



TERS YIKAMA BASINCI
BACK-FLUSHING PRESSURE

1BAR

description

AutoFlush® Automatic Plastic Disc Filter is constructed by assembling many tiny synthetic disc manufactured from polypropylene material on filter body with telescopic structure. When synthetic discs arranged one-on-other are centralized around within telescopic filter body, center of discs forms a hollow disc. They are designed to perform a deep filtration based on desired micron level found on both sides of synthetic discs and inter-sectioning of channels designed in crosswise manner. Most outstanding advantage of AutoFlush® Automatic Plastic Disc filter is that automatically self cleans the filter when it is obstructed.

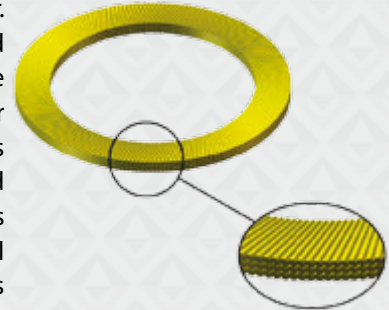
operating principle

AutoFlush® Automatic Plastic Disc Filter operates in two different modes including filtration process and back flushing process. In back flushing process of AutoFlush® Automatic disc filter, internal mechanism of filter, where synthetic discs are assembled, is automatically flushed. During cleaning process, no need for assembly and disassembly cycle of filter's internal mechanism ensures continuous operation.

filtration process



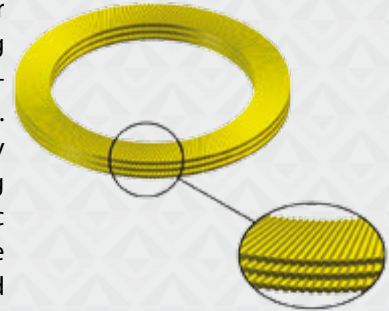
Many synthetic discs assembled on telescopic filter body create a hollow cylinder. Those discs assembled on the filter body are compressed using spring force and water pressure. Due to above mentioned arrangement of discs, many crosswise water channels intersecting each other are formed between two discs. Polluted water supplied from inlet pipe of AutoFlush® Automatic Disc Filter is transferred on discs due to cyclone effect arising from centrifuge wing found on filter body. The polluted water supplied as mentioned above passes from crosswise water channels and it is filtered depending on filtration degree. Particles with diameter larger than channel diameter of the disc attach to exterior surface of discs. Filtered clean water progresses from hollow section of discs and thus, clean water is supplied to the system from clean water pipe of the filter. As pressure resistance of discs involved in AutoFlush® automatic plastic disc filters shall cause no change on filter surface, efficiency to trap solid particles will be very high.



back-flushing process

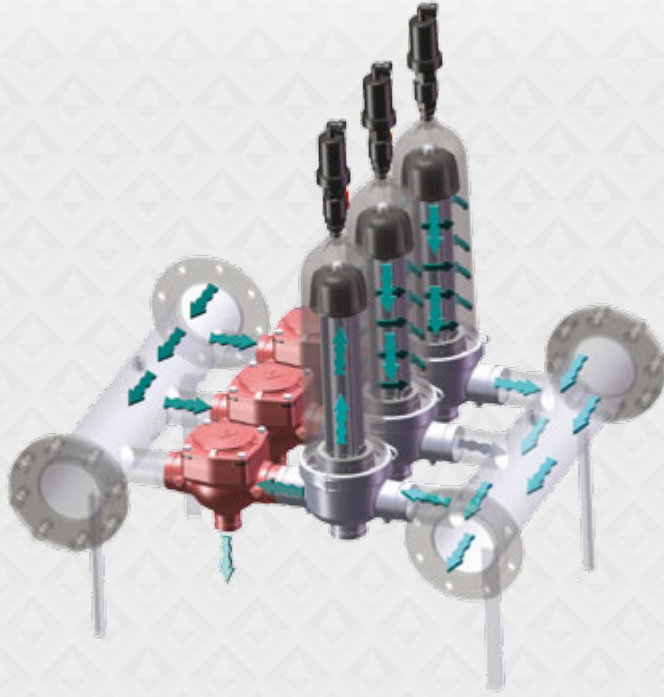


Throughout filtration process, synthetic discs will be obstructed at a particular time due to filtration of polluted water containing particulate matter. Back flushing process of AutoFlush® automatic disc filters connected parallel to the system is time-dependently started using pressure gradient (DP) sensor or a control de- Grooved. The filtered clean water is supplied in reverse manner along telescopic filter body from the clean water pipe of AutoFlush® automatic disc filter. Pressure of back flushing water elongates distance between discs by removing spring force on the synthetic discs. Pressure clean water is sprayed from nozzles on filter body to the crosswise channels of discs. Due to spray of pressure clean water, particles previously attached to the channels of synthetic discs are cleaned and discharged. Back flushing process is completed within short time such as 15-20 seconds. Thus, coupious amount of water is not used for flushing AutoFlush® automatic disc filter, as the case for other filters. At the end of the back flushing process, filter is shifted to filtration position.





