)		
Weight [empty]	Brushaway	6 kg (13.2 lb)	6.7 kg (14.8 lb)	7.3 kg (16 lb)
	Scanaway	5.1 kg (11.2 lb)	5.9 kg (13 lb)	6.3 kg (13.9 lb)

* Consult Amiad for optimum flow depending on filtration degree & water quality.

Engineering Data

Filter Type		2"	2" Super	3"
Filter Element Data				
Filtration area		800 cm ² (124 in ²)	1,200 cm ² (186 in ²)	1,200 cm ² (186 in ²)
Filter element type		Molded St. St. Screen Perforated St. St. Screen		

Construction Materials*

Filter housing & Lid		Reinforced polyamide		
Housing seal		NBR		
Screen		Construction = polypropylene and st. st. 316 Seals = NBR		
Cleaning mechanism	Brushaway	S/ST316 Spindle & plastic brush		
	Scanaway	RPBT		

* Amiad offers a variety of construction materials. Consult us for specifications.

Scanaway Filtration Degree

Scanaway	Micron	50	80	100	130	200	300	500	
	Color Code		●	●	●	●	●	●	●
Filtration Element		Molded S/S 316 Screen						Molded S/S 316 Screen	Molded S/S 316 Screen
Amiad Plastic Scanaway 2", 2" Super, 3"		✓	✓	✓	✓	✓	✓	✓	
Amiad Steel Scanaway 3"-8"		✓	✓	✓	✓	✓	✓	✓	

Technical Specifications **Steel**

Filter Type		3" In-Line	4" Super In-Line	6" Compact In-Line	6" Super In-Line/Modular	8" In-Line/Modular
General Data						
Maximum flow rate*		50 m ³ /h (220 gpm)	100 m ³ /h (440 gpm)	160 m ³ /h (704 gpm)	160 m ³ /h (704 gpm)	300 m ³ /h (1,320 gpm)
Inlet/outlet diameter		80 mm (3")	100 mm (4")	150 mm (6")		200 mm (8")
Max. operating pressure		10 bar (145 psi)				
Max. operating temperature		60°C (140°F)				
Weight [empty]	Brushaway	16 kg (35.2 lbs)	42.4 kg (93.5 lbs)	47.4 kg (105 lbs)	61 kg (135 lbs)	70 kg (154 lbs)
	Scanaway	19 kg (42 lbs)	44.5 kg (98 lbs)	50 kg (110 lbs)	63.5 kg (140 lbs)	72 kg (160 lbs)

* Consult Amiad for optimum flow depending on filtration degree & water quality.

Engineering Data

Filter Type		3" In-Line	4" Super In-Line	6" Compact In-Line	6" Super In-Line/Modular	8" In-Line/Modular
Filter Element Data						
Filtration area		1,600 cm ² (248 in ²)	2,800 cm ² (434 in ²)	2,800 cm ² (434 in ²)	5,800cm ² (899 in ²)	
Filter element type		Molded St. St. Screen Perforated St. St. Screen				

Construction Materials*

Filter housing		Carbon steel 37-2 with polyester coating				
Filter lid		SMC polyester				
Seals		NBR				
Weavewire screen		Stainless steel 316 with polypropylene + fiber glass and NBR seals				
Perforated screen		Stainless steel 316 and NBR seals				
Cleaning mechanism	Brushaway	S/ST316 ROD & RPP Nozzles				
	Scanaway	S/ST316 Spindle & plastic				

* Amiad offers a variety of construction materials. Consult us for specifications.

Brushaway Filtration Models Degree

Brushaway	Micron	200	300	500	800	1500	2500	3500
	Color Code		●	●	●			
Filtration Element		Molded S/S 316 Screen			Molded S/S 316 Screen	Perf. S/S 316 Screen	Perf. S/S 316 Screen	
Amiad Plastic Brushaway 2", 2" Super, 3"		✓	✓	✓	✓	✓	✓	✓
Amiad Steel Brushaway 3"-8"		✓	✓	✓	✓	✓	✓	✓

Arkal Screen Line

3"- 4"- 6" Semi-Automatic Screen Filters

PSA-SERIES



- Unique economical design
- Corrosion resistant
- Large screen area
- Most suitable for waste water applications
- No need for manual disassembly and cleaning

