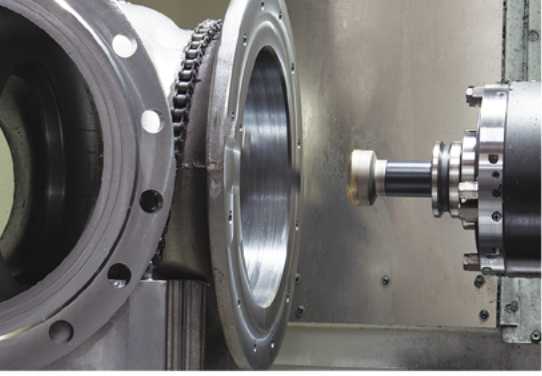




Filtration Systems





ARMAS[®]

Valve & Filtration

armas.com.tr



company profile

ARMAŞ A.Ş. was founded in 1998 to produce valves for potable water and agricultural irrigation systems. It has become one of the leader establishments of its sector in a short time thanks to ARMAŞ makes valves.

ARMAŞ A.Ş. has given high quality services with economical prices to his costumers in industry, potable water networks and agricultural irrigation systems by means of Hydraulic Control Valves, Automatic Filtration Systems, Gate Valves, Ball Valves, Strainers, Check Valves, Air Valves and Hydrants he produced. Our company who does not sacrifice quality in production has used ISO 9001-2000 Quality Management System since 2000. In the scope of importance we gave for both human and environment, we have developed our institutional structure day by day with ISO 14001 Environmental Management System Certificate and TS 18001 Occupational Healthy and Safety Certificate since 2007.

Our products have been subjected to pressure and performance tests before sales by Quality Control Department and technical support services have been given at the installation, operation and maintenance stages after sales by our experienced engineers.

Our company who have continued R&D investments in order to present more quality and reliable products to his costumers, will continue its costumer-satisfaction focused services with increasing achievements in future thanks to his dynamic staff, powerful brand and permanent developing structure.



ARMAS[®]
Valve & Filtration

armas.com.tr

filtration systems



table of contents

ARMAŞ Filtration	
Filtration	4
AutoFlush® Automatic Screen Filter	5
AutoFlush® Automatic Screen Filter Systems	10
AutoFlush® Automatic Plastic Disc Filter	12
AutoFlush® Automatic Plastic Disc Filter Systems	16
Manual Disc Filter Systems	18
Gravel (Media) Filter - 1000 Series	19
Gravel (Media) Filter Systems	23
Hydrocyclone (Sand Seperator) - 2000 Series	26
Suction Filter	30
Metal Screen-Disc Filters - 3000 Series	32
Metal Screen-Disc Filter Systems	35
Fertilizer Tank - 5000 Series	36
Back-Flushing Valves	39



Obstruction of sprinklers and drippers is one of most significant problems encountered in irrigation systems. Most common reason of the obstruction is about minerals, organic and inorganic materials found in the water resource. Process of filtering water in the irrigation system is referred as filtration. Filtration is the best protection method against avoiding entrance/obstruction of dripper, sprinkler, hydrant and other similar equipments used in the irrigation system by sediments. Because, process of finding the obstructed dripper, to clean or replace the dripper is very costly and laborious. Therefore, filtration is most significant control unit of an irrigation system.

filter selection table

Water Source	Type of Filter to be used
Network Water	Screen Filter Hydrocyclone Disc Filter
Well Water	Disc Filter Hydrocyclone Screen Filter
River or Stream Water	Disc Filter Gravel Filter and Disc Filter System Gravel Filter and Screen Filter System Gravel Filter and Hydrocyclone System
Lake or Pool Water	Disc Filter Gravel Filter and Disc Filter System Gravel Filter and Screen Filter System Gravel Filter and Hydrocyclone System
Spring or Artesian Well Water	Screen Filter Hydrocyclone Disc Filter
Water Supply containing Organic Material	Disc Filter Gravel Filter and Disc Filter System Gravel Filter and Hydrocyclone System
Water Supply containing sand	Screen Filter Hydrocyclone Disc Filter

type of filter to be used

1. Sand separators (Hydrocyclones)
2. Screen Filter
3. Disc Filters
4. Media Tanks for Sand-Gravel Filters

mesh and disc numbers based on particulate matter dimension classification

Particle Class	Particle Size (mm)	Screen -Disc Number (mesh)	Screen -Disc Number (micron)
Very Rough Sand	1.0 – 2.0	10 – 18	1500 – 850
Rough Sand	0.50 – 1.0	18 – 35	850 – 420
Intermediary Sand	0.25 – 0.50	35 – 60	420 – 250
Fine Sand	0.10 – 0.25	60 – 160	250 – 100
Very Fine Sand	0.05 – 0.10	160 – 270	100 – 50
Silt	0.002 – 0.05	270 – 400	50 – 30
Clay	< 0.002	> 400	> 30

