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AUTOMATIC SELF-CLEANING FILTERS

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Filternox®

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Filternox's Vision

Filternox's Mission

The Quality Policy

Exclusive, reliable and cost effective solutions for each individual water filtration need

Excellence in engineering, quality in production

Obeying Regulations	All **Filternox®** products comply with CE directives
Safety	All **Filternox®** products are 100% functionally tested
Documented Safety	All **Filternox®** filters are delivered with Test Certicate
Filternox's Value is Its Team	All **Filternox®** filters are developed by qualified engineers and manufactured by certified welders
Assurance of Quality	ISO 9001:2008 certificate

Filternox®
AUTOMATIC SELF-CLEANING FILTERS

Filternox® Automatic Self-Cleaning Filters treat all kind of waters containing suspended solids by physical methods.

Filternox® Automatic Self-Cleaning Filters, physically filter out suspended solids, particles, macro-organisms and other solid state contaminants.

Filternox® Automatic Self-Cleaning Filters

by protecting
- industrial systems and equipment
- modern agricultural irrigation systems
- water systems
- pipelines and fittings

by preventing
- mechanical corrosion and damages
- fouling
- blockages

by decreasing
- chemical consumption
- energy consumption
- maintenance needs and operational cost

amortize their cost in a short time.

Filternox® Automatic Self-Cleaning Filters, with their complete stainless steel structure and specially designed robust screen with large filtration area offer characteristics superior to competitive devices.

Filternox® Automatic Self-Cleaning Filters perform successfully all over the world, especially in

- Cooling towers side stream and full flow applications
- HVAC systems
- All kind of nozzles protection
- Irrigation
- Sea water and surface water filtration
- Ballast water filtration
- Fish farms
- Heat exchanger protection
- Municipal and domestic water supply
- Water and wastewater treatment plants
- Well water filtration
- Prefiltration prior to Ultra filtration and Reverse Osmosis
- Various industrial applications such as automotive, food, power generation, plastic, metallurgy, mining, steel and textile manufacture.

Filternox® Filters offer unequalled quality and performance at a very competitive price.

General Operating Principles

As the water enters into filter inlet 1, it is prefiltered through the coarse screen 3 to prevent large particles entry that will damage the fine screen and internal parts.

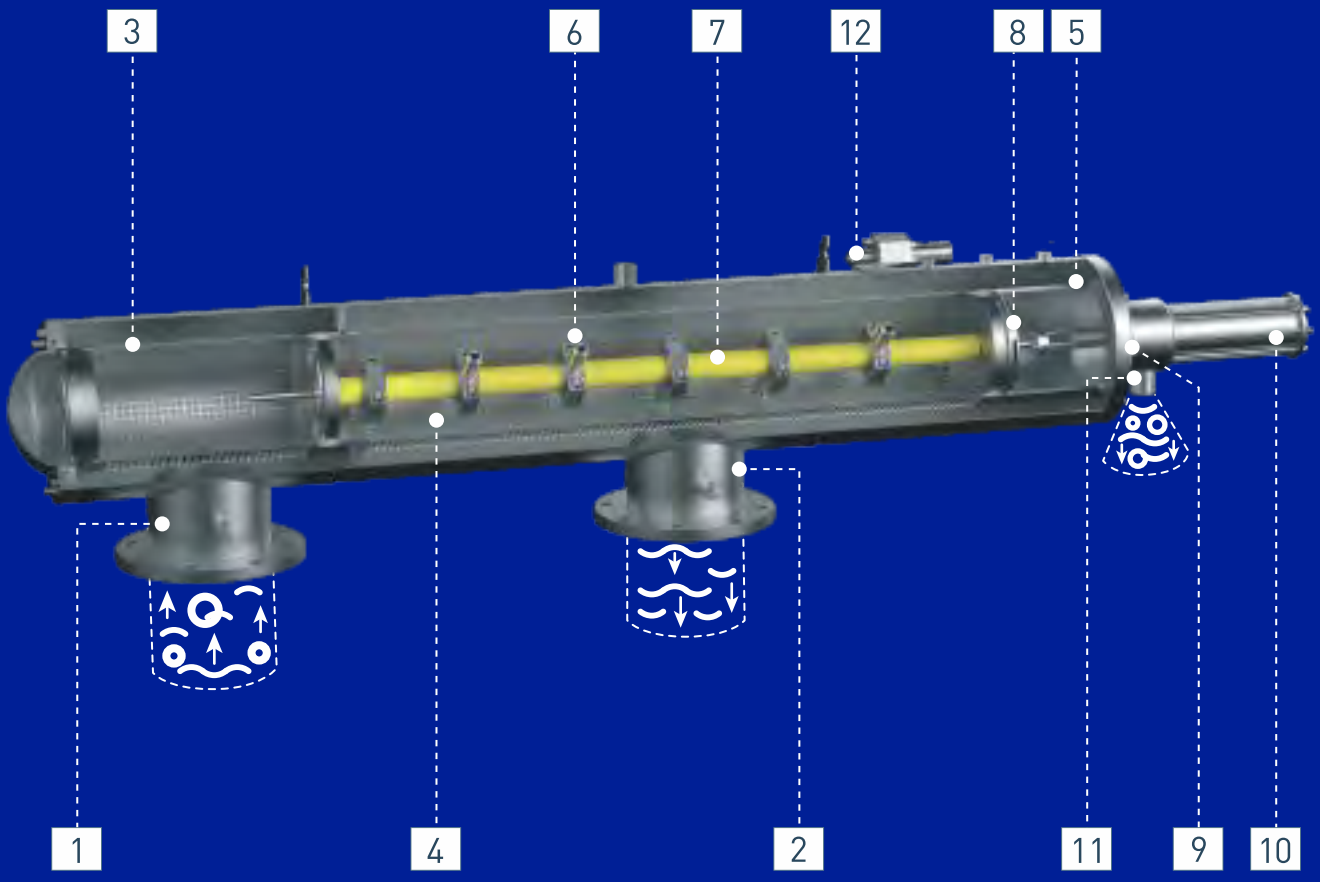
Water then passes into the second filtration section that contains multi-layer fine screen 4 This screen is protected by a robust coarse mesh that also provides a prefiltration. While water passes through the fine screen towards the outlet 2 the particles within the water accumulate on the inside surface of the fine screen and form a dirt layer. The dirt layer itself will act as a filter and collect much smaller particles than the stainless steel screen. The difference between the filter inlet pressure and the outlet pressure is called the differential pressure (ΔP).

The dirt layer builds up on the screen, and when it is thick enough to cause a certain differential pressure value the flush cycle is started. At a preset value, back-flush control unit 12 opens flushing discharge valve 9 and a strong back-flush stream that discharges to atmosphere via drainage pipe 11 occurs. This flow creates a suction effect in front of the nozzles 6 and sweeps the dirt collected on the fine screen.

The dirty water sucked from the fine screen surface flows through the collector pipe 7 and the hydraulic turbine 8 and impels a rotatory movement of the dirt collector while discharging through the drainage pipe. At the same time the drop of the pressure in the hydraulic turbine chamber 5 and drainage of piston 10 forces the dirt collector into an axial movement. These rotatory and axial movements together create a helical motion that enables the suction nozzles to sweep the entire screen area.

When backflushing is completed, a second flushing cycle is automatically triggered by pushing the collector assembly to its original position and the filter remains ready for the next flushing cycle. The combined flush cycle takes 10-80 seconds depending on the model. The filtration process is not interrupted during backflushing.

For models equipped with automatic self-cleaning coarse screen, the automatic valve can be adjusted by timer or differential pressure to open automatically, and the dirt layer accumulated on the coarse screen is scraped off by hydraulic current and discharged.



For further information about operating principles please visit our website.
You can use the QR code on the right to access online information about the operating principles.

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Filternox® became solar energy friendly.

Computerized and remote monitored for mission critical installations.

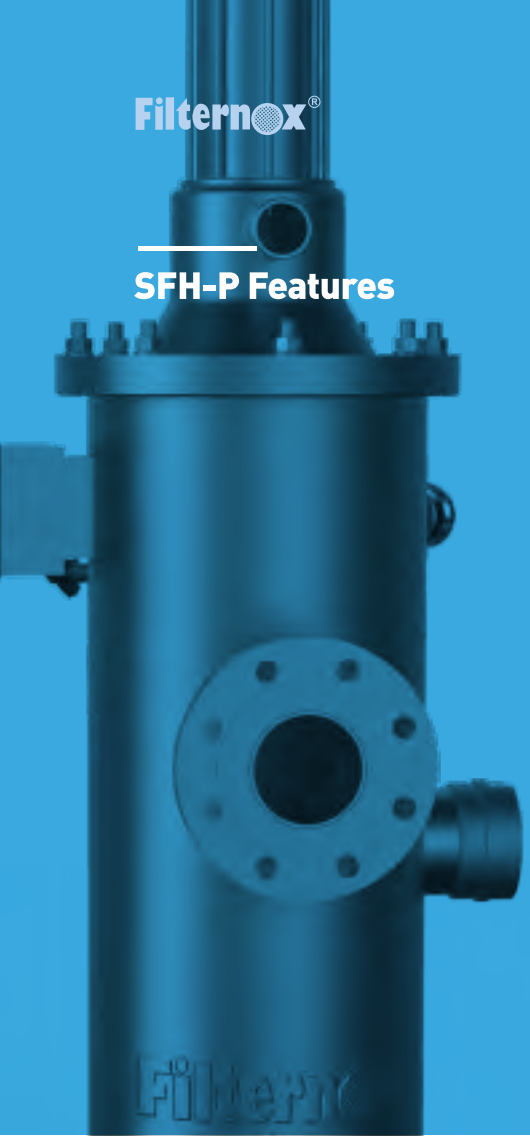
Filternox®

Products

SFH-P

Economical Models

Universal Filter in One Stage



SFH-P Features

+ Filternox® Automatic Self-Cleaning SFH-P models are supplied without coarse screen and suitable for low flow applications in industrial plants, local irrigation systems and secondary filtration for irrigation.

+ Filternox® Automatic Self-Cleaning Filters, with their stainless steel construction, hydraulic controlled pressure operation not requiring electrical power, automatic self-cleaning system and ease of installation and maintenance are a total and permanent solution to filtration requirements.

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
2 bar

Max. Operating Temperature
60°C / 90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
10-15 s

Back-Flush Water Consumption
80-120 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Hydraulic or Electric

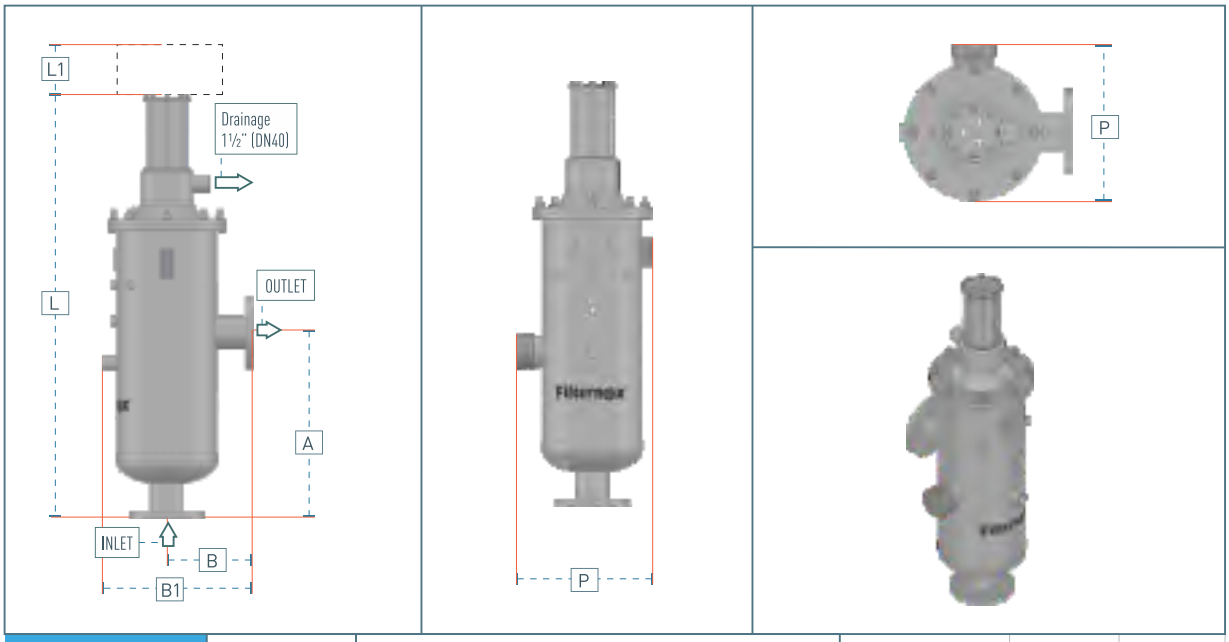
For different pressure and material requirements, please contact Filternox.

Optional Features

Alternative Energy Sources
Solar Energy

Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Head Office

SFH-P Models Dimensions



Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area
			A	B	B1	L	L1	P	Empty	Full		
	inch	mm	mm						kg		m^3/h	cm^2
SFH 110102-P	2	50	350	237	399	967	300	324	40	65	up to 30	1200
SFH 110103-P	3	80	350	237	399	967	300	324	43	72	up to 50	1200
SFH 110104-P	4	100	350	237	399	967	300	324	47	78	up to 60	1200
SFHL 110102-P	2	50	400	237	413	1067	400	359	45	75	up to 30	1800
SFHL 110103-P	3	80	400	237	413	1067	400	369	48	82	up to 50	1800
SFHL 110104-P	4	100	400	237	413	1067	400	369	52	88	up to 60	1800
SFH 110203-P	3	80	450	237	413	1167	500	369	60	90	up to 60	2400
SFH 110204-P	4	100	450	237	413	1167	500	369	63	95	up to 80	2400

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.

For further information about SFH-P models please visit our website.
You can use the QR code on the right to access online information about this product.

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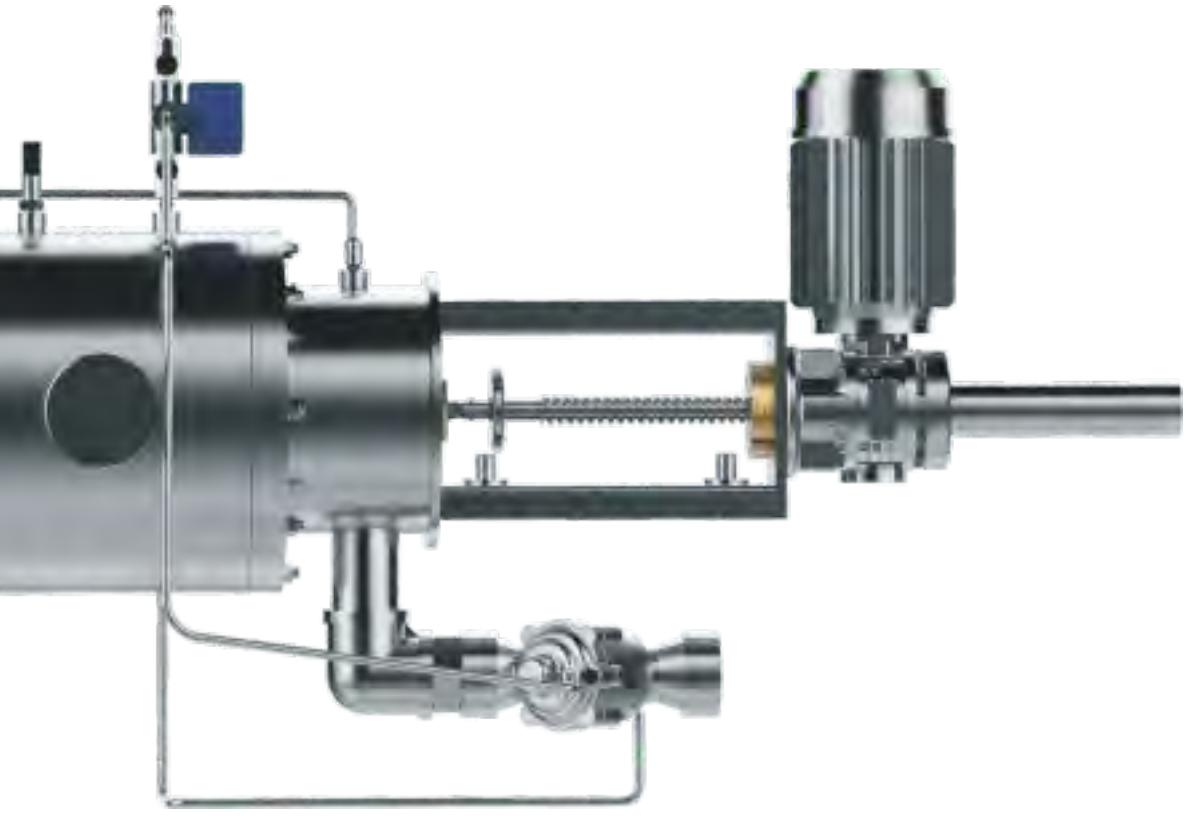
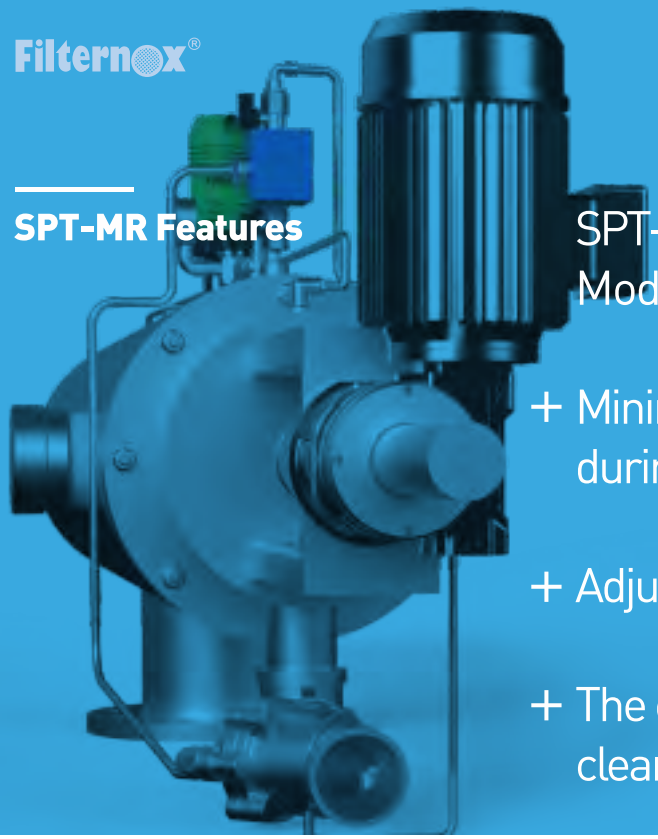
Filternox®