AutoFlush® automatic plastic disc filter



description

Back flushing control valves adjusting filtration and back flushing positions of AutoFlush® automatic disc filters connected parallel to the manifold collector system are programmed by differential pressure sensor (DP) for pressure and by control device for time-dependent parameters.

disc filter degree measures

Mesh No	Micron	Effective Filtering Surface (%)	Disc Color
80	200	%39	Dark Blue
120	130	%39	Red
150	100	%40	Yellow

applications

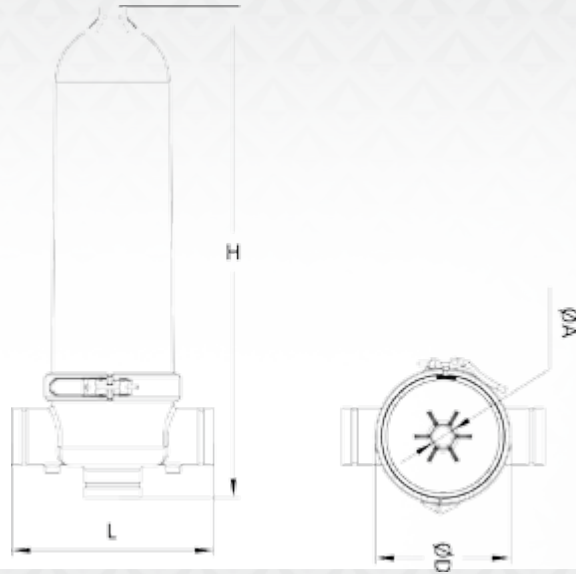
- Filtration of well water
- Filtration of river, lake and reserve water
- Filtration of applications such as process water and cooling water
- Upwards the ultra-filtration systems
- Agricultural drip and micro-irrigation systems
- For recreational irrigation system practices

specifications

- Back flushing process is completed in automated manner.
- Water supply is not interrupted during back flushing process.
- As it can be cleaned within short time, very low amount of water is used in back flushing process.
- Due to discs with varying dimensions, desired filtration degree is ensured.
- Maintenance during operation is very easy.
- As it is used in modular filter systems, filtration at desired rates can be performed.
- Due to body and framework reinforced against corrosion, it has long operation life.



dimension and weight



available models and recommended flow rates

Model	ØA	ØD	H	L	ağırlık	Filtration Area (cm ²)	Recommended Flow Rate (m ³ /h)
Auto	1"	214 mm	773 mm	318 mm	9 kg	1520 cm ²	25-35 m ³ /h
Manual	1"	214 mm	773 mm	318 mm	9 kg	1520 cm ²	25-35 m ³ /h

technical specifications

Max. Operating Pressure	Min. Back-Flushing Pressure	Min. Back-Flushing Flow Rate	Temperature	Connection
8 (bar) 120 (psi)	1 (bar) 14 (psi)	9 – 11 m ³ /h	0 °C – 60 °C (32 °F – 132 °F)	3" (80 mm) Grooved End