calculation of approximate mesh and disc diameter

$$\text{mesh} = \frac{15000}{d} \quad d \text{ (Micron)}$$

Sample
d = 250 micron (=0.25 mm)

$$\text{mesh} = \frac{15000}{250} = 60 \text{ mesh}$$

$$d = \frac{15000}{60} = 250 \text{ micron}$$

filtration degree conversion table

Micron	25	30	40	50	80	100	130	150	200	400	800	1500	3000
mm	0,025	0,03	0,04	0,05	0,08	0,1	0,13	0,15	0,2	0,4	0,8	1,5	3,0
Mesh	650	550	400	300	200	150	120	100	80	40	20	10	5



AutoFlush®

automatic screen filter



description

AutoFlush® is the ideal solution for agricultural and municipal filtration due to its large filtration area, reliable operation mechanism and simple structure. AutoFlush® works on differential pressure and cleans itself automatically without any external intervention. AutoFlush® has electronically activated models besides hydraulically controlled models. Due to suction nozzles, cleaning is achieved with little water consumption. Besides the standart 130 micron filter size, different screen sizes are available for different dirt levels.



AutoFlush® series

electric activated automatic screen filter



VE Series



HE Series

hydraulic controlled automatic screen filter



VH Series

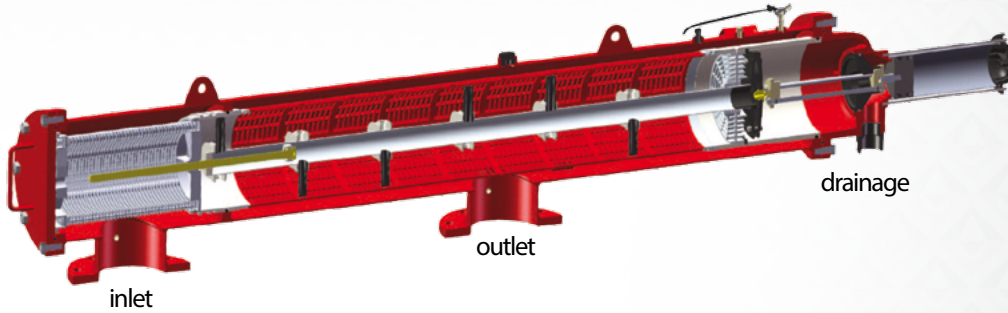


HH Series



operation principle

AutoFlush[®] series can do automatic cleaning without any need for external power supply or optionally with electrical activation from a distance. The filter screen can achieve filtration rates from 25 m³/h to 180 m³/h. Standart filter screen size is 130 microns and inlet/exit pipe diameters are available between 2" to 8".



filtration method

Filtration starts as the dirty water enters the coarse screen from the inlet. In order to protect the fine filter, large particles are filtered on the coarse filter. Water then passes through the fine filter, particals are captured by the fine filter, and clean water leaves from the outlet. Particals gradually accumulating on the fine filter, increases the pressure difference. Once the pressure difference exceeds the preset pressure differential value, filter automatically starts to clean itself.

cleaning method

Once the pressure difference exceeds the preset pressure differential value, hydraulic control unit opens the drainage valve and the cleaning cycle starts. Particals accumulated on the fine filter, are sucked by the nozzles and the turbine and discharged from the drainage pipe. Thus cleaning operation is achieved. Filtration is not interrupted and AutoFlush[®] continues filtration during the cleaning cycle.

features

- Most efficient filtration method
- Reliability: efficient filtration at various flow rates
- Low head loss
- Automatic self-cleaning system
- Uninterrupted filtration during self-cleaning
- Low maintenance cost

applications

- Agricultural applications
- Industrial applications
- Municipal applications
- Water management
- Cooling towers



AutoFlush®

automatic screen filter



Material List (horizontal)