SPT-MR

Economical Models

High Capacity Universal Filter





SPT-MR Features

SPT-MR, like all **Filternox®** Motor Reducer Models, provides:

+ Minimum and adjustable water consumption during backflush
+ Adjustable rpm of cleaning mechanism
+ The option of either one way or round trip cleaning sequences via control panel

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
2 bar

Max. Operating Temperature
60°C / 90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
20-30 s

rpm of Cleaning Mechanism
Adjustable

Back-Flush Water Consumption
100-120 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Electric

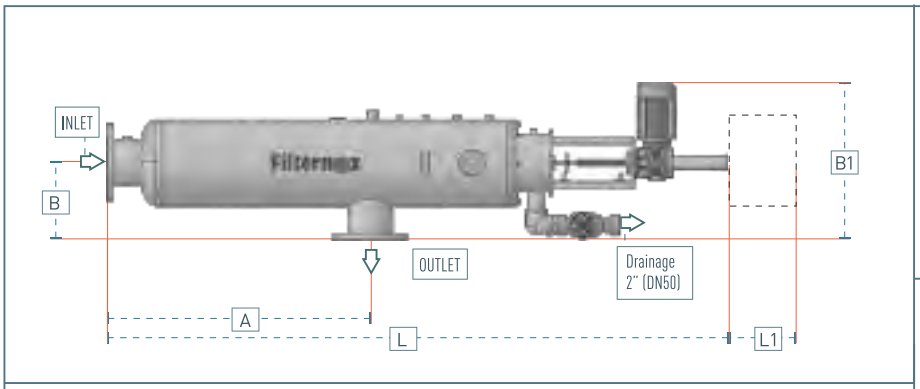
For different pressure and material requirements, please contact Filternox.

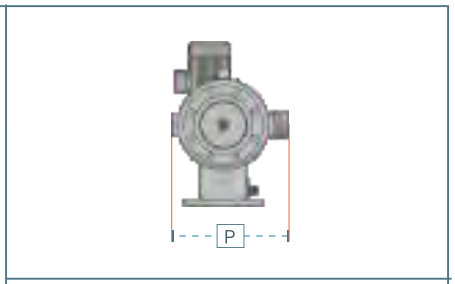
Optional Features

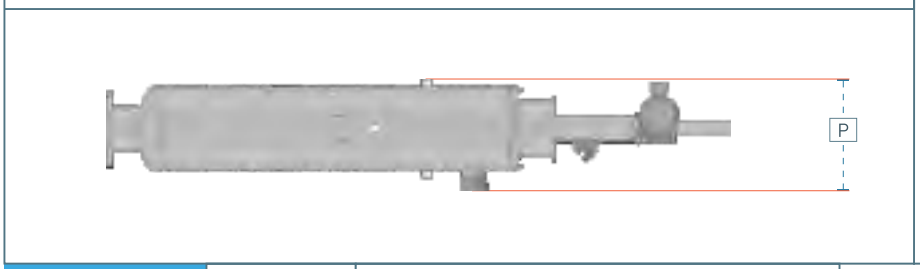
Alternative Energy Sources
Solar Energy

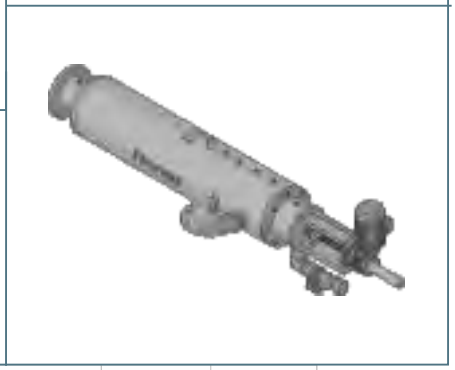
Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Head Office

SPT-MR Models Dimensions









Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area
			A	B	B1	L	L1	P	Empty	Full		
	inch	mm	mm						kg		m^3/h	cm^2
SPT 110303-MR	3	80	600	257	557	1870	400	369	65	95	up to 60	3600
SPT 110304-MR	4	100	600	257	557	1870	400	369	70	115	up to 100	3600
SPT 110306-MR	6	150	600	267	567	1865	400	369	75	125	up to 140	3600
SPT 110404-MR	4	100	800	257	557	2080	600	369	80	110	up to 120	4800
SPT 110406-MR	6	150	800	267	567	2080	600	369	85	120	up to 160	4800
SPT 112408-MR	8	200	800	292	592	2110	600	419	120	190	up to 180	4800
SPT 114304-MR	4	100	600	298	598	1922	400	452	125	190	up to 120	4800
SPT 114406-MR	6	150	800	308	608	2120	600	452	145	240	up to 200	6400
SPT 114408-MR	8	200	800	308	608	2105	600	452	150	255	up to 240	6400
SPT 116410-MR	10	250	800	353	653	2130	600	505	185	310	up to 400	8000

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.

For further information about SPT-MR models please visit our website.
You can use the QR code on the right to access online information about this product.

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PFH

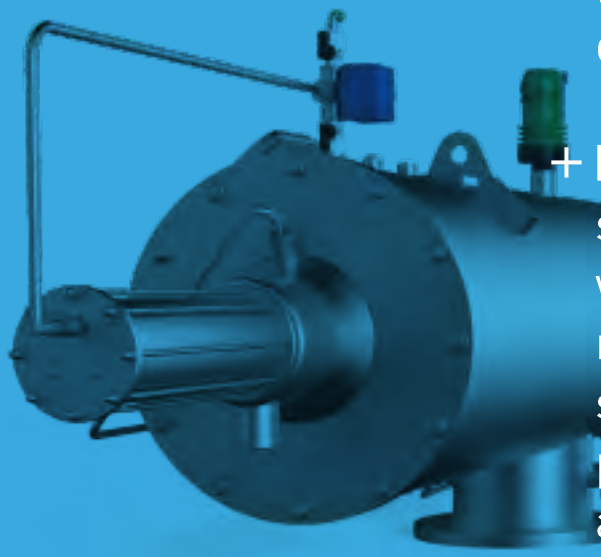
Standard Models with Piston

Uninterrupted Filtration in All Fields

PFH Features

+ Filternox® PFH models are standard piston type, and their inlet-outlet range varies from 2" to 18" and their capacity range varies up to 1000 m³/h.

+ Filternox® PFH models with their special stainless steel screen provide larger filtration area compared to competitive devices.



+ Filternox® PFH models, with their stainless steel structure, hydraulic control operation without requiring any additional power, manual coarse screen and automatic self-cleaning fine screen provide better performance in all industrial applications as well as in irrigation and water treatment fields.

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
2 bar

Max. Operating Temperature
60°C / 90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
20-30 s

Back-Flush Water Consumption
100-200 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Hydraulic or Electric

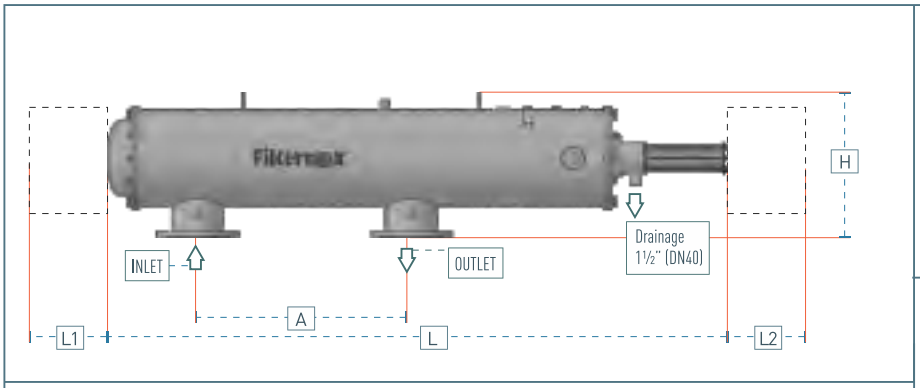
For different pressure and material requirements, please contact Filternox.

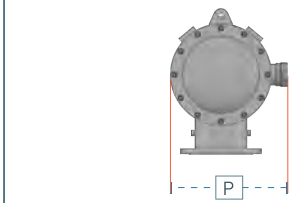
Optional Features

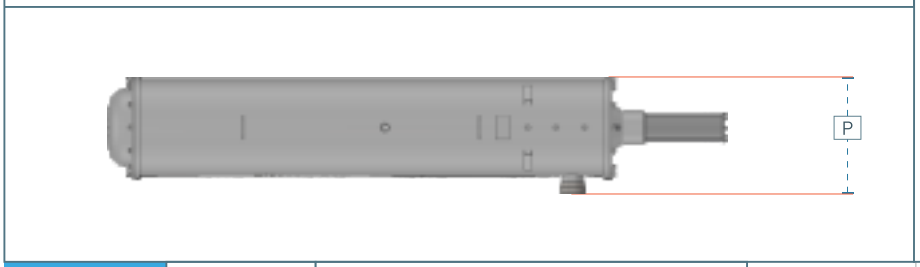
Alternative Energy Sources
Solar Energy

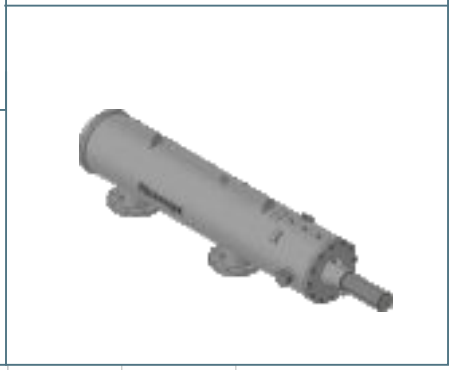
Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Head Office

PFH Models Dimensions









Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area
			A	L	L1	L2	H	P	Empty	Full		
	inch	mm	mm						kg		m^3/h	cm^2
PFH 110203	3	80	500	1531	900	200	468	369	72	115	up to 60	2400
PFH 110304	4	100	700	1731	1100	200	468	369	85	135	up to 100	3600
PFH 110404	4	100	900	1931	1300	200	468	369	97	160	up to 120	4800
PFH 110406	6	150	900	2031	1300	200	478	369	104	175	up to 160	4800
PFH 112408	8	200	900	2031	1300	200	529	402	120	200	up to 180	4800
PFH 114406	6	150	900	2131	1300	200	561	436	160	255	up to 200	6400
PFH 114408	8	200	900	2131	1300	200	561	436	175	275	up to 240	6400
PFH 112608	8	200	900	2531	1700	200	529	402	150	290	up to 320	7200
PFH 114510	10	250	900	2425	1500	200	581	446	185	320	up to 400	8000
PFH 114610	10	250	900	2625	1800	200	581	446	225	370	up to 500	9600
PFH 116612	12	300	1200	2655	1800	200	661	496	255	415	up to 600	12000
PFH 118512	12	300	900	2445	1500	200	712	537	245	395	up to 750	12000
PFH 120512	12	300	900	2435	1600	200	763	588	265	420	up to 800	13500
PFH 118614	14	350	1200	2645	1800	200	712	551	280	435	up to 900	14400
PFH 120616	16	400	1200	2635	1800	200	763	607	310	475	up to 1000	16200

The tolerance value for given data is according to DIN ISO 2768-1(v).

For larger filtration area, please contact Filternox.

For further information about PFH models please visit our website.
You can use the QR code on the right to access online information about this product.

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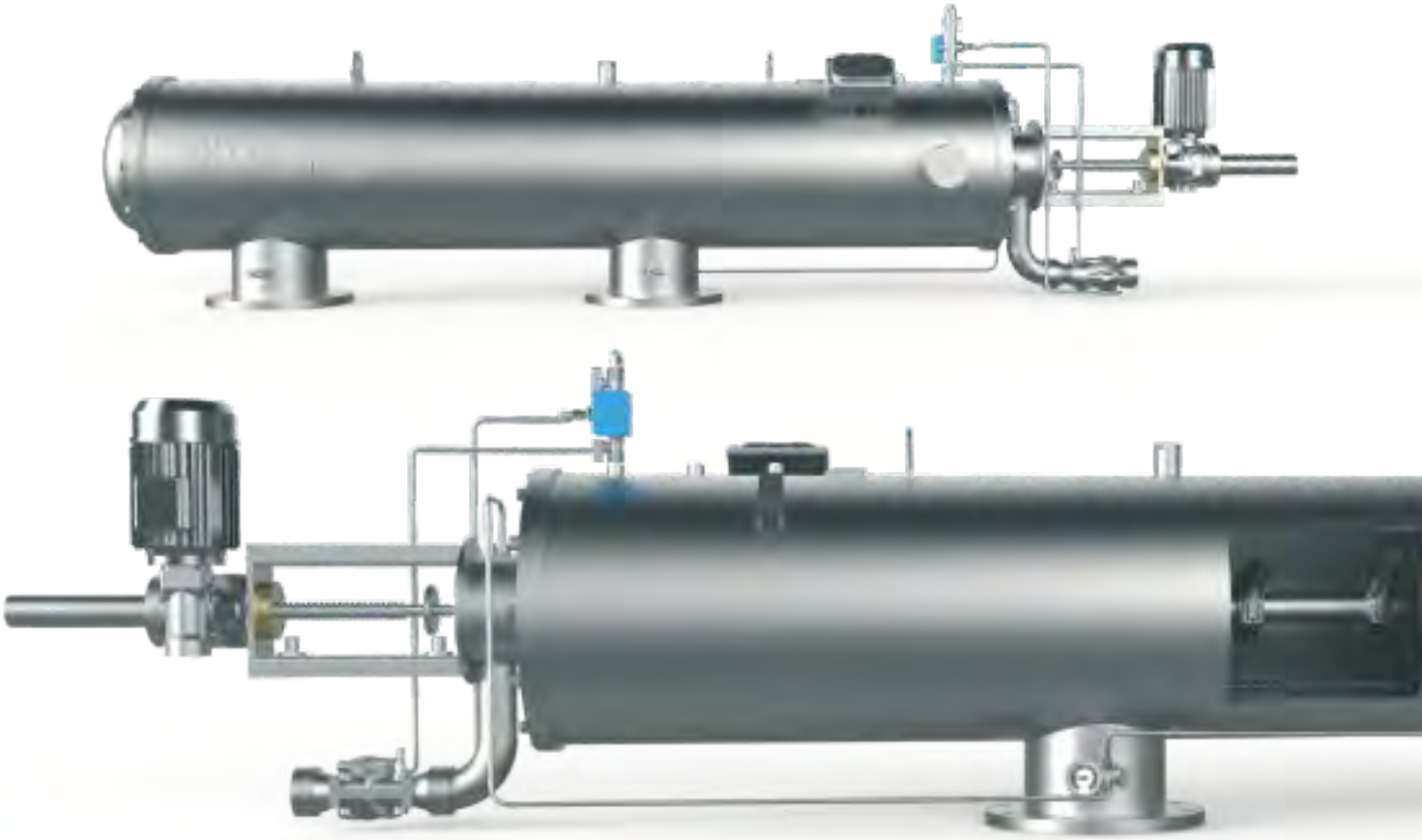
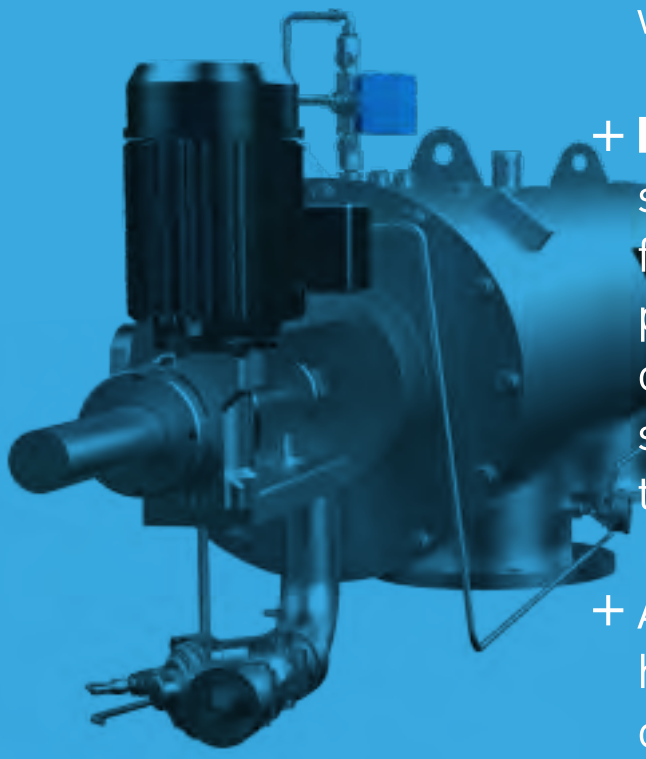


PFH-MR

Generic Models with Motor Reducer

Preference for High Expectations

PFH-MR Features



+ **Filternox®** PFH-MR models are supplied with manual coarse screen.