3" - 80mm
Grooved End



3" - 80mm
Grooved End

3" - 80mm
Grooved End



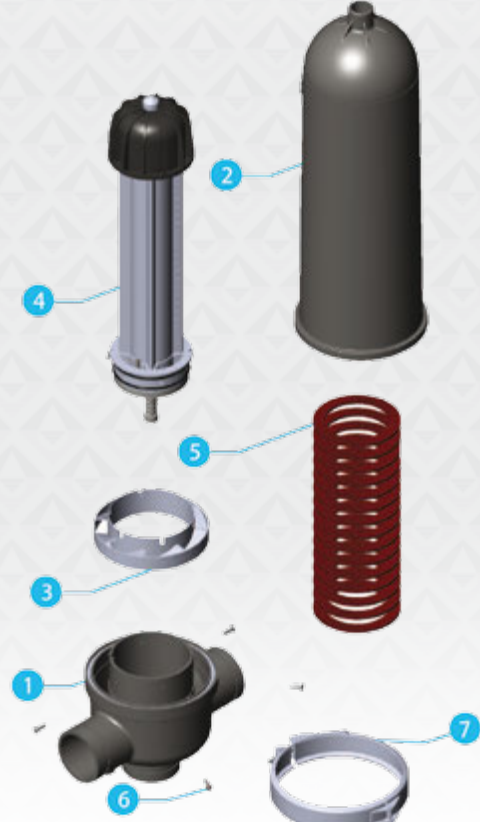
AutoFlush®

automatic plastic disc filter

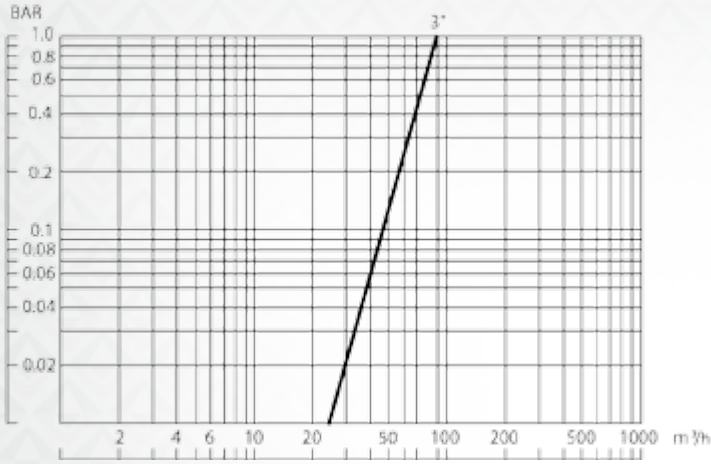


material list

part no	part name	material
1	Body	Polyamid (PA6.6 %30 GFR)
2	Lid	Polyamid (PA6.6 %30 GFR)
3	Hydrocyclone Wing	PET – P
4	Manual Filter Frame	PET – P
5	Disk	Nylon Reinforced PP
6	Bolt	8.8Js-500 Steel
7	Collar	SST



head loss chart



available models and recommended flow rates

Modules pcs	Recommended Flow (m³/h)	Min. Back-Flushing Flow Rate (m³/h)	Max. Operating Pressure (bar)	Min. Back-Flushing Pressure (1 bar)	Filtering Area (cm²)	Connection
2 modül	60 m³/h	18 m³/h	8 bar	1 bar	3040 cm²	Grooved End
3 modül	90 m³/h	27 m³/h	8 bar	1 bar	4560 cm²	Grooved End
4 modül	120 m³/h	36 m³/h	8 bar	1 bar	6080 cm²	Grooved End
5 modül	150 m³/h	45 m³/h	8 bar	1 bar	7600 cm²	Grooved End
6 modül	180 m³/h	54 m³/h	8 bar	1 bar	9120 cm²	Grooved End

* Please consult us for higher flow rate systems.



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- Controller, connection equipments, air valves and pressure gauges are included in the system.
- Fertilizer kit and fertilize tank are not included in the system.
- Package: Wooden crate

automatic disc filter system

Code	Collector Size (inch)	Disc Filter Quantity	Connection Type	Recommended Flow Rate (m ³ /h)
ADF-02	4	2	VIC	50
ADF-03	4	3	VIC	75
ADF-04	5	4	VIC	100
ADF-05	6	5	VIC	125
ADF-06	6	6	VIC	150
ADF-07	8	7	VIC	175
ADF-08	8	8	VIC	200



TERS YIKAMA BASINCI
BACK-FLUSHING PRESSURE

1BAR

- Controller, connection equipments, air valves, pressure gauges, fertilizer tank and quick pressure relief valve(QR) are included in the system.
- Package: Wooden crate

hydrocyclone+fertilization+automatic disc filter system

Code	Collector Size (inch)	Disc Filter Quantity	Hydrocyclone Quantity	Fertilizer Tank Quantity	Connection Type	Recommended Flow Rate (m ³ /h)
A-4H-100G-P2	4	2	1-4"	100	VIC.	50
A-4H-100G-P3	4	3	1-4"	100	VIC.	75
A-4H-100G-P4	5	4	1-5"	100	VIC.	100
A-4H-100G-P5	6	5	1-6"	200	VIC.	125
A-4H-100G-P6	6	6	1-6"	200	VIC.	150
A-4H-100G-P7	8	7	2-5"	200	VIC.	175
A-4H-100G-P8	8	8	2-5"	340	VIC.	200



AutoFlush®

semi-auto disc filter systems

1BAR

TERS YIKAMA BASINCI
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- Butterfly valves, ball valves, connection equipments, air valves and pressure gauges are included in the system.
- Fertilizer kit and fertilize tank are not included in the system.
- Package: Wooden crate