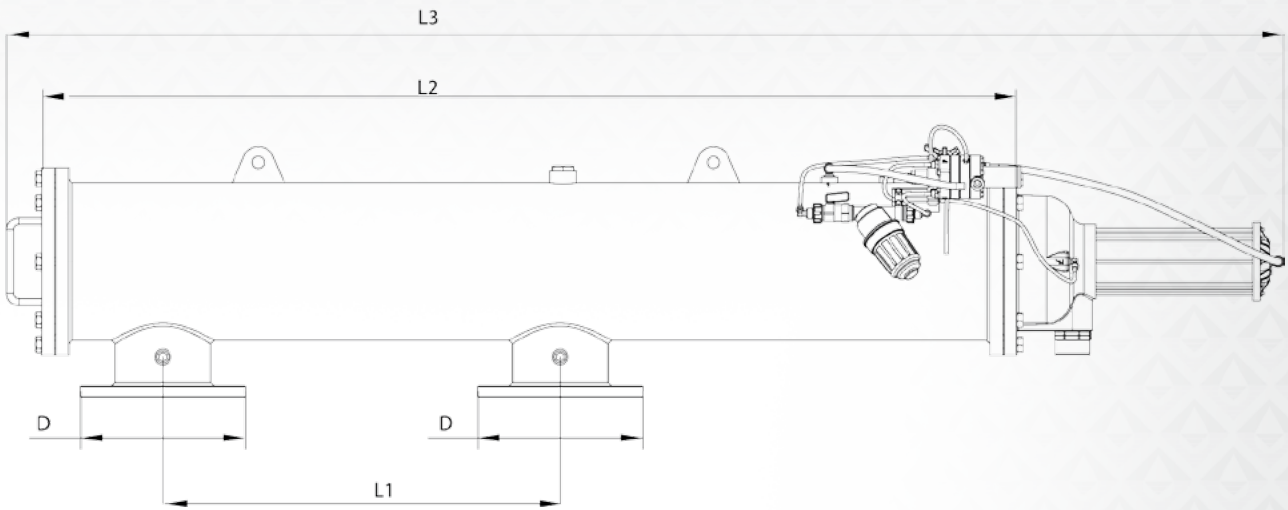
Part No	Part Name
1	Body
2	Bonnet and piston mechanism
3	Screen and filter group
4	Suction nozzle set
5	Coarse filter
6	Bonnet
7	Hydraulic control unit
8	Stainless steel nut
9	Stainless Steel Bolt



material list (vertical)

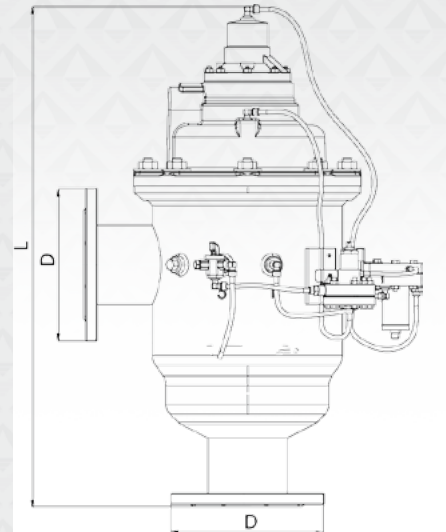
Part No	Part Name
1	Body
2	Bonnet and piston mechanism
3	Screen and filter group
4	Suction nozzle set
5	Hydraulic control unit
6	Stainless Steel Nut
7	Stainless Steel Washer





available model dimensions

Model	D	L	L1	L2	L3
	inch	mm	mm	mm	mm
VH-25	2"	630	-	-	-
VH-40	3"	623	-	-	-
VH-60	3"	727	-	-	-
VH-80	4"	720	-	-	-
HH-100	4"	-	900	1894	2400
HH-120	5"	-	900	1894	2400
HH-160	6"	-	900	1894	2400
HH-180	8"	-	900	1894	2400