+ **Filternox®** PFH-MR models, with their stainless steel construction and higher filtration surface area provide excellent performance. They are specially convenient for industrial applications such as side-stream and full flow cooling tower filtration.

+ All **Filternox®** Motor Reducer Models have the option to adjust the rpm of the cleaning mechanism ⇒ **more efficient**

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
2 bar

Max. Operating Temperature
60°C / 90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
20-30 s

rpm of Cleaning Mechanism
Adjustable

Back-Flush Water Consumption
100-200 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Electric

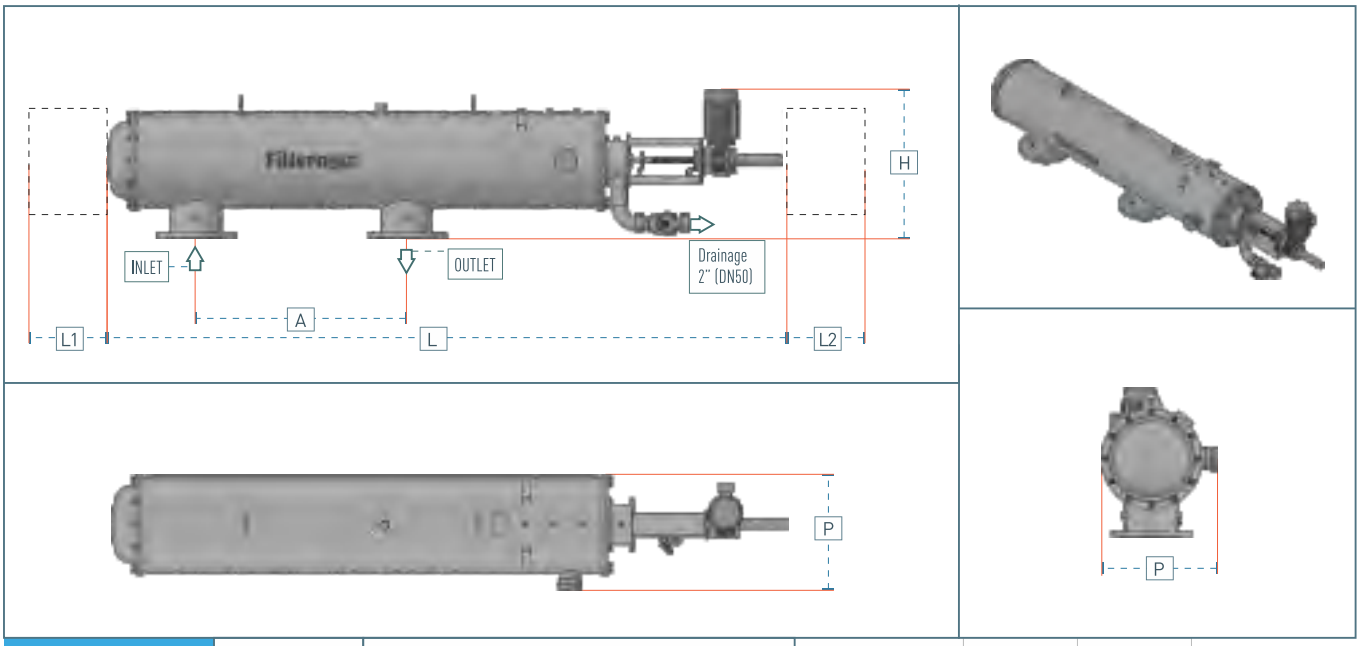
For different pressure and material requirements, please contact Filternox.

Optional Features

Alternative Energy Sources
Solar Energy

Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Headoffice

PFH-MR Models Dimensions



Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area
			A	L	L1	L2	H	P	Empty	Full		
	inch	mm	mm						kg		m^3/h	cm^2
PFH 110203-MR	3	80	500	1862	900	200	557	369	82	125	up to 60	2400
PFH 110304-MR	4	100	700	2062	1100	200	557	369	95	145	up to 100	3600
PFH 110404-MR	4	100	900	2262	1300	200	557	369	107	170	up to 120	4800
PFH 110406-MR	6	150	900	2362	1300	200	567	369	114	185	up to 160	4800
PFH 112408-MR	8	200	900	2362	1300	200	592	394	130	210	up to 180	4800
PFH 114406-MR	6	150	900	2462	1300	200	608	436	170	265	up to 200	6400
PFH 114408-MR	8	200	900	2462	1300	200	608	436	185	285	up to 240	6400
PFH 112608-MR	8	200	900	2862	1700	200	592	394	160	300	up to 320	7200
PFH 114510-MR	10	250	900	2662	1500	200	628	446	195	330	up to 400	8000
PFH 114610-MR	10	250	900	2862	1700	200	628	446	235	380	up to 500	9600
PFH 116612-MR	12	300	1200	2895	1700	200	683	496	265	425	up to 600	12000
PFH 118512-MR	12	300	900	2685	1500	200	712	551	255	405	up to 750	12000
PFH 120512-MR	12	300	900	2690	1500	200	763	588	280	435	up to 800	13500
PFH 118614-MR	14	350	1200	2885	1700	200	712	551	290	445	up to 900	14400
PFH 120616-MR	16	400	1200	2890	1700	200	763	607	325	490	up to 1000	16200

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.

For further information about PFH-MR models please visit our website.
You can use the QR code on the right to access online information about this product.

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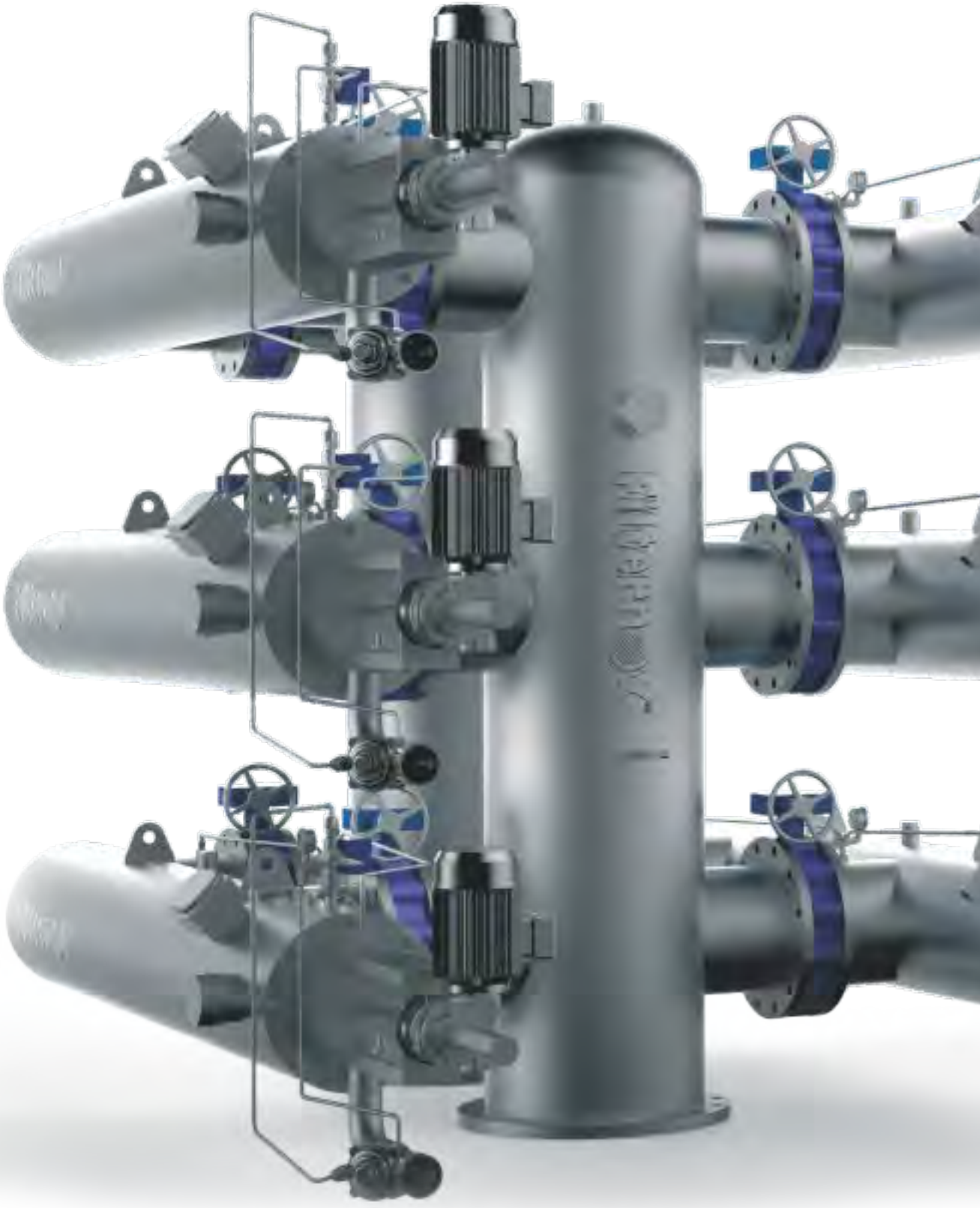


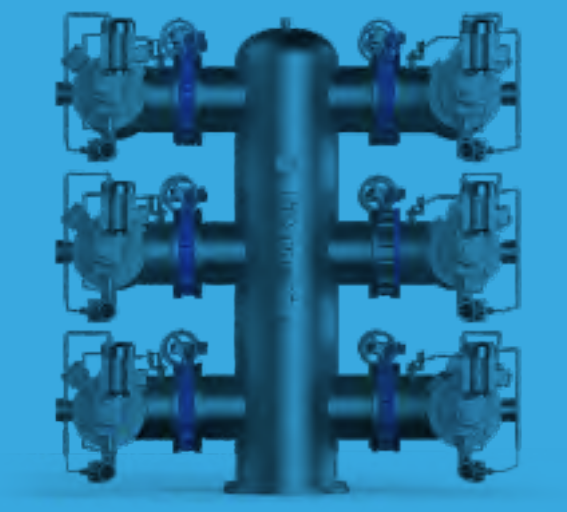
PQR-VMR

Models with 4-6-8 Separate Filters in One Unit

Uninterrupted Filtration in All Fields

Large Capacity Minimum Footprint

PQR-VMR Features



+ Filternox® PQR-VMR models provide safe and uninterrupted filtration due to their special design.

+ Filternox® secures up to 200.000 cm² filtration area with its largest PQR-VMR model filter.

+ All Filternox® Motor Reducer models have the option to adjust either one way or round trip cleaning sequences ➔ **less drainage water consumption**

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
2 bar

Max. Operating Temperature
60°C / 90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
80-180 s

rpm of Cleaning Mechanism
Adjustable

Back-Flush Water Consumption
400-1200 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Electric

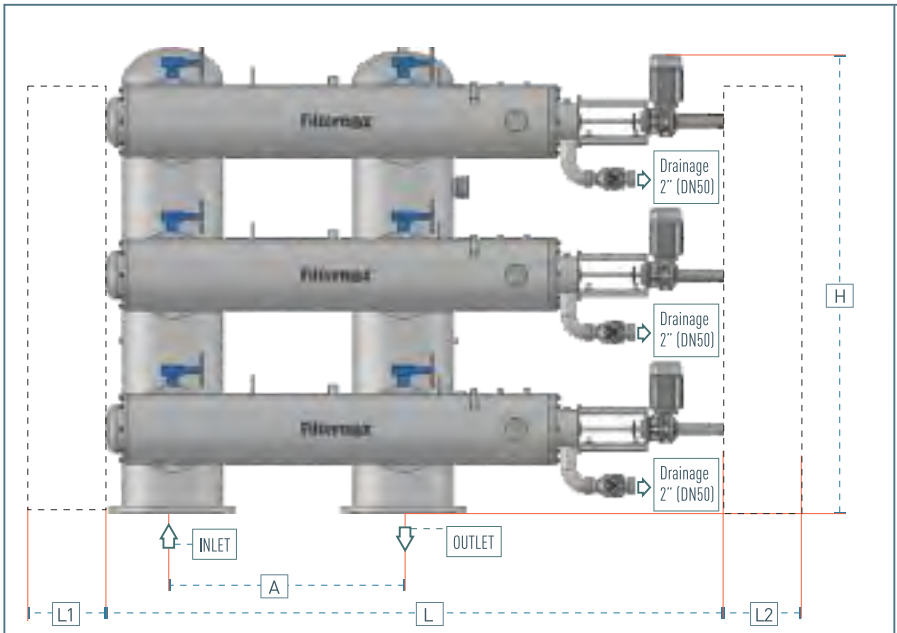
For different pressure and material requirements, please contact Filternox.

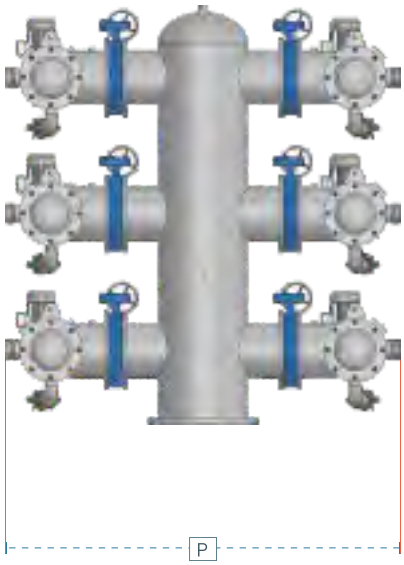
Optional Features

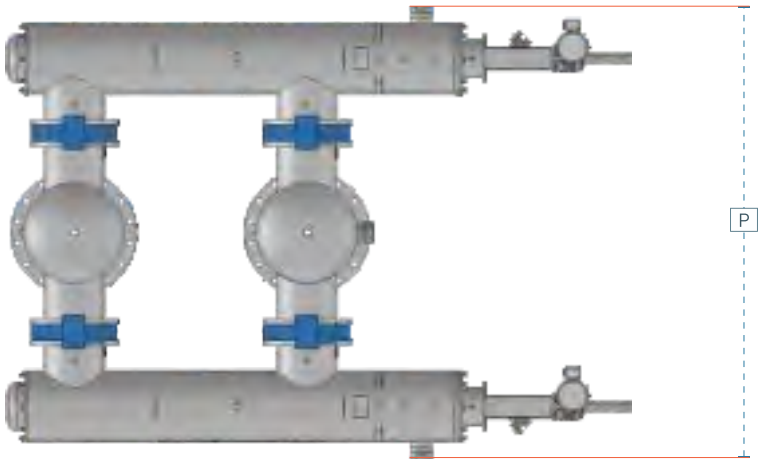
Alternative Energy Sources
Solar Energy

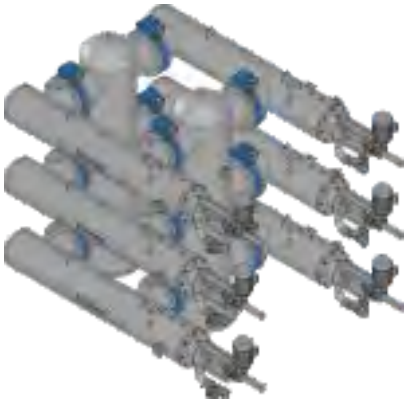
Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Head Office

PQR-VMR Models Dimensions









Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area
			A	L	L1	L2	H	P	Empty	Full		
	inch	mm	mm						kg		m^3/h	cm^2
PQR 412616-VMR	16	400	1200	2862	1700	200	1200	1914	1170	2110	up to 1500	28800
PQR 414618-VMR	18	450	1200	2862	1700	200	1250	2096	1270	2580	up to 1800	38400
PQR 416620-VMR	20	500	1200	2895	1700	200	1320	2246	1390	2880	up to 2000	48000
PQR 420624-VMR	24	600	1200	2890	1700	200	1530	2598	1630	3130	up to 2500	64800
PQR 620630-VMR	30	750	1200	2890	1700	200	2300	2748	2180	3950	up to 3500	97200

The tolerance value for given data is according to DIN ISO 2768-1(v).