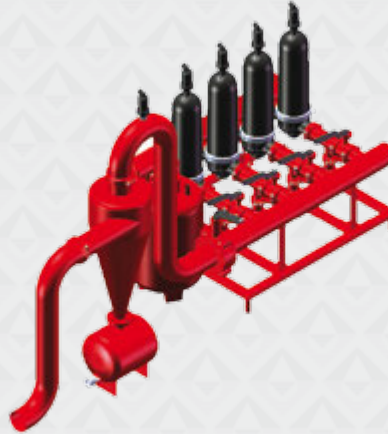
semi-auto disc filter system

Code	Collector Size (inch)	Disc Filter Quantity	Connection Type	Recommended Flow Rate (m ³ /h)
S MDF-02	4	2	VIC	50
S MDF-03	4	3	VIC	75
S MDF-04	5	4	VIC	100
S MDF-05	6	5	VIC	125
S MDF-06	6	6	VIC	150
S MDF-07	8	7	VIC	175
S MDF-08	8	8	VIC	200

1BAR

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- Butterfly valves, ball valves, connection equipments, air valves, pressure gauges, fertilizer tank and quick pressure relief valve(QR) are included in the system.
- Package: Wooden crate



hydrocyclone+fertilization+semi-auto disc filter system

Code	Collector Size (inch)	Disc Filter Quantity	Hydrocyclone Quantity	Fertilizer Tank Quantity	Connection Type	Recommended Flow Rate (m ³ /h)
SM-4H-100G-P2	4	2	1-4"	100	VIC.	50
SM-4H-100G-P3	4	3	1-4"	100	VIC.	75
SM-4H-100G-P4	5	4	1-5"	100	VIC.	100
SM-4H-100G-P5	6	5	1-6"	200	VIC.	125
SM-4H-100G-P6	6	6	1-6"	200	VIC.	150
SM-4H-100G-P7	8	7	2-5"	200	VIC.	175
SM-4H-100G-P8	8	8	2-5"	340	VIC.	200



manual back-flushing double disc filter system



Code	Collector Size inch	Disc Filter Quantity	Connection Type	Recommended Flow Rate (m ³ /h)
S MDF-ED-02	5	2x4"	VIC	60 - 120
S MDF-ED-03	6	3x4"	VIC	120 - 150
S MDF-ED-04	6	4x4"	VIC	150 - 180

- Butterfly valves, ball valves, connection equipments, air valves and pressure gauges are included in the system.
- Fertilizer kit and fertilize tank are not included in the system.

hydrocyclone+ manual back-flushing double disc filter system



Code	Collector Size inch	Disc Filter Quantity	Hydrocyclone Quantity	Connection Type	Recommended Flow Rate (m ³ /h)
S MDF-ED-3H-P2	5	2x4"	2 x 3"	VIC	60 - 120
S MDF-ED-4H-P3	6	3x4"	2 x 4"	VIC	120 - 150
S MDF-ED-4H-P4	6	4x4"	2 x 4"	VIC	150 - 180

- Butterfly valves, ball valves, connection equipments, air valves, pressure gauges and quick pressure relief valve(QR) are included in the system.
- Fertilizer kit and fertilize tank are not included in the system.

manual back-flushing disc filter system



Code	Collector Size inch	Disc Filter Quantity	Connection Type	Recommended Flow Rate (m ³ /h)
S MDF-M-02	4	2	VIC	40 - 60
S MDF-M-03	4	3	VIC	60 - 90
S MDF-M-04	5	4	VIC	80 - 120
S MDF-M-05	6	5	VIC	100 - 150
S MDF-M-06	6	6	VIC	120 - 180

- Butterfly valves, ball valves, connection equipments, air valves and pressure gauges are included in the system.
- Fertilizer kit and fertilize tank are not included in the system.
- Package: Wooden crate

hydrocyclone+ manual back-flushing disc filter system



Code	Collector Size inch	Disc Filter Quantity	Hydrocyclone Quantity	Connection Type	Recommended Flow Rate (m ³ /h)
S MDF-M-4H-P2	4	2	1 - 4"	VIC	40 - 60
S MDF-M-4H-P3	4	3	1 - 4"	VIC	60 - 90
S MDF-M-5H-P4	5	4	1 - 5"	VIC	80 - 120
S MDF-M-6H-P5	6	5	1 - 6"	VIC	100 - 150
S MDF-M-6H-P6	6	6	1 - 6"	VIC	120 - 180

- Butterfly valves, ball valves, connection equipments, air valves, pressure gauges and quick pressure relief valve(QR) are included in the system.
- Fertilizer kit and fertilize tank are not included in the system.