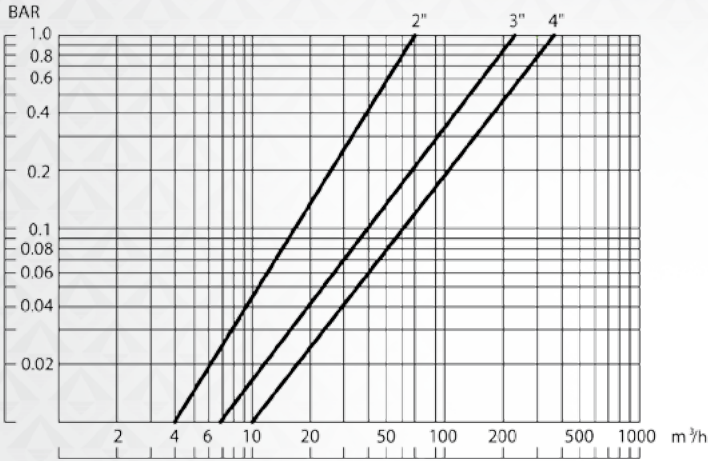


available models

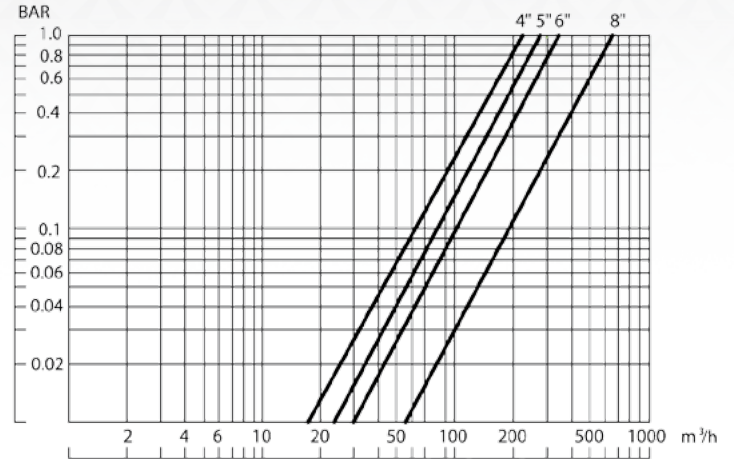
Filter Model Code	VH-25	VH-40	VH-60	VH-80	HH-100	HH-120	HH-160	HH-180
	VE-25	VE-40	VE-60	VE-80	HE-100	HE-120	HE-160	HE-180
Max. Flow Rate	25 m ³ /h	40 m ³ /h	60 m ³ /h	80 m ³ /h	100 m ³ /h	120 m ³ /h	160 m ³ /h	180 m ³ /h
Inlet/Outlet Dimension	2"	3"	3"	4"	4"	5"	6"	8"
Standard Filtration Degree	130 micron	130 micron	130 micron	130 micron	130 micron	130 micron	130 micron	130 micron
Min. Operation Pressure	2,5 bar	2,5 bar	2,5 bar	2,5 bar	2,5 bar	2,5 bar	2,5 bar	2,5 bar
Max. Operation Pressure	8 bar	8 bar	8 bar	8 bar	8 bar	8 bar	8 bar	8 bar
Max. Operation Temperature	60°C	60°C	60°C	60°C	60°C	60°C	60°C	60°C
Cleaning Cycle Time	10-16 sn	10-16 sn	10-16 sn	10-16 sn	15-22 sn	15-22 sn	15-22 sn	15-22 sn
Cleaning Criteria	Differential Pressure (DP) 0.5 bar	Differential Pressure (DP) 0.5 bar	Differential Pressure (DP) 0.5 bar	Differential Pressure (DP) 0.5 bar	Differential Pressure (DP) 0.5 bar	Differential Pressure (DP) 0.5 bar	Differential Pressure (DP) 0.5 bar	Differential Pressure (DP) 0.5 bar
Filtration Area	500 cm ²	500 cm ²	1000 cm ²	1000 cm ²	4500 cm ²	4500 cm ²	4500 cm ²	4500 cm ²



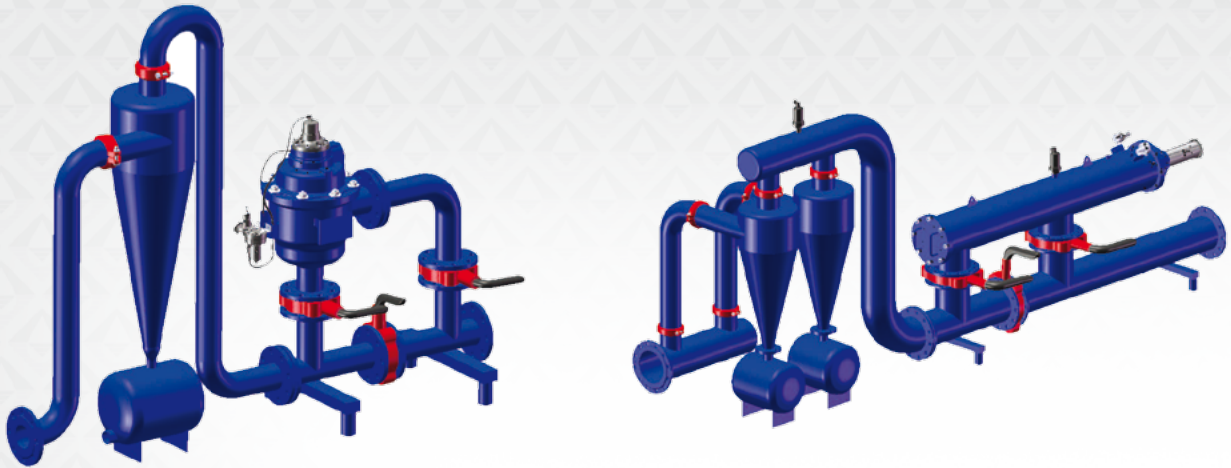
head loss chart (vertical)



head loss chart (horizontal)