For larger filtration area, please Filternox.

For further information about PQR-VMR models please visit our website.
You can use the QR code on the right to access online information about this product.

www.filternox.com/**filters**

SPECIAL SPT-MR

High Performance Models

Maximum Efficiency
Minimum Footprint

SPECIAL SPT-MR Features

+ Special SPT-MR models of Filternox® Automatic Self-Cleaning Filters are appropriate for applications requiring medium to large filtration capacities.

+ Filternox® Special SPT-MR models are designed for fine filtration needs where the vertical installation and small footprint are necessary. They provide high filtration performance with their developed back-flushing system.

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
2 bar

Max. Operating Temperature
60°C / 90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
20-30 s

rpm of Cleaning Mechanism
Adjustable

Back-Flush Water Consumption
100-200 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Electric

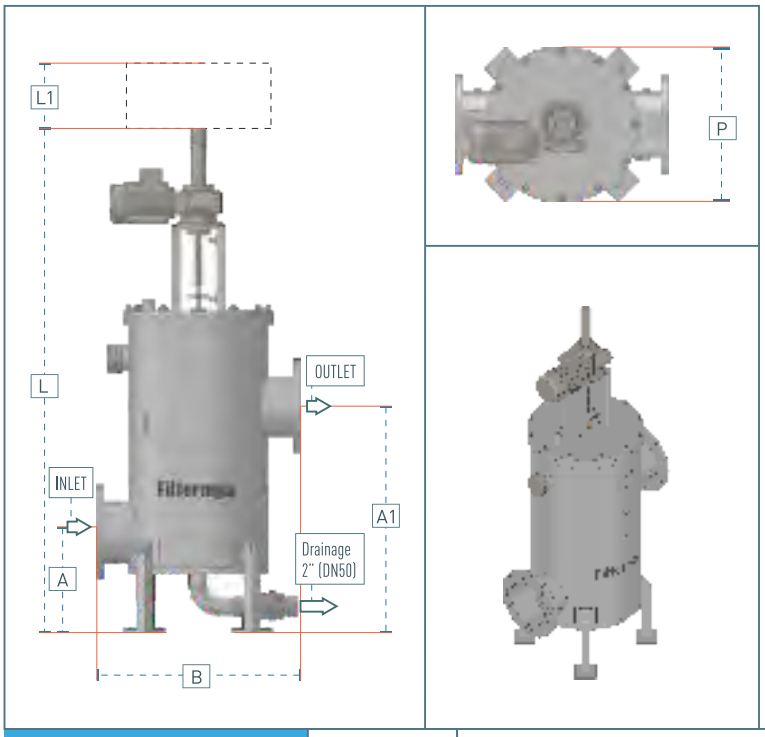
For different pressure and material requirements, please contact Filternox.

Optional Features

Alternative Energy Sources
Solar Energy

Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Head Office

SPECIAL SPT-MR Models Dimensions



Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area
			A	A1	B	L	L1	P	Empty	Full		
	inch	mm	mm						kg		m^3/h	cm^2
SPECIAL SPT 114304-MR	4	100	450	950	596	2005	300	380	125	210	up to 120	4800
SPECIAL SPT 114306-MR	6	150	450	950	616	2005	300	380	130	220	up to 160	4800
SPECIAL SPT 116308-MR	8	200	450	950	666	2005	300	430	150	260	up to 240	6000
SPECIAL SPT 118310-MR	10	250	500	1000	757	2055	300	482	165	295	up to 400	7200
SPECIAL SPT 120308-MR	8	200	450	950	768	2005	300	533	190	345	up to 360	8100
SPECIAL SPT 118410-MR	10	250	500	1100	757	2255	500	482	185	340	up to 500	9600
SPECIAL SPT 120410-MR	10	250	500	1100	768	2255	500	533	235	420	up to 540	10800
SPECIAL SPT 124414-MR	14	350	550	1200	970	2355	500	635	330	600	up to 800	12800

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.

For further information about SPECIAL SPT-MR models please visit our website.
You can use the QR code on the right to access online information about this product.

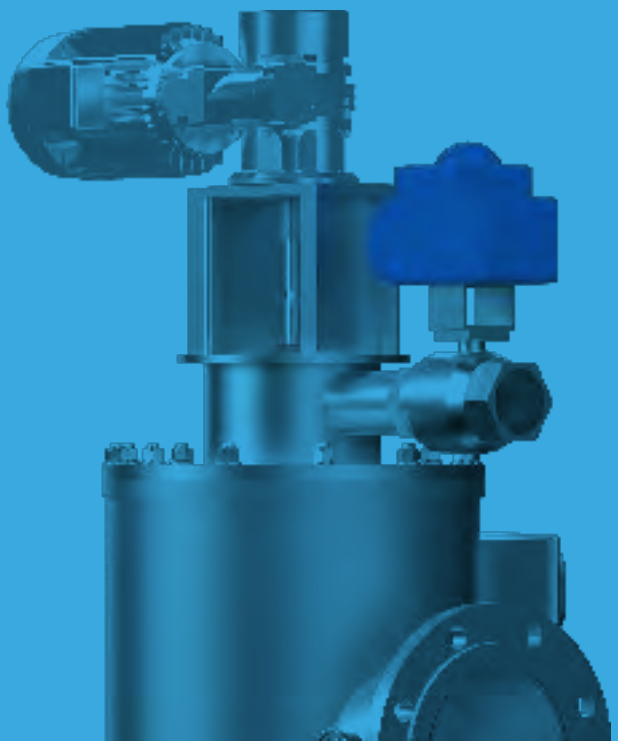
www.filternox.com/**filters**

ACF-W-MR

Brush Cleaning Automatic Models

Multipurpose Filtration in One Stage

ACF-W-MR Features



+ Filternox® ACF-W-MR models, designed for all kind of applications, provide with their brush cleaning system a simple and efficient solution for prefiltration as well as fine filtration requirements.

+ Filternox® ACF-W-MR models have the flexibility to be mounted directly on the pipeline, either horizontally or vertically, as well as online or inline.

+ They provide high capacity filtration in a minimum footprint.

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
1 bar

Max. Operating Temperature
60°C / 90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
20-40 s

rpm of Cleaning Mechanism
Adjustable

Back-Flush Water Consumption
200-400 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Electric

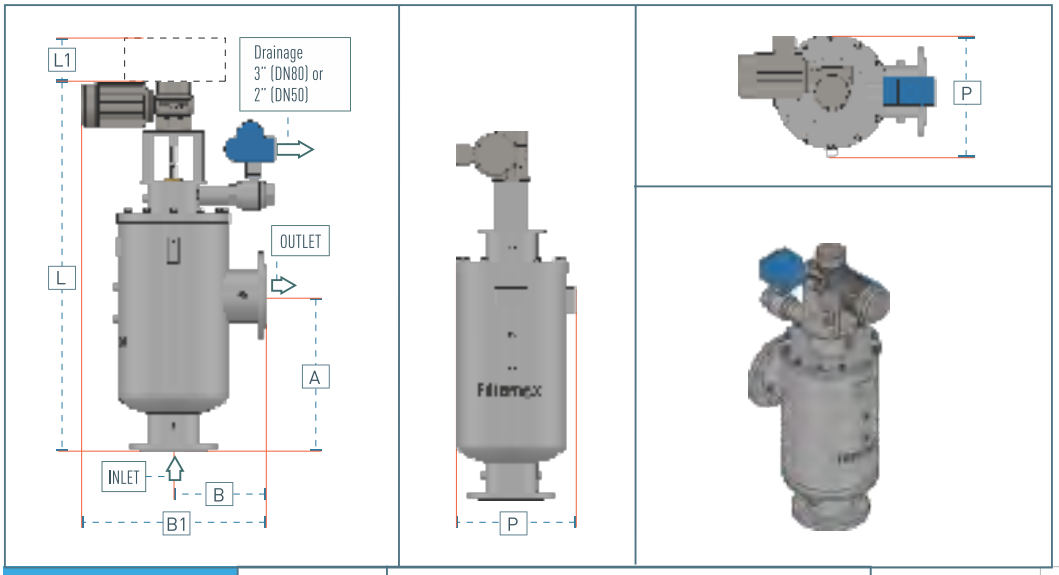
For different pressure and material requirements, please contact Filternox.

Optional Features

Alternative Energy Sources
Solar Energy

Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Head Office

ACF-W-MR Models Dimensions



Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area
			A	B	B1	L	L1	P	Empty	Full		
	inch	mm	mm						kg		m^3/h	cm^2
ACF-W 110203-MR	3	80	450	257	557	1160	200	328	63	100	up to 60	2500
ACF-W 114204-MR	4	100	450	298	598	1160	200	395	97	145	up to 80	3200
ACF-W 114304-MR	4	100	500	298	598	1360	400	395	112	195	up to 120	4800
ACF-W 114306-MR	6	150	500	308	608	1370	400	395	115	200	up to 140	4800
ACF-W 116308-MR	8	200	500	333	633	1360	400	445	135	240	up to 200	6000
ACF-W 116410-MR	10	250	650	353	653	1580	600	445	155	280	up to 360	7800
ACF-W 118412-MR	12	300	650	409	709	1550	600	495	175	320	up to 400	8500
ACF-W 120414-MR	14	350	700	434	734	1640	600	547	185	335	up to 500	10000
ACF-W 124416-MR	16	400	700	485	805	1650	600	650	280	510	up to 600	12800

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.

For further information about ACF-W-MR models please visit our website.
You can use the QR code on the right to access online information about this product.

www.filternox.com/**filters**

FMS & FMS-W-MR

Brush Cleaning Mini Models

Compact Design for Low Flows

FMS & FMS-W-MR Features

+ Filternox® FMS & FMS-W-MR models are manufactured for smaller flows applications and motorized filters equipped with a brush for cleaning during back-flush.

+ Filternox® FMS & FMS-W-MR models provide prefiltration as well as final filtration for various water sources containing specially inorganic dirt load.

+ Filternox® Automatic Self-Cleaning brushed mini-screen models are controlled by ΔP and timer.

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
1 bar

Max. Operating Temperature
60°C / 90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
15-20 s

Back-Flush Water Consumption
40-50 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Electric

For different pressure and material requirements, please contact Filternox.

Optional Features

Alternative Energy Sources
Solar Energy

Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Head Office

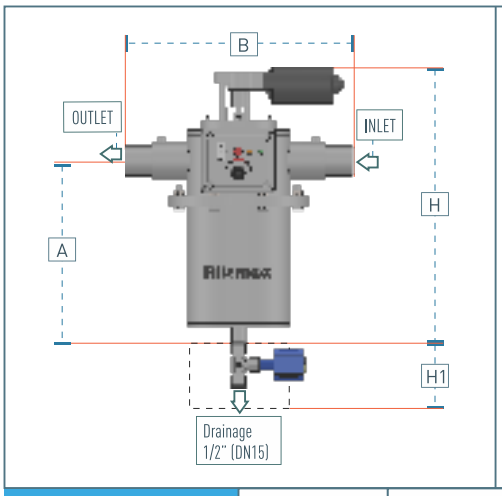
For further information about FMS & FMS-W-MR models please visit our website.
You can use the QR codes on the right to access online information about these products.

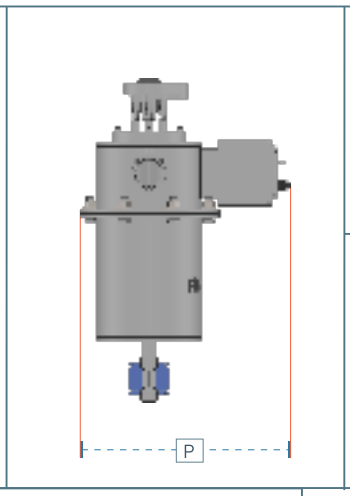
www.filternox.com/**filters**

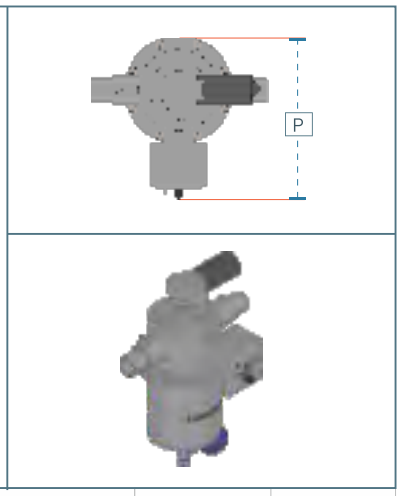
FMS

FMS-W-MR

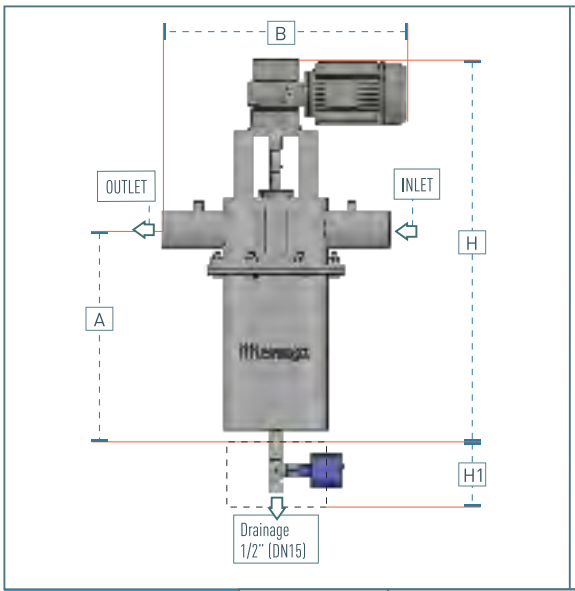
FMS & FMS-W-MR Models Dimensions

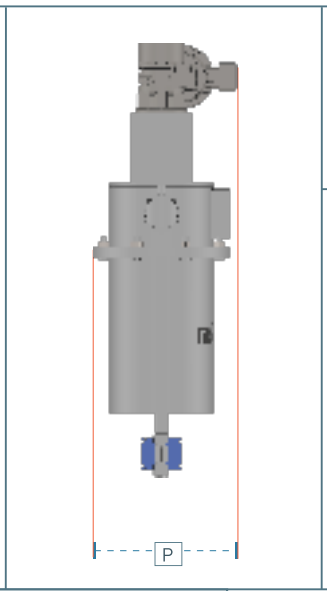


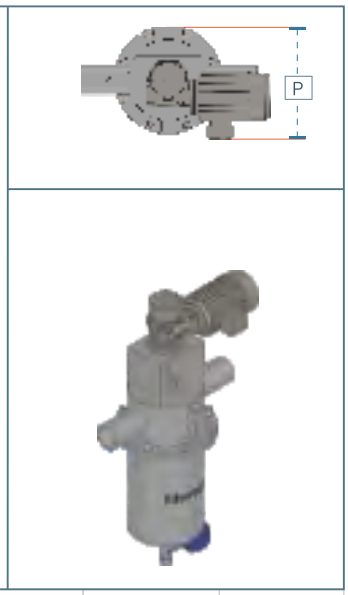




Model (FMS)	Inlet-Outlet Diameter		Dimensions					Weight		Flow Rate	Filtration Area
			A	B	H	H1	P	Empty	Full		
	inch	mm	mm					kg		m^3/h	cm^2
FMS 106101	1	25	243	368	405	250	340	11	19	up to 15	350
FMS 106101.5	1½	40	303	368	465	250	340	12	20	up to 20	600
FMS 106102	2	50	363	368	525	250	340	13	21	up to 30	850
FMS 108103	3	80	378	459	560	250	440	22	33	up to 50	1250