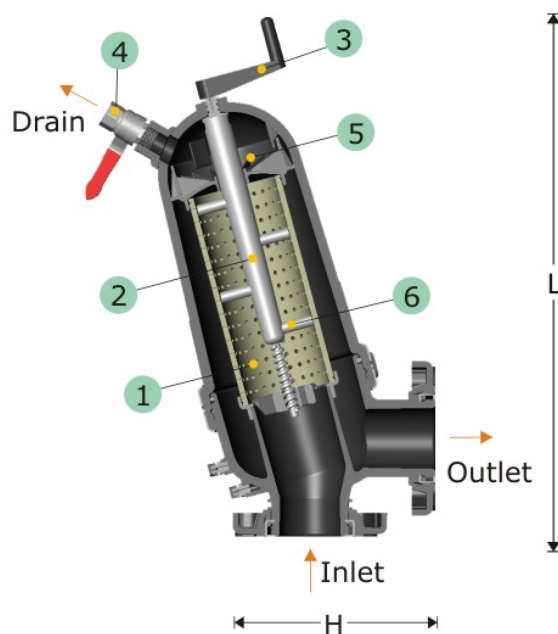


Semi Automatic Screen Filters, Scanaway Suction.
Orders and more information

ARKAL
FILTRATION SYSTEMS

■ Operation Description - Filtration Mode

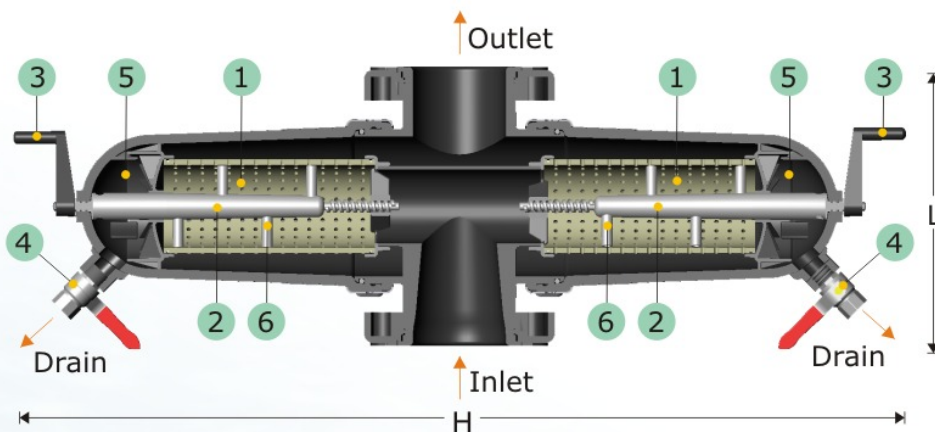
Water enters the filter through the "Inlet", reaching the screen **1**, which purifies the water by taking out smaller particles. As more water flows through impurities build up on the screen creating differential pressure between the internal section of the screen **1** and the external section of the screen.



■ Description

Arkal's 3", 4" and 6" Semi-Automatic filters consist of the following major parts:

- 1** Screen
- 2** Dirt Collector
- 3** Handle
- 4** Flush Valve
- 5** Flush Chamber
- 6** Nozzles



■ Cleaning Process in Suction Type Filter

When the differential pressure (ΔP) reaches the determined value (no more than 0.8 bar), or according to the timetable specified by the operator, a series of events occurs as the water continues to flow into the system's units.

Before opening the flush valve **4** the operator should check that the dirt collector **2** is fully withdrawn by turning the handle **3** clockwise until it stops. When the flush valve **4** opens, water flows out.