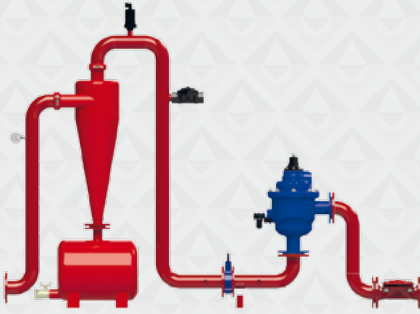
sample application



Model	Connection Size	Connection Type	Control Unit	Screen Degree
VH-80	4"	Flanged (F)	Hydraulic	130 micron
HE-120	6"	Flanged (F)	Electric	130 micron



hydraulic controlled AutoFlush® (vertical)+hydrocyclone+PS+collector



Code	Connection Size (inch)	Hydrocyclone Quantity	Filtration Area (cm ²)	Capacity (m ³ /h)
VH-C-PS-2H-0225	2"	1x2"	500	25
VH-C-PS-3H-0340	3"	1x3"	500	40
VH-C-PS-3H-0350	3"	1x3"	1000	50
VH-C-PS-4H-0475	4"	1x3"	1000	75

- Grooved End Clamps, Hydrocyclone, Air Valves, Pressure Gauges, Ball Valves, Connection Equipments, Quick Pressure Relief Valve (QR) and Pressure Sustaining Valve (PS) are included in the system
- Fertilizer kit and tank are not included in the system.
- Package: Wooden Crate

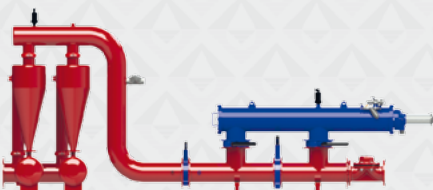
hydraulic controlled AutoFlush® (horizontal)+hydrocyclone+PS+collector



Code	Connection Size (inch)	Hydrocyclone Quantity	Filtration Area (cm ²)	Capacity (m ³ /h)
HH-C-PS-4H-04100	4"	1x4"	4500	100
HH-C-PS-5H-05120	5"	1x5"	4500	120
HH-C-PS-6H-06160	6"	1x6"	4500	160
HH-C-PS-5H-08180	8"	2x5"	4500	180

- Grooved End Clamps, Hydrocyclone, Air Valves, Pressure Gauges, Ball Valves, Connection Equipments, Quick Pressure Relief Valve (QR) and Pressure Sustaining Valve (PS) are included in the system.
- Fertilizer kit and tank are not included in the system.
- Package: Wooden Crate

hydraulic controlled AutoFlush® (horizontal)+hydrocyclone+PS+ By Pass collector

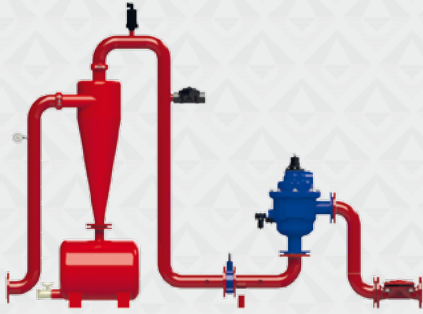


Code	Connection Size (inch)	Hydrocyclone Quantity	Filtration Area (cm ²)	Capacity (m ³ /h)
HH-C-B-PS-4H-04100	4"	1x4"	4500	100
HH-C-B-PS-5H-05120	5"	1x5"	4500	120
HH-C-B-PS-6H-06160	6"	1x6"	4500	160
HH-C-B-PS-5H-08180	8"	2x5"	4500	180

- Grooved End Clamps, Hydrocyclone, Air Valves, Pressure Gauges, Ball Valves, Connection Equipments, Quick Pressure Relief Valve (QR) and Pressure Sustaining Valve (PS) are included in the system.
- Fertilizer kit and tank are not included in the system.
- Package: Wooden Crate



electric activated AutoFlush® (vertical)+hydrocyclone+PS+collector



Code	Connection Size (inch)	Hydrocyclone Quantity	Filtration Area (cm ²)	Capacity (m ³ /h)
VE-C-PS-2H-0225	2"	1x2"	500	25
VE-C-PS-3H-0340	3"	1x3"	500	40
VE-C-PS-3H-0350	3"	1x3"	1000	50
VE-C-PS-4H-0475	4"	1x3"	1000	75

- Grooved End Clamps, Hydrocyclone, Air Valves, Solenoid Valve, Pressure Gauges, Ball Valves, Connection Equipments, Quick Pressure Relief Valve (QR) and Pressure Sustaining Valve (PS) are included in the system.
- Fertilizer kit and tank are not included in the system.
- Package: Wooden Crate

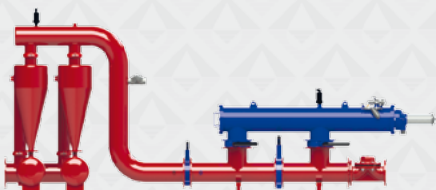
electric activated AutoFlush® (horizontal)+hydrocyclone+PS+collector