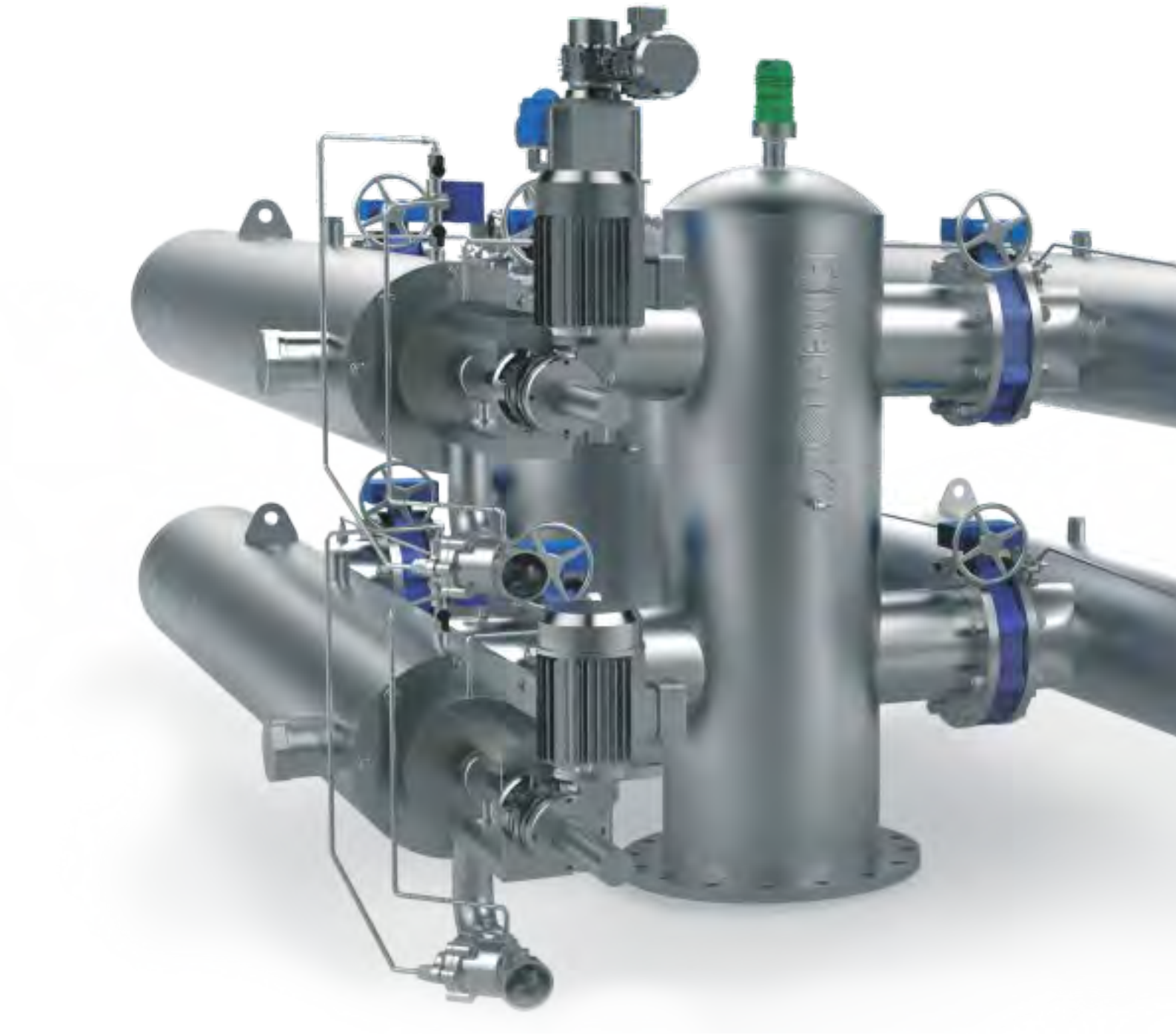


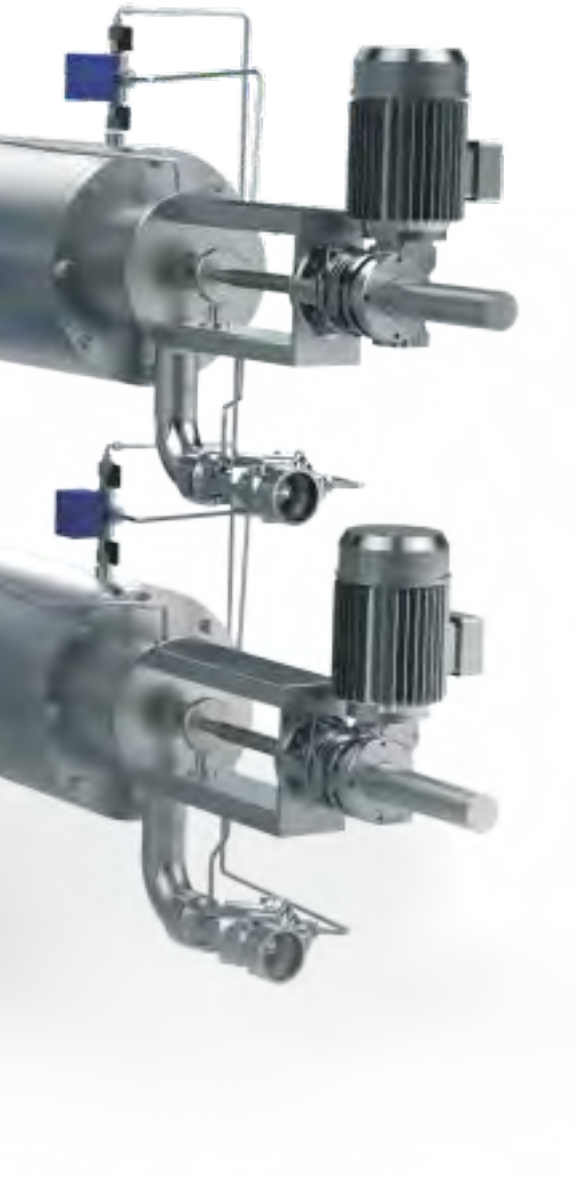




Model (FMS-W-MR)	Inlet-Outlet Diameter		Dimensions					Weight		Flow Rate	Filtration Area
			A	B	H	H1	P	Empty	Full		
	inch	mm	mm					kg		m^3/h	cm^2
FMS-W 108101-MR	1	25	363	520	670	250	280	37	48	up to 15	1250
FMS-W 108102-MR	2	50	363	520	670	250	280	39	51	up to 30	1250
FMS-W 108103-MR	3	80	378	530	700	250	280	42	55	up to 50	1250

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.





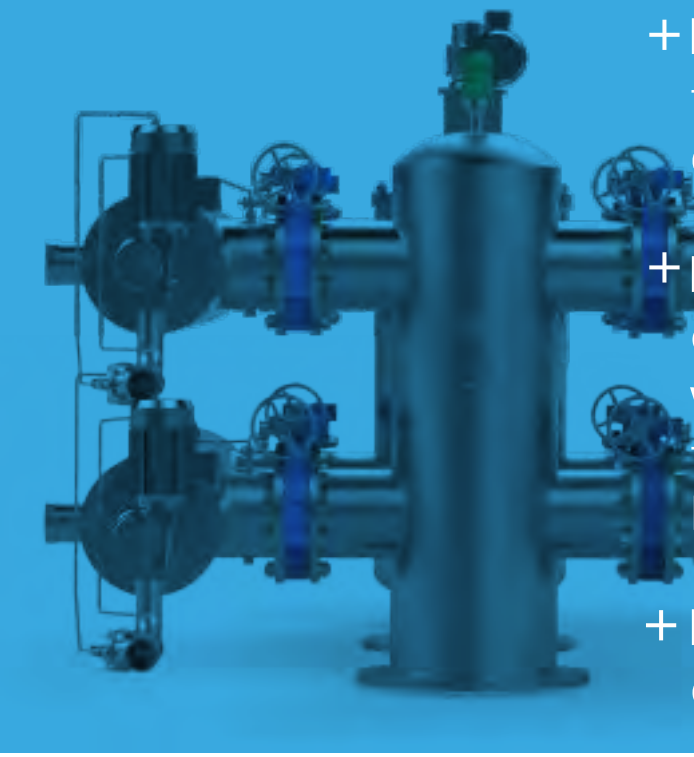
KQR-VMR

Models with Automatic Self-Cleaning Coarse Screen

Two Stage Filtration in One Filter Unit

Large Capacity Minimum Footprint

KQR-VMR Features



+ Filternox® Automatic Self-Cleaning KQR-VMR models with rust proof body are ideal and permanent solution for sea water and surface water filtration.

+ Filternox® KQR-VMR models provide the final and permanent solution for all kind of waters containing very high dirt loads.

+ Filternox® KQR-VMR models have unique coarse screen and multiple fine screens with one inlet and outlet able to make two stage filtration and they are used for high flow rates.

+ Filternox® KQR-VMR can be installed either inline or online.

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
2 bar

Max. Operating Temperature
60°C /90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
80-120 s

rpm of Cleaning Mechanism
Adjustable

Back-Flush Water Consumption
600-1000 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Electric

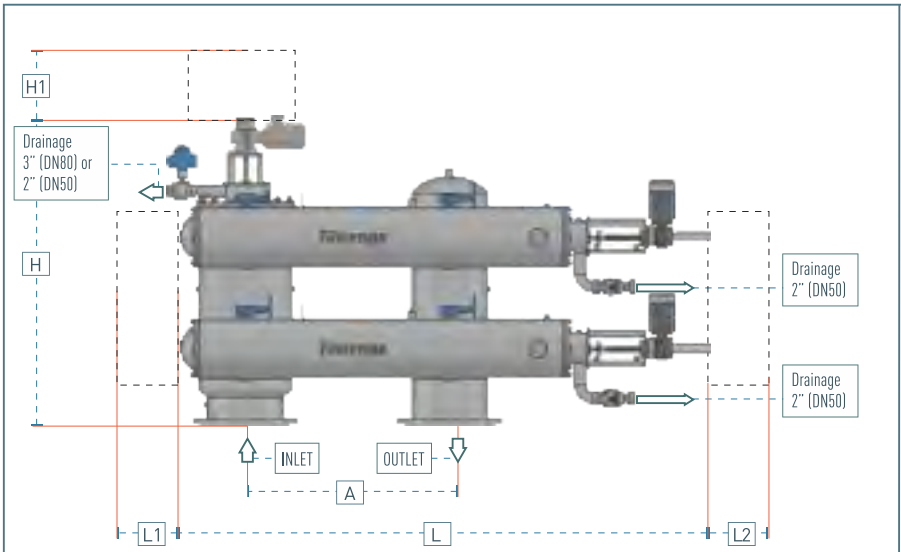
For different pressure and material requirements, please contact Filternox.

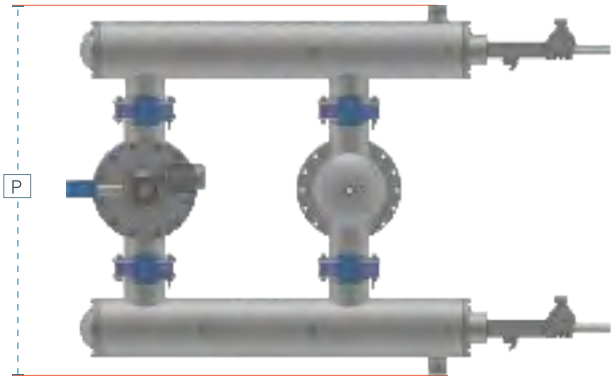
Optional Features

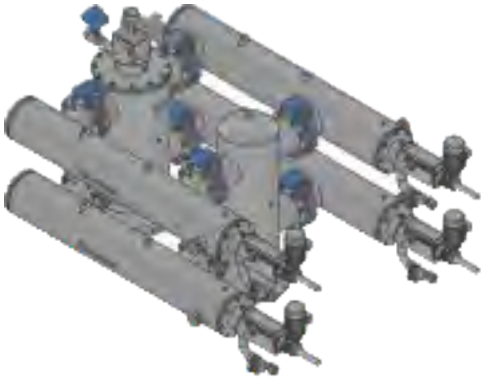
Alternative Energy Sources
Solar Energy

Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Head Office

KQR-VMR Models Dimensions







Model	Inlet-Outlet Diameter		Dimensions							Weight		Flow Rate	Filtration Area	
			A	L	L1	L2	H	H1	P	Empty	Full		Stage 1	Stage 2
	inch	mm	mm							kg		m^3/h	cm^2	
KQR 412616-VMR	16	400	1200	2745	1700	200	1770	700	2014	1320	2730	up to 1500	11100	28800
KQR 414618-VMR	18	450	1200	2745	1700	200	1770	700	2246	1430	2850	up to 1800	14000	38400
KQR 416620-VMR	20	500	1200	2796	1700	200	2100	1000	2348	1570	3040	up to 2000	20000	48000
KQR 420624-VMR	24	600	1200	2890	1700	200	2150	1000	2696	1850	3560	up to 2500	28500	64800
KQR 620630-VMR	30	750	1200	2890	1700	200	2800	1700	2900	2420	4380	up to 3500	44000	97200

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.

For further information about KQR-VMR models please visit our website.
You can use the QR code on the right to access online information about this product.

www.filternox.com/**filters**

SPT-WBV-MR

High-Tech Models

Double Effect Cleaning Ideal Solution for High Dirt Loads

SPT-WBV-MR Features

+ Filternox® SPT-WBV-MR models are developed based on our vast experience to deal with waters containing very high dirt load built up from large and small particles together either from river or sea.

+ SPT-WBV-MR models of Filternox® Automatic Self-Cleaning Filters, with their specially developed dual self-cleaning system made up of brushes and vacuum nozzles, achieve an incomparable performance and offer a definitive and permanent solution for variable high dirt load applications.

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
2 bar

Max. Operating Temperature
60°C / 90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
40-60 s

rpm of Cleaning Mechanism
Adjustable

Back-Flush Water Consumption
200-400 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Electric

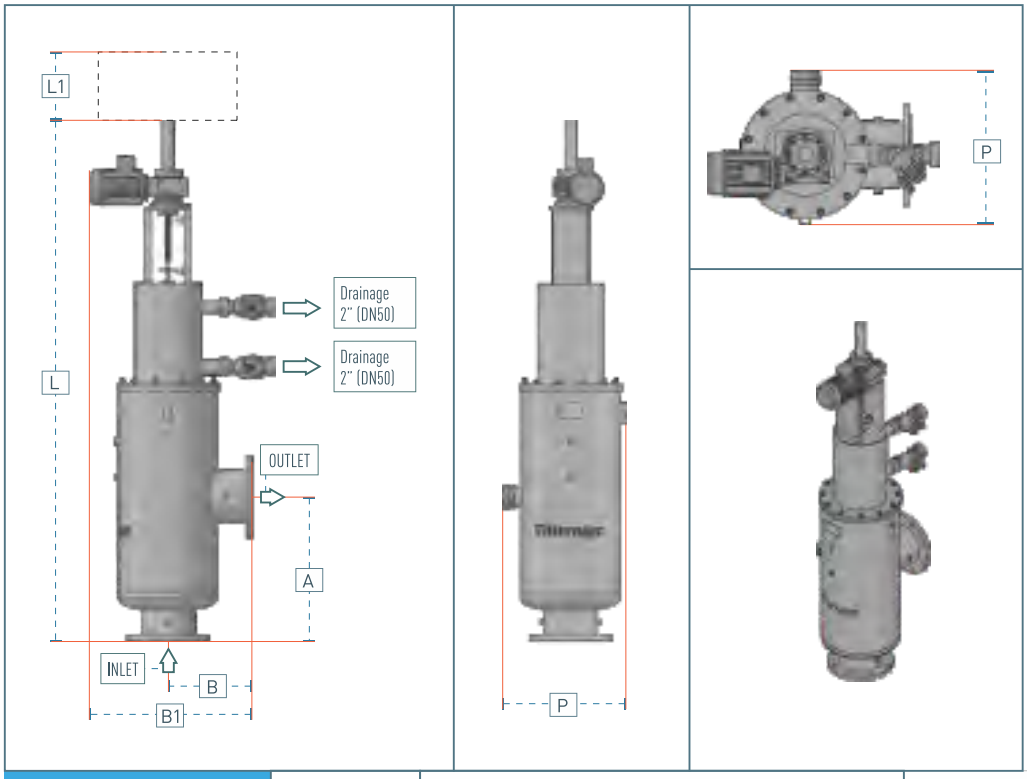
For different pressure and material requirements, please contact Filternox.

Optional Features

Alternative Energy Sources
Solar Energy

Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Head Office

SPT-WBV-MR Models Dimensions



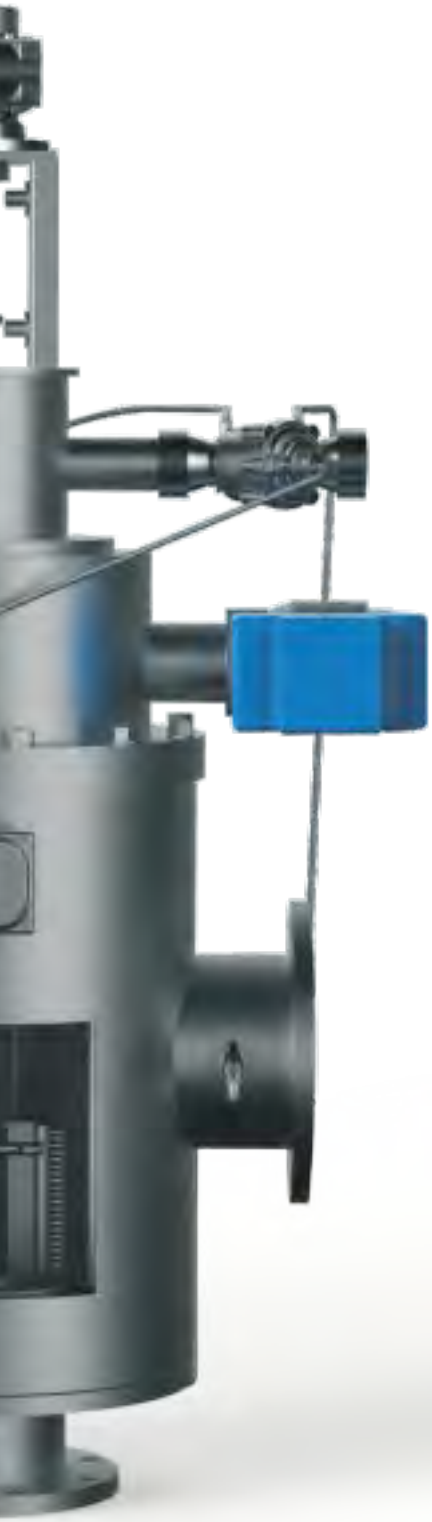
Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area
			A	B	B1	L	L1	P	Empty	Full		
	inch	mm	mm						kg		m^3/h	cm^2
SPT-WBV 110203-MR	3	80	450	257	557	1765	200	373	80	135	up to 60	2500
SPT-WBV 114204-MR	4	100	450	298	598	1765	200	445	90	145	up to 80	3200
SPT-WBV 114304-MR	4	100	500	298	598	1965	200	455	100	160	up to 120	4800
SPT-WBV 114306-MR	6	150	500	308	608	1975	200	455	105	170	up to 140	4800
SPT-WBV 116308-MR	8	200	500	333	633	1970	200	505	120	220	up to 200	6000
SPT-WBV 116410-MR	10	250	650	353	653	2190	200	505	140	260	up to 360	7800
SPT-WBV 118412-MR	12	300	650	409	709	2180	200	555	160	290	up to 400	8500
SPT-WBV 120414-MR	14	350	700	434	734	2240	200	608	195	350	up to 500	10000

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.