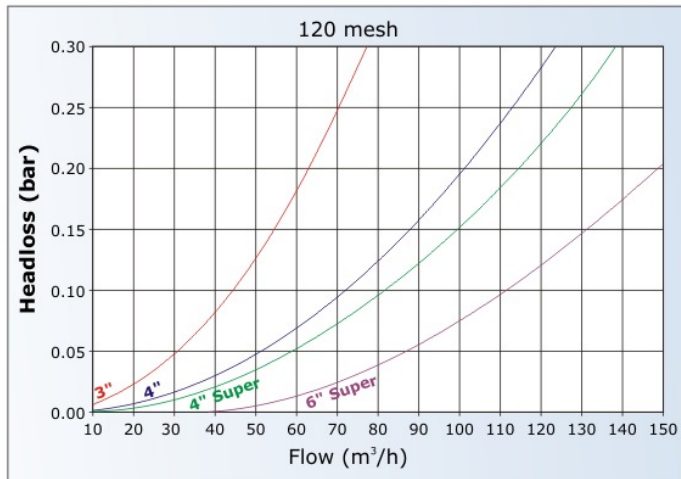
The operator should also check that the pressure in the flush chamber **5** and the dirt collector **2** is significantly reduced, which will create suction through the collector's nozzles **6**. Rotating the dirt collector **2** by the handle will cause full scanning of the screen **1** by the nozzles **6**. The combination of linear movement and rotation cleans the whole internal screen **1** surface. The flushing cycle will take only a few seconds.

General Technical Data

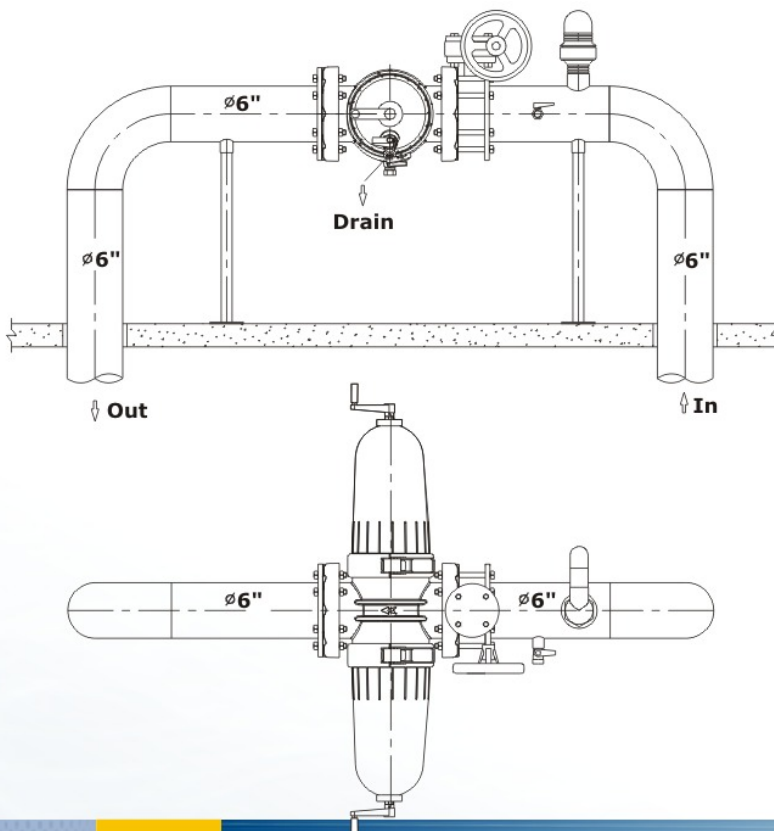
- Max. Pressure: 10 bar / 145 psi
- Max. Temperature: 60°C / 140°F
- Filtration Grades (currently): 400 μ , 200 μ , 120 μ

Model Number	Connection Size (inch)	Screen Area (cm ²)	Max. Flow Rate (M ³ /h)	L (mm)	H (mm)	Weight (kg)
AKSP3LT	3	1250	60	825	509	12
AKSP3LV	3	1250	60	789	509	12
AKSP3LF	3	1250	60	789	509	13
AKSP4LV	4	1250	90	789	509	13
AKSP4LF	4	1250	90	789	509	14
AKSP4S	4	2500	110	445	1368	26
AKSP6S	6	2500	140	415	1368	28

Headloss Chart



AKSP = Arkal Semi Automatic Polypropylene
L = Angel filter connection
T = Threaded filter connection
V = Victaulic filter connection
F = Flanged filter connection
S = Super leader filter (inline filter connection)



Applications

PSA-SERIES



Ordering Amiad Arkal Semi Automatic Filters from www.irrigationglobal.com

irrigationglobal.com

Email: service@irrigationglobl.com

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FILTRATION SYSTEMS

0808ScPSA-eng3 Adom # A18_09_g_ver8_en