Code	Connection Size (inch)	Hydrocyclone Quantity	Filtration Area (cm ²)	Capacity (m ³ /h)
HE-C-PS-4H-04100	4"	1x4"	4500	100
HE-C-PS-5H-05120	5"	1x5"	4500	120
HE-C-PS-6H-06160	6"	1x6"	4500	160
HE-C-PS-5H-08180	8"	1x8"	4500	180

- Grooved End Clamps, Hydrocyclone, Air Valves, Solenoid Valve, Pressure Gauges, Ball Valves, Connection Equipments, Quick Pressure Relief Valve (QR) and Pressure Sustaining Valve (PS) are included in the system.
- Fertilizer kit and tank are not included in the system.
- Package: Wooden Crate

electric activated AutoFlush® (horizontal)+hydrocyclone+PS+ By Pass collector



Code	Connection Size (inch)	Hydrocyclone Quantity	Filtration Area (cm ²)	Capacity (m ³ /h)
HE-C-B-PS-4H-04100	4"	1x4"	4500	100
HE-C-B-PS-5H-05120	5"	1x5"	4500	120
HE-C-B-PS-6H-06160	6"	1x6"	4500	160
HE-C-B-PS-5H-08180	8"	1x8"	4500	180

- Grooved End Clamps, Hydrocyclone, Air Valves, Solenoid Valve, Pressure Gauges, Ball Valves, Connection Equipments, Quick Pressure Relief Valve (QR) and Pressure Sustaining Valve (PS) are included in the system.
- Fertilizer kit and tank are not included in the system.
- Package: Wooden Crate



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.

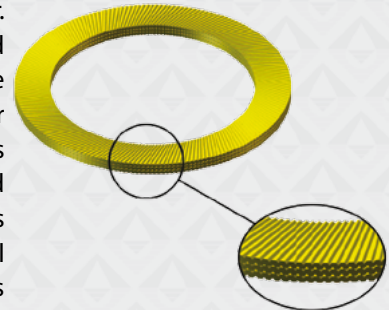
operating principle

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



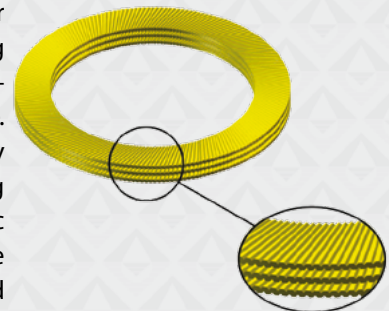
Many synthetic discs assembled on telescopic filter body create a hollow cylinder. Those discs assembled on the filter body are compressed using spring force and water pressure. Due to above mentioned arrangement of discs, many crosswise water channels intersecting each other are formed between two discs. 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

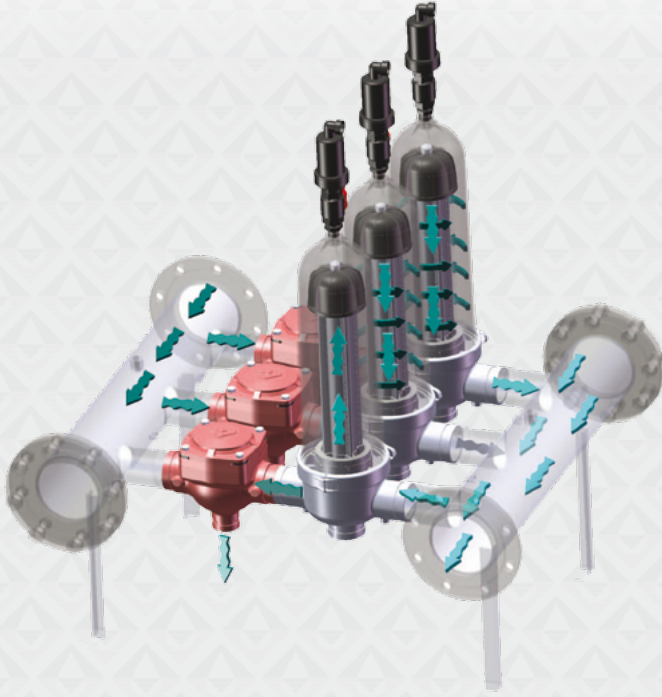


Throughout filtration process, synthetic discs will be obstructed at a particular time due to filtration of polluted water containing particulate matter. Back flushing process of AutoFlush® automatic disc filters connected parallel to the system is time-dependently started using pressure gradient (DP) 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, copious 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