For further information about SPT-WBV-MR models please visit our website.
You can use the QR code on the right to access online information about this product.

www.filternox.com/**filters**


Filternox

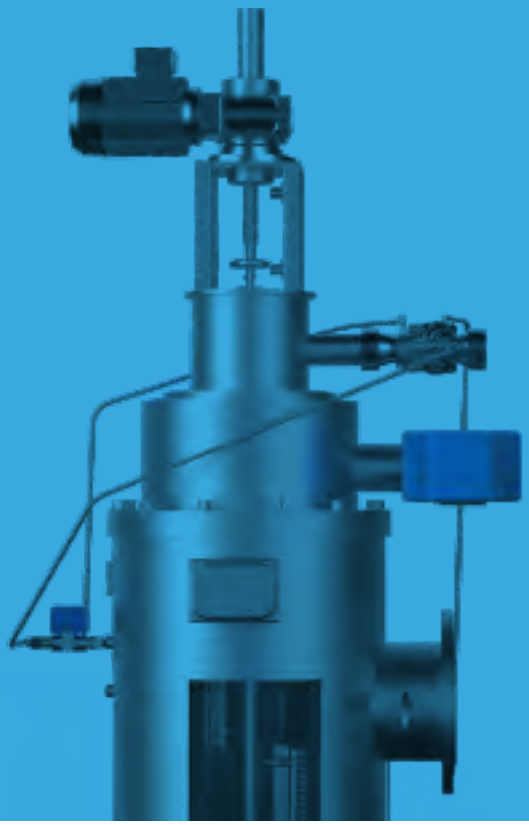


CFH-MR

New and Advanced Technology Automatic Filter

Advanced Double Stage Filtration in One Unit

CFH-MR Features



+ CFH series of **Filternox®** are special filters performing two stage filtration in one unique (filter) body. Based on the characteristics of the water to be filtered, it is possible to reach very fine filtration levels thanks to their efficient self-cleaning capability.

+ **Filternox®** has patented dual filtration process, which is unique in the industry. CFH models of **Filternox®** Automatic Self-Cleaning Filters are designed particularly for much finer filtration levels of waters with high dirt loads. Now we can process super dirty water.

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
2 bar

Max. Operating Temperature
60°C / 90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
20-60 s

rpm of Cleaning Mechanism
Adjustable

Back-Flush Water Consumption
100-400 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Electric

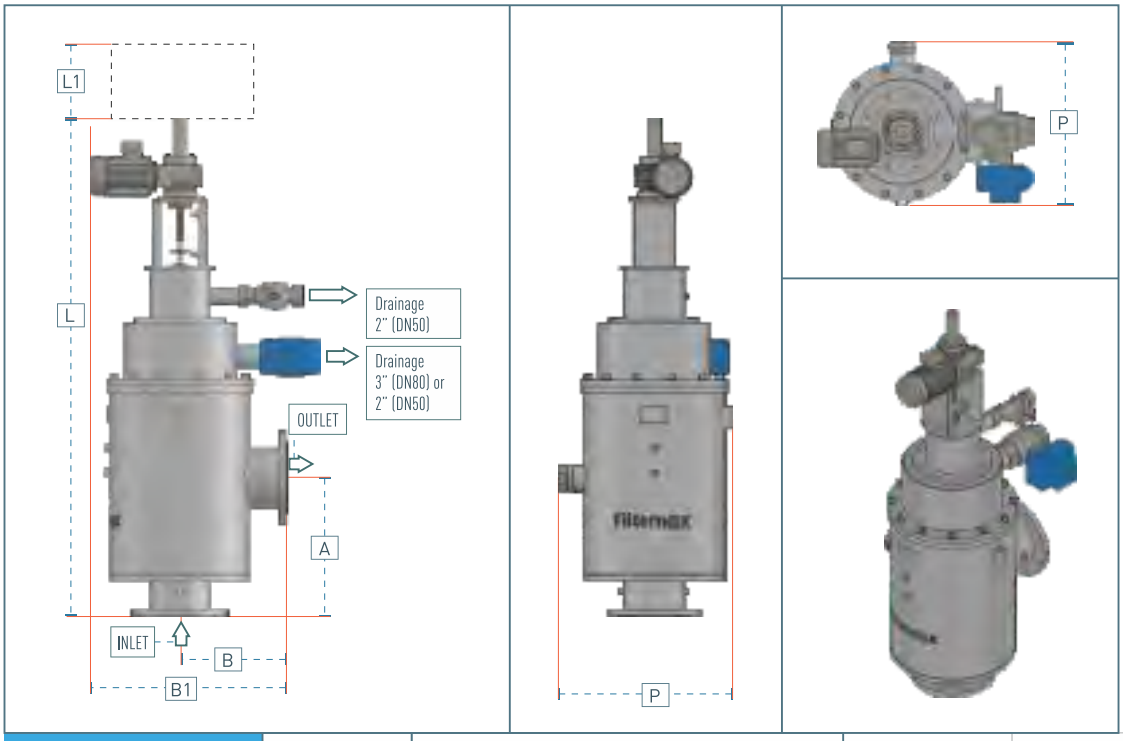
For different pressure and material requirements, please contact Filternox.

Optional Features

Alternative Energy Sources
Solar Energy

Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Head Office

CFH-MR Models Dimensions

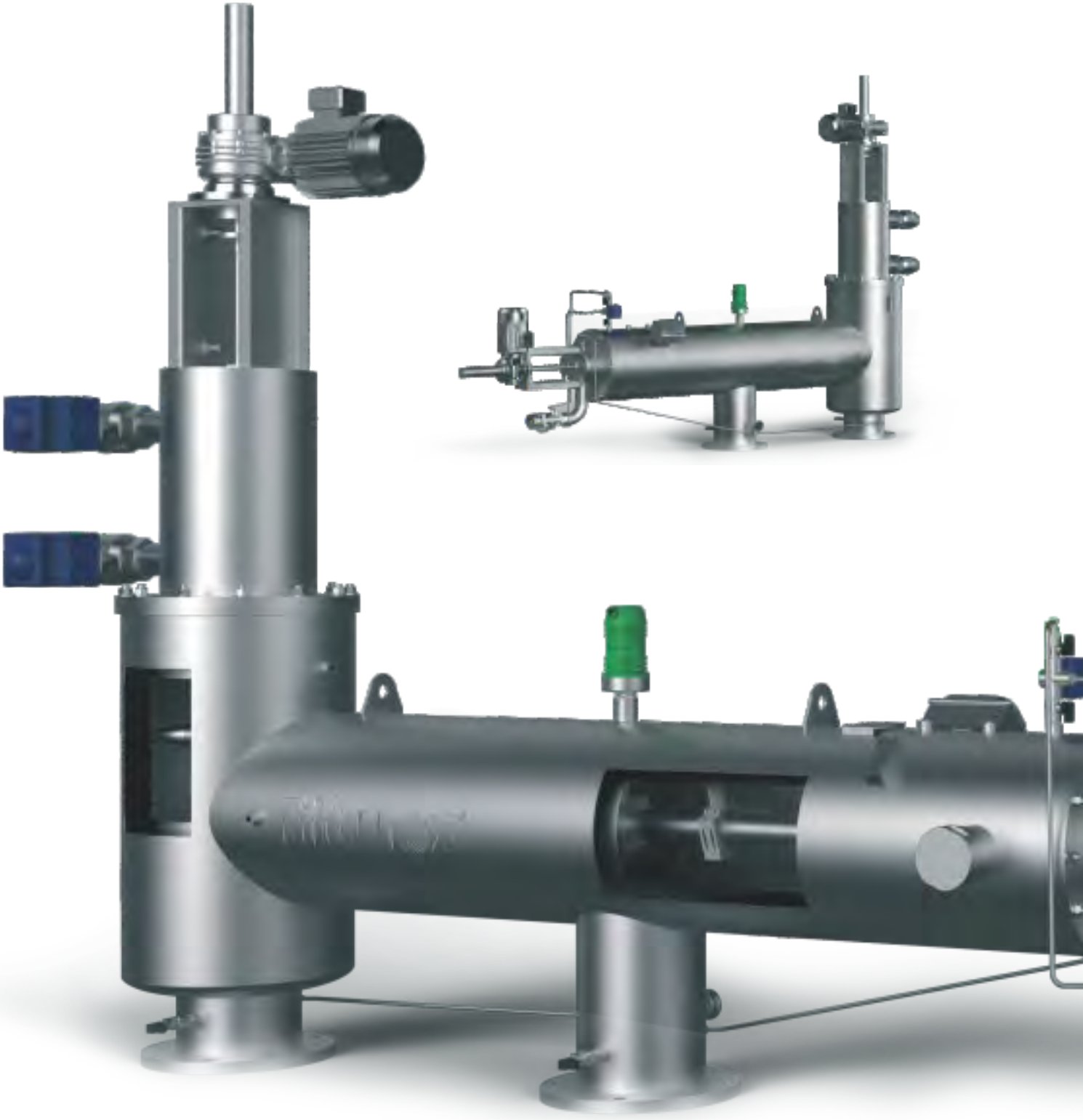


Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area	
			A	B	B1	L	L1	P	Empty	Full		Stage 1	Stage 2
	inch	mm	mm						kg		m^3/h	cm^2	
$C_{22}F_{22}H$ 118203-MR	3	80	400	349	649	1880	200	495	225	400	up to 80	2100	4400
$C_{22}F_{22}H$ 120306-MR	6	150	500	384	684	2090	200	547	295	535	up to 240	4200	7500

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.

For further information about CFH-MR models please visit our website.
You can use the QR code on the right to access online information about this product.

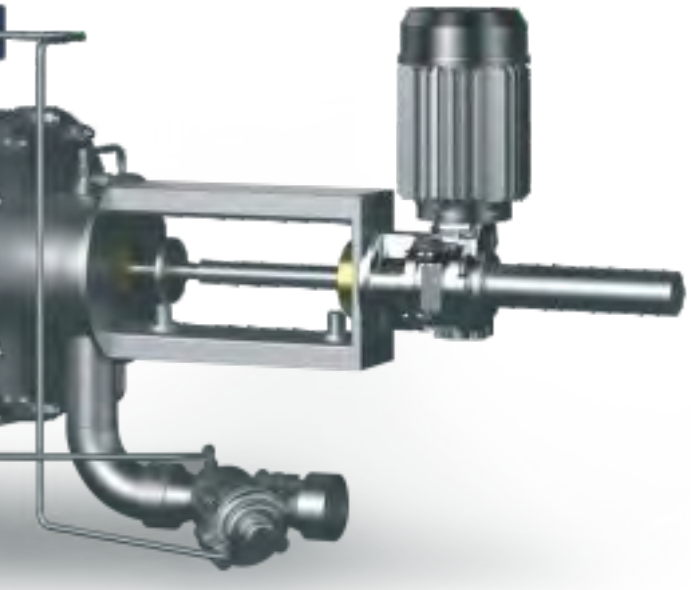
www.filternox.com/**filters**



KFH-WBVV-MR

Heavy Duty Models for Very High Dirt Loads

Two-Three Stages Filtration in One Filter Unit



KFH-WBVV-MR Features

+ Filternox® Automatic Self-Cleaning KFH-WBVV-MR models with rust proof body are ideal and permanent solution for sea water and surface water filtration.

+ Filternox® KFH-WBVV-MR models provide the final and permanent solution for all kind of waters containing very high dirt loads.

+ Filternox® KFH-WBVV-MR models with automatic self-cleaning system for coarse and fine screens enable to make two-three stages filtration in one filter unit.

General Technical Specifications

Body Material
AISI 304L, AISI 316L

Screen Material
AISI 316L

Max. Operating Pressure
PN10 / PN16

Min. Inlet Pressure Required During Back-Flush
2 bar

Max. Operating Temperature
60°C / 90°C

Headloss at Max. Flow Rate
0.2 bar

Back-Flush Time
40-60 s

rpm of Cleaning Mechanism
Adjustable

Back-Flush Water Consumption
200-400 l / back-flush

Fine Screen Range
10-3000 micron

Control System
Electric

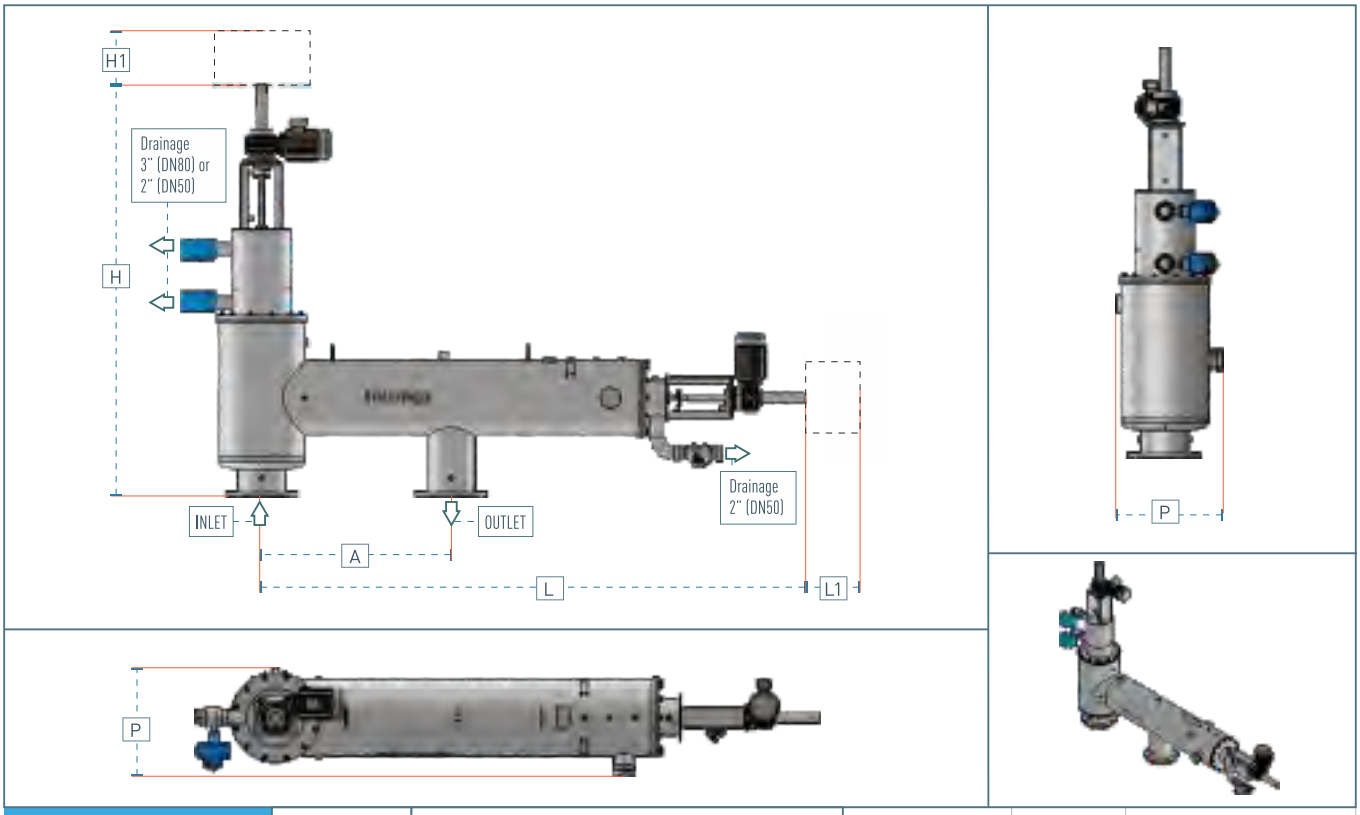
For different pressure and material requirements, please contact Filternox.

Optional Features

Alternative Energy Sources
Solar Energy

Remote Control and Monitoring
PLC, PC,
Mobile Devices,
Filternox Headoffice

KFH-WBVV-MR Models Dimensions



Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area	
			A	L	L1	H	H1	P	Empty	Full		Stage 1	Stage 2
	inch	mm	mm						kg		m^3/h	cm^2	
KFH-WBVV 110203-MR	3	80	600	1975	200	1765	200	398	132	210	up to 60	2400	2400
KFH-WBVV 110304-MR	4	100	800	2175	400	1765	200	398	145	225	up to 100	2400	3600
KFH-WBVV 110404-MR	4	100	900	2415	600	1765	200	423	158	255	up to 120	3200	4800
KFH-WBVV 112408-MR	8	200	900	2415	600	1775	200	439	180	285	up to 180	3200	4800
KFH-WBVV 114306-MR	6	150	800	2215	400	1775	200	455	205	335	up to 160	3200	4800
KFH-WBVV 114406-MR	6	150	900	2415	600	1775	200	455	220	350	up to 200	3200	6400
KFH-WBVV 112608-MR	8	200	900	2815	1000	1975	200	439	210	335	up to 320	4800	7200
KFH-WBVV 114508-MR	8	200	900	2615	800	1975	200	455	255	400	up to 340	4800	8000
KFH-WBVV 114610-MR	10	250	1200	2865	1000	1990	200	480	295	460	up to 500	6000	9600
KFH-WBVV 116510-MR	10	250	1200	2665	800	1990	200	505	340	545	up to 500	6000	10000
KFH-WBVV 120512-MR	12	300	1200	2970	800	2030	200	607	435	705	up to 800	7500	13500
KFH-WBVV 120614-MR	14	350	1200	3170	1000	2230	200	607	480	790	up to 900	10000	16200

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.

For further information about KFH-WBVV-MR models please visit our website.
You can use the QR code on the right to access online information about this product.

www.filternox.com/**filters**

SPECIAL BMF & MSPT

Manual Cleaning Models

Simple Design for High Capacity Expectations

Filternox®

SPECIAL BMF & MSPT Features

+ Filternox® Special BMF & MSPT models are designed for any types of fluid in small to large flow capacities, from 1" up to 24" inlet-outlet connections.

General Technical Specifications (SPECIAL BMF & MSPT)

Body Material
AISI 304L, AISI 316L

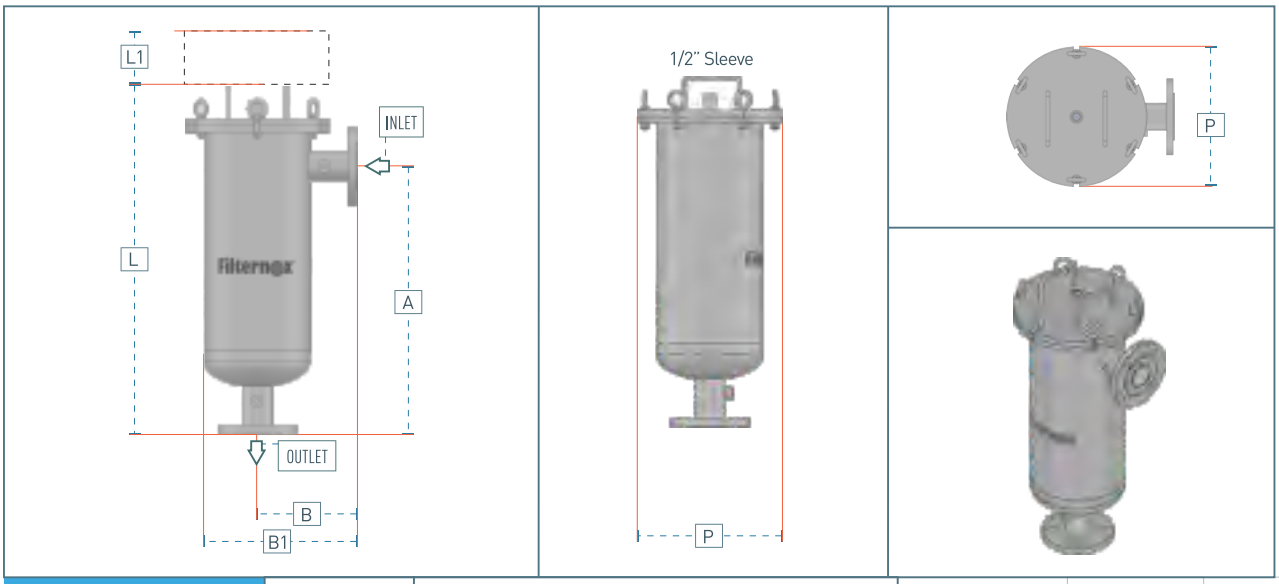
Max. Operating Temperature
90°C

Max. Operating Pressure
PN10 / PN16

Screen Material
AISI 316L

For different pressure and material requirements, please contact Filternox.

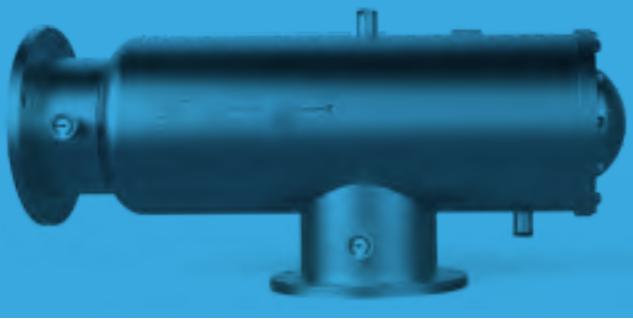
SPECIAL BMF Models Dimensions



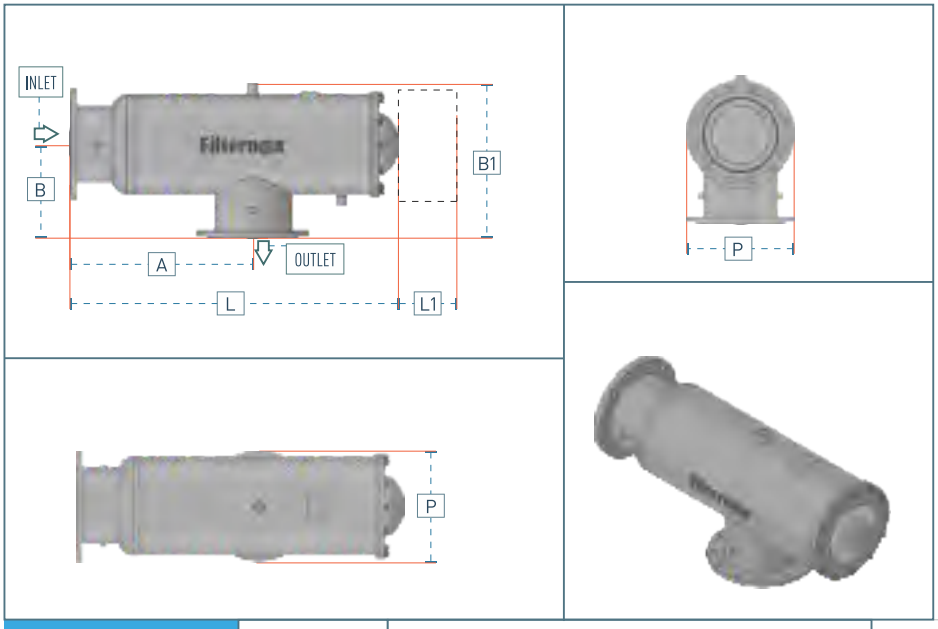
Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area
			A	B	B1	L	L1	P	Empty	Full		
	inch	mm	mm						kg		m^3/h	cm^2
SPECIAL BMF 106101	1	25	375	184	310	530	250	250	18	32	up to 15	650
SPECIAL BMF 108102	2	50	450	210	360	620	300	300	28	46	up to 30	1250
SPECIAL BMF 108103	3	80	580	210	360	765	400	300	32	58	up to 50	1750
SPECIAL BMF 108104	4	100	960	210	360	1150	800	300	50	95	up to 100	3500

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.

+These models provide also prefiltration for specific applications. They are suitable for high temperature and pressure applications in a wide range filtration levels.



MSPT Models Dimensions



Model	Inlet-Outlet Diameter		Dimensions						Weight		Flow Rate	Filtration Area
			A	B	B1	L	L1	P	Empty	Full		
	inch	mm	mm						kg		m^3/h	cm^2
MSPT 110304	4	100	500	257	433	942	800	324	60	90	up to 100	3600
MSPT 114306	6	150	500	308	526	957	800	375	85	125	up to 160	4800
MSPT 116308	8	200	500	333	576	980	800	425	110	180	up to 240	6000
MSPT 116410	10	250	650	353	596	1200	1000	425	130	210	up to 400	7800
MSPT 118412	12	300	650	409	677	1210	1000	477	150	260	up to 500	8500
MSPT 120414	14	350	700	434	728	1240	1000	528	195	330	up to 700	10000
MSPT 124416	16	400	700	485	830	1270	1000	630	250	430	up to 1000	12800
MSPT 130420	20	500	700	561	982	1300	1100	780	330	615	up to 1200	16000

- The tolerance value for given data is according to DIN ISO 2768-1(v).
- For larger filtration area, please contact Filternox.

For further information about SPECIAL BMF & MSPT models please visit our website.
You can use the QR codes on the right to access online information about these products.

www.filternox.com/**filters**

SPECIAL BMF

MSPT

Filternox®

Applications

HVAC and Cooling Tower

Cooling towers act in a similar way to air scrubbers by collecting all particles from the surrounding environment into the cooling water. These particles, such as dust, sand, algae and pollen attach easily to the hot surfaces during the circulation inside cooling system and cause clogging, fouling and reduction in efficiency of the process, which results in the shut down of the system for cleaning. Efficient filtration is very important for maintaining the continuous operation of the cooling system.

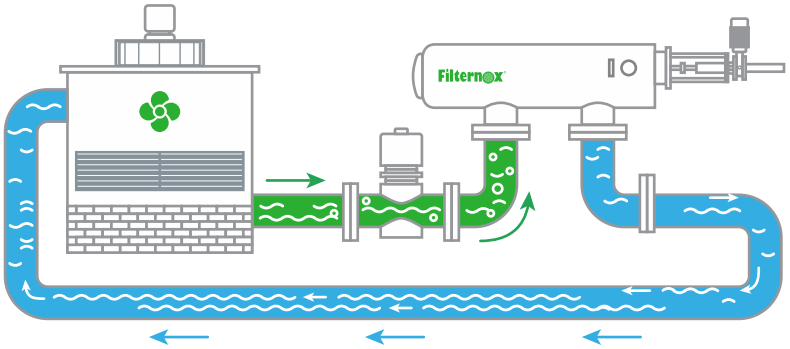
By using **Filternox®** Automatic Self-Cleaning Filters in the cooling system, either as sidestream or full flow applications, you will avoid all above mentioned problems and you will also decrease the chemical consumption for water conditioning.

Working Process

Cooling Tower

Unfiltered Water

Filtered Water



Recommended Products for This Application

- PFH-MR
- SPECIAL SPT-MR
- SPT-WBV-MR
- CFH-MR

For further information about **HVAC and Cooling Tower applications** please visit our website.
You can use the QR code on the right to access online information about the application.

www.filternox.com/**#filtration**

Power Generation

A decrease in efficiency due to the accumulation of particles is one of the main problems with heat exchangers. Even a minor layer of scale causes a dramatic decrease in heat transfer which can result in the unforeseen shut down of the system for cleaning.

Filternox® Automatic Self-Cleaning Filters, by removing all suspended solids and particles, provide uninterrupted working conditions for heat exchangers.

As well as protecting heat exchangers, **Filternox®** Automatic Self-Cleaning Filters will also provide protection for nozzles, ion exchangers, seals, membranes and other sensitive equipment installed in your system.

The use of **Filternox®** Automatic Self-Cleaning Filters helps to maintain optimum pumping conditions through the prevention of pressure drop caused by sediment build up.

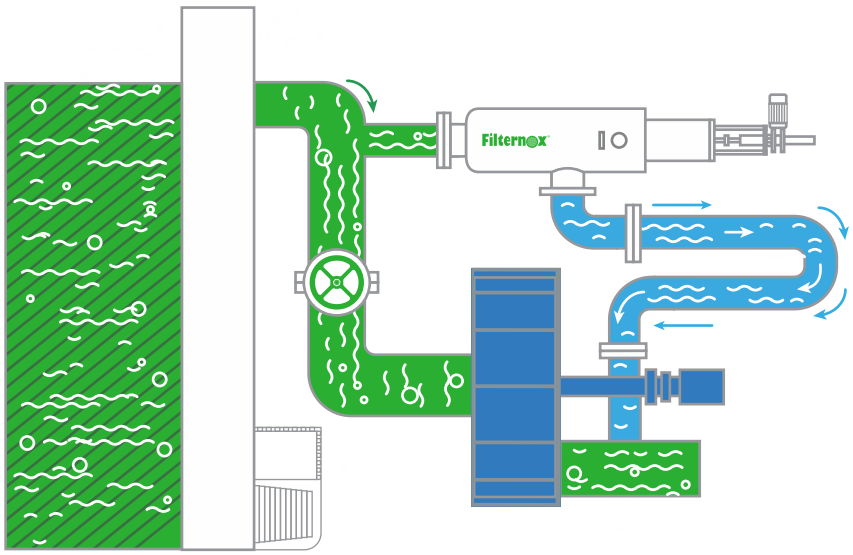
The continuous operation of the turbines has vital importance for the hydroelectric power plants.

Dam water used for the cooling of the turbine bearing and the sealing equipment of the hydroelectric power plants, contains different sizes of particles as all the surface waters creating fouling in the pipes and heat exchanging surfaces, and damaging the turbine bearings and seals.

Filtenox® provides a solution to this filtration problem with its two stage Automatic Self-Cleaning filtration models which offer a convenient and cost effective way to address filtration challenges in hydroelectric power plants, extending the life of bearings and seals equipment and reducing maintenance

Working Process

- Flow Control Valve
- Unfiltered Water
- Filtered Water
- Water Source
- Turbine



Recommended Products for This Application

- SPT-WBV-MR
- KFH-B-MR
- ACF-W-MR

For further information about **Power Generation applications** please visit our website.
You can use the QR code on the right to access online information about the application.

www.filternox.com/**#filtration**

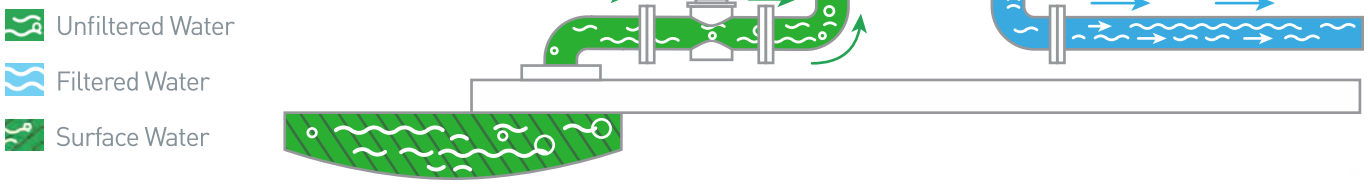
Surface Water, UF, RO

As well as sea water, surface water contains a wide variety of types and sizes of contaminant particles. To effectively meet this challenge, filtration units require both coarse and fine automatic filtration. Sediment build up and the consequent loss of efficiency is one of the main problems in heat exchangers, nozzles, ion exchange systems, seals, membranes and other sensitive equipment.

To prevent unforeseen system shut downs for cleaning, the installation of **Filternox®** Automatic Self Cleaning Filters will remove the suspended particles from the incoming water supply, thus providing uninterrupted working conditions.

The use of **Filternox®** Automatic Self Cleaning Filters helps to maintain optimum pumping conditions through the prevention of pressure drop caused by sediment build up.

Working Process



Recommended Products for this Application

- SPT-WBV-MR
- CFH-MR
- KFH-WBVV-MR

For further information about **Surface Water, UF, RO applications** please visit our website.
You can use the QR code on the right to access online information about the application.

www.filternox.com/**#filtration**

Sea Water

The size of dirt particles existing in sea water varies widely. Therefore sea water filtration needs more care than other fluids. A very special filtration solution is required to remove particles from 10 mm at one end of the spectrum down 50 microns particles at the other. It requires filtration both coarse and fine particles at the same time.

Filternox® offers special models, KFH, KTW and KQR which have both coarse and fine filtration stages in one body and both featuring an independent automatic self-cleaning system.

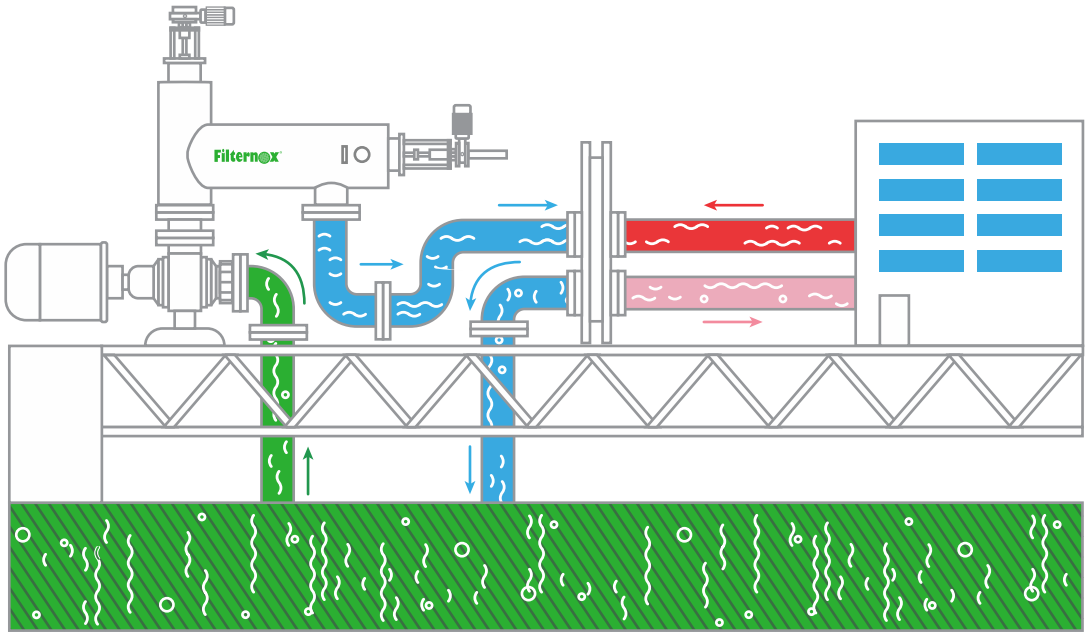
Filternox® Automatic Self-Cleaning Filters are used for sea water filtration on oil platforms, the protection of heat exchangers, ultra filtration and Reverse Osmosis units as well as recreational usages.