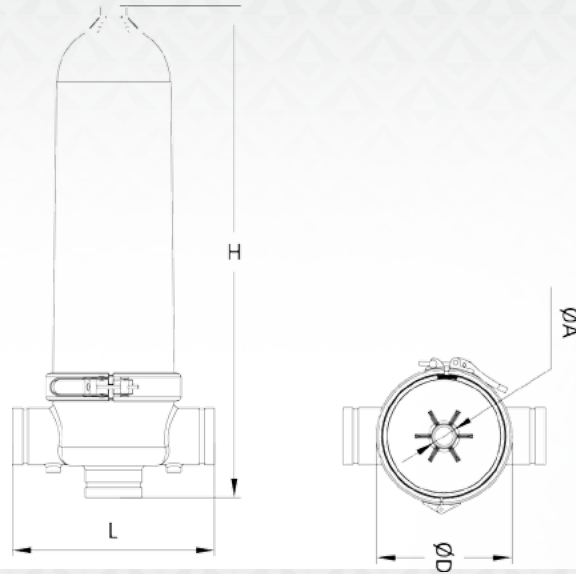
- Filtration of well water
- Filtration of river, lake and reserve water
- Filtration of applications such as process water and cooling water
- Upwards the ultra-filtration systems
- Agricultural drip and micro-irrigation systems
- For recreational irrigation system practices

specifications

- Back-flushing pressure is 1 bar.
- 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



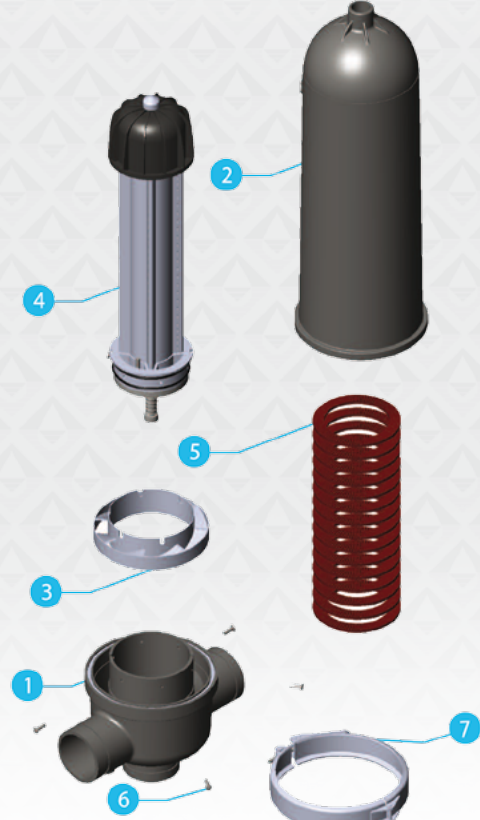
AutoFlush®

automatic plastic disc filter

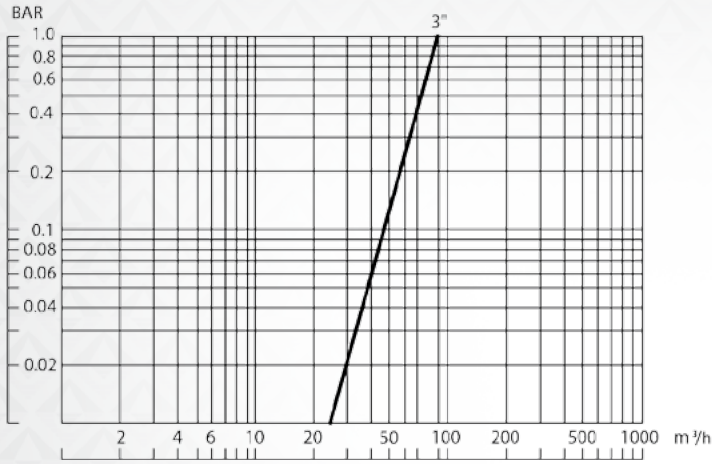


material list

part no	part name	material
1	Body	Polyamide (PA6.6 %30 GFR)
2	Lid	Polyamide (PA6.6 %30 GFR)
3	Hydrocyclone Wing	PET – P
4	Manual Filter Frame	PET – P
5	Disc	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.



**BACK-FLUSHING
PRESSURE**

1BAR

- 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

AutoFlush® automatic disc filter system

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



**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+AutoFlush® 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	Grooved End or Flanged	50
A-4H-100G-P3	4	3	1-4"	100	Grooved End or Flanged	75
A-4H-100G-P4	5	4	1-5"	100	Grooved End or Flanged	100
A-4H-100G-P5	6	5	1-6"	200	Grooved End or Flanged	125
A-4H-100G-P6	6	6	1-6"	200	Grooved End or Flanged	150
A-4H-100G-P7	8	7	2-5"	200	Grooved End or Flanged	175
A-4H-100G-P8	8	8	2-5"	340	Flanged	200



AutoFlush®

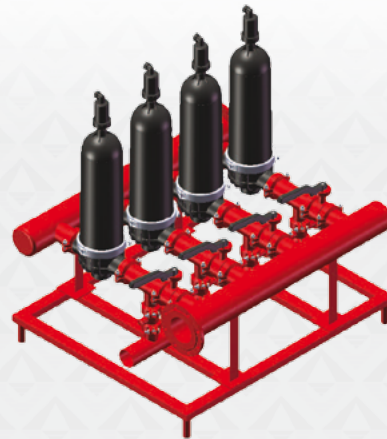
semi-auto disc filter systems



1BAR

BACK-FLUSHING PRESSURE

- 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



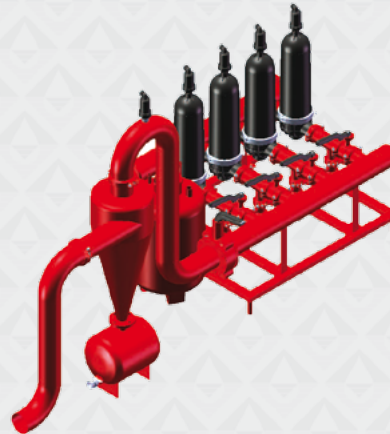
AutoFlush® semi-auto disc filter system

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

1BAR

BACK-FLUSHING PRESSURE

- 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+AutoFlush® 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	Grooved End or Flanged	50
SM-4H-100G-P3	4	3	1-4"	100	Grooved End or Flanged	75
SM-4H-100G-P4	5	4	1-5"	100	Grooved End or Flanged	100
SM-4H-100G-P5	6	5	1-6"	200	Grooved End or Flanged	125
SM-4H-100G-P6	6	6	1-6"	200	Grooved End or Flanged	150
SM-4H-100G-P7	8	7	2-5"	200	Grooved End or Flanged	175
SM-4H-100G-P8	8	8	2-5"	340	Flanged	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"	Grooved End or Flanged	60 - 120
S MDF-ED-03	6	3x4"	Grooved End or Flanged	120 - 150
S MDF-ED-04	6	4x4"	Grooved End or Flanged	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"	Grooved End or Flanged	60 - 120
S MDF-ED-4H-P3	6	3x4"	2 x 4"	Grooved End or Flanged	120 - 150
S MDF-ED-4H-P4	6	4x4"	2 x 4"	Grooved End or Flanged	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	Grooved End or Flanged	40 - 60
S MDF-M-03	4	3	Grooved End or Flanged	60 - 90
S MDF-M-04	5	4	Grooved End or Flanged	80 - 120
S MDF-M-05	6	5	Grooved End or Flanged	100 - 150
S MDF-M-06	6	6	Grooved End or Flanged	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"	Grooved End or Flanged	40 - 60
S MDF-M-4H-P3	4	3	1 - 4"	Grooved End or Flanged	60 - 90
S MDF-M-5H-P4	5	4	1 - 5"	Grooved End or Flanged	80 - 120
S MDF-M-6H-P5	6	5	1 - 6"	Grooved End or Flanged	100 - 150
S MDF-M-6H-P6	6	6	1 - 6"	Grooved End or Flanged	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.



gravel (media) filter

1000 series



description

Filtration rates of gravel filters designed to be used in filtration of river, lake, pool water and water resources containing organic materials such as lichen and alga is over 15 m/h implicating that they are rapid filters. The outstanding advantage of the gravel filters against other types of filters is about maximum filtration efficiency due to deep filtration. Armaş 1000 series Gravel filters are designed to provide ease of use, maximum filtration efficiency and less maintenance due to simple structure and thus, they are offered to the users.

Armaş 1000 series Gravel filters are manufactured to contain at least two containers. Upper container located within filter vessel is the container of media ensuring the filtration process. In the media container, various materials including but not limited to sand-gravel, quartz sand, Anthracite coal, grinded basalt, silica sand are placed in a particular order based on the filtration degree. Lower container is the clean water tank obtained from filtering process. A rubber diffuser plate separating said two containers is present within the filter. Corks assembled on the plate ensure uniform pressure during back flushing procedure of the media filter and thus, they are designed to provide an efficient back flushing process.

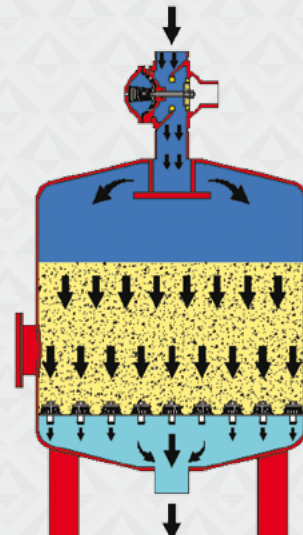
Armaş 1000 series Gravel Filters are projected to operate single or modular and manual or fully automatic back flushing procedure based on the water flow rate to be filtered within scope of the field of use. In order to increase filtration efficiency of gravel filters, it is recommended that modular filter system is selected from a model operating automatic back flushing procedure.

operating principle

Armaş 1000 series Gravel