Filternox® Automatic Self-Cleaning Filters are used for sea water filtration on oil platforms, the protection of heat exchangers, ultra filtration and reverse osmosis units as well as recreational usages.

Another important consideration in the filtration of sea water is the corrosive effect. **Filternox®** offers the best permanent solution against corrosion with a rubber coating over its stainless steel body.

Working Process

- Unfiltered Water
- Filtered Water
- Sea
- Hot Water
- Cooled Water



Recommended Products for This Application

- SPT-WBV-MR
- KFH-WBVV-MR
- KQR-VMR

For further information about **Sea Water applications** please visit our website.
You can use the QR code on the right to access online information about the application.

www.filternox.com/**#filtration**

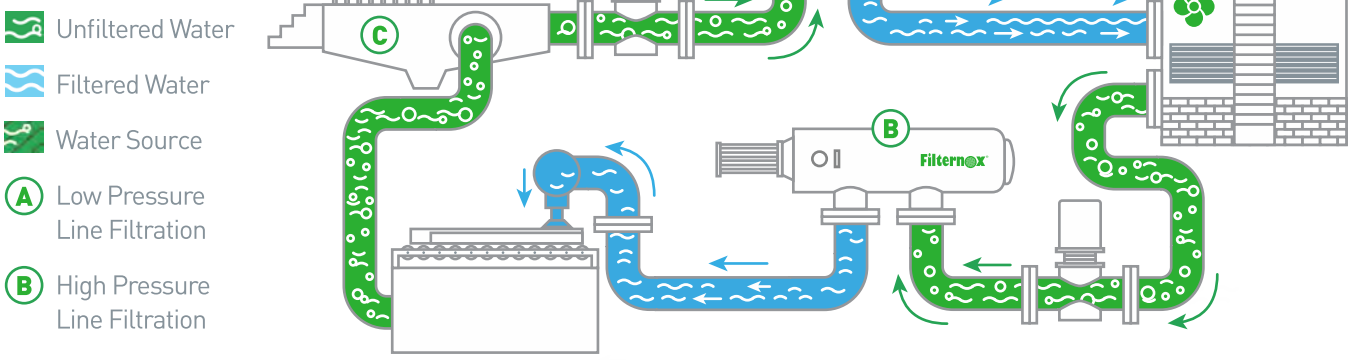
Steel Industry and Nozzle Protection

The quality of cooling water is crucial for the manufacturing of high quality steel. If cooling water contains particles which clog the spray nozzles, this will lower the quality of the end product. This may also lead to serious losses in production due to the unscheduled shut down of production lines.

Filternox® Automatic Self-Cleaning Filters, by the removal of particles contained in the cooling water, provide a perfect solution to prevent clogging of the nozzles and to maintain continuous production.

In addition, **Filternox®** special "high energy back-flushing system" avoids screen blockages from oil and grease in the cooling water of the steel industry.

Working Process



Recommended Products for This Application

- SPT-MR
- PFH-MR
- PFH
- SPT-WBV-MR
- CFH-MR

For further information about **Steel Industry and Nozzle Protection applications** please visit our website.
You can use the QR code on the right to access online information about the application.

www.filternox.com.tr **/#filtration**

Irrigation

The reduction of available fresh water sources has become a major problem in recent years. The consequent reduction in water volume has also increased the concentration of contaminants and pollution. Because of this problem, modern irrigation systems, using either underground or surface water are requiring more efficient filtration systems.

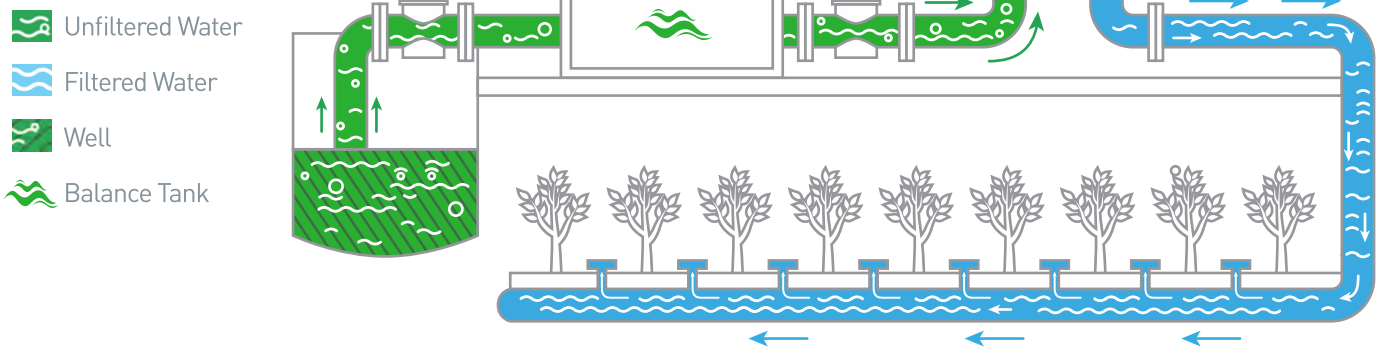
Filternox® Automatic Self-Cleaning Filters protect irrigation and fertilizing systems from all kind of particles and ensure years of continued operation without the clogging of drippers, sprinklers, etc.

Filternox® is the perfect solution for golf courses, agriculture, gardening and various applications wherever water economy is needed.

Filternox® Automatic Self-Cleaning Filters are equipped with a special hydraulic control system which triggers the back-flush without requiring any extra energy other than the pressure of the water. With this hydraulic control system there is not any interruption of the flow during the back-flush.

Filternox® offers also double stage automatic self-cleaning models to be implemented directly to the surface water ahead of the irrigation system with few extra costs.

Working Process



Recommended Products for This Application

- PFH & PFH-MR
- SFH-P & SPT-MR
- SPT-WBV-MR

For further information about **Irrigation applications** please visit our website.
You can use the QR code on the right to access online information about the application.

www.filternox.com **/#filtration**

Well Water

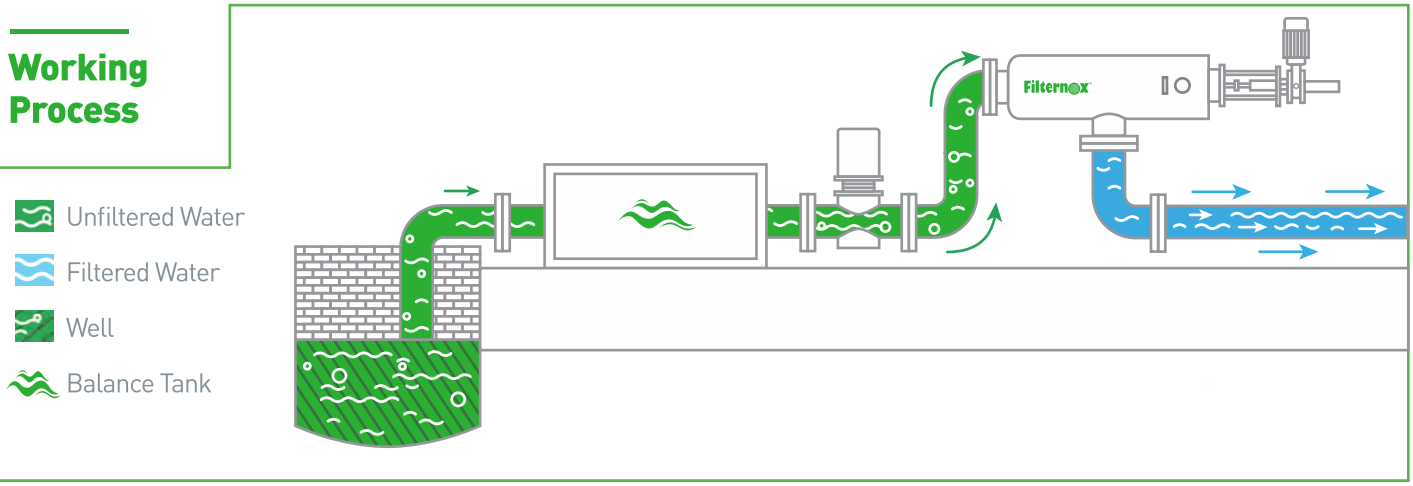
Filtration of well water is becoming one of the most important forms of filtration in the environmentally changing world.

High carbon emissions along with the increasing greenhouse effect have dramatically reduced underground water supplies. This in turn, increases the amount of both organic and inorganic pollutant particles in the well water that is pumped through pipelines and other systems, creating the need of filtration for well water.

Along with this, fluctuations in weather patterns have limited the availability of surface water in certain locations, increasing the demand for supplies of well water. As a result, the filtration of well water is becoming a very important challenge in today's environment.

Filternox® provides an effective filtration of well water while minimizing the operational costs of many applications.

Working Process



Recommended Products for This Application

- SPT & SPT-MR
- PFH & PFH-MR
- ACF-W-MR
- SPT-WBV-MR

For further information about **Well Water applications** please visit our website.
You can use the QR code on the right to access online information about the application.

www.filternox.com/**#filtration**

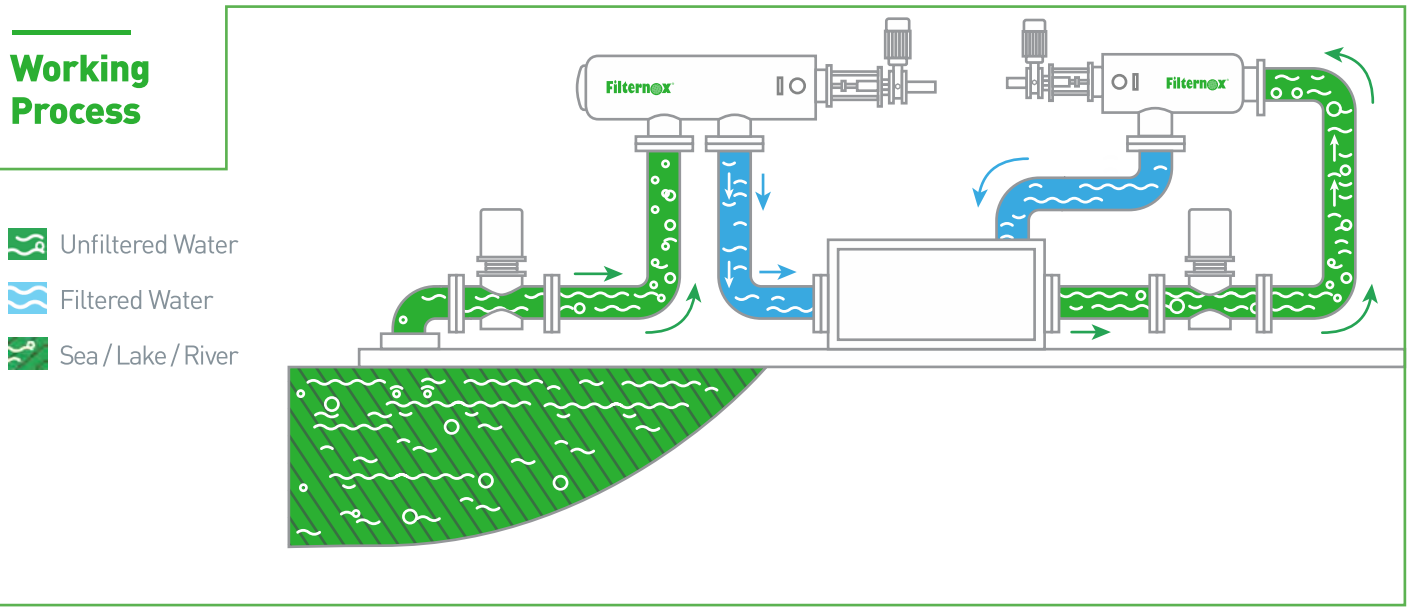
Fish Farm

Fish farms use either sea water or fresh water as a source of water for fish production. This water must be filtered to ensure optimum conditions for fish production.

The make-up water to feed the basins have to be filtered. In addition to that filtration, the water inside the tanks and basins should also be continuously filtered by side stream to maintain the necessary sanitary water conditions.

The complete stainless steel structure of **Filternox®** Automatic Self-Cleaning Filters provide the most convenient and hygienic filtration for the removal of suspended solids and particles for fish farm water.

Working Process



Recommended Products for This Application

- SFH-MR
- SPT-MR & SPECIAL SPT-MR
- PFH-MR
- SPT-WBV-MR

For further information about **Fish Farm applications** please visit our website.
You can use the QR code on the right to access online information about the application.

www.filternox.com/**#filtration**

Ballast Water

New regulations are required for almost all types of vessels to implement filtration systems of maximum 50 microns followed by a UV system for disinfection of ballast water. Filternox® engineers recently developed a new model designed specifically for this application.

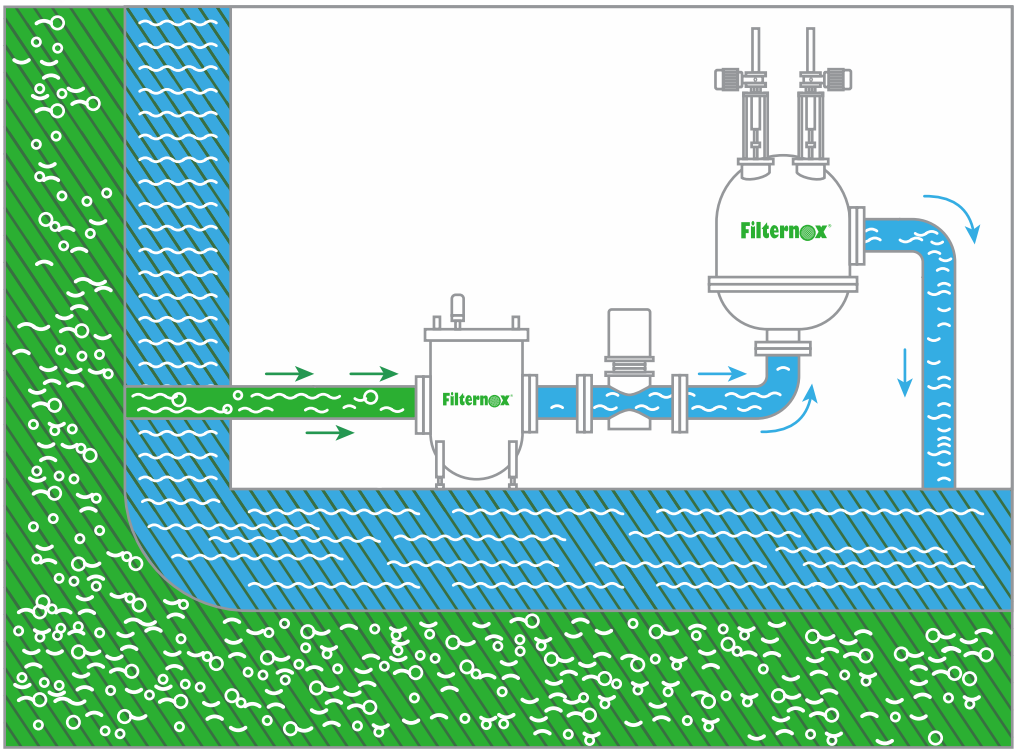
As the ballast system requires high flows and to meet the 50 micron filtration requirement, filtration surface areas have to be large. The technology used in **Filternox®** designed for ballast water filtration applications provide the optimum surface area for a successful result.

Filternox® offers also models that combine two stage filtration within one unit with automatic self-cleaning of the coarse screen structure integrated into the fine screen body, making it ideal for the filtration of the ballast water.

For a more complete and safer filtration, **Filternox®** can also implement the basket type filters to eliminate large particles and to protect the pump.

Working Process

- Unfiltered Water
- Filtered Water
- Sea
- Ballast Water



Recommended Products for This Application

- SPECIAL SPT-MR
- SPT-WBV-MR
- KFH-WBVV-MR
- CFH-MR

For further information about **Ballast Water applications** please visit our website.
You can use the QR code on the right to access online information about the application.

www.filternox.com/**#filtration**

Application Examples


ユニット
NO.2ろ過装置

Filternox®
AUTOMATIC SELF-CLEANING FILTERS

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www.filternox.com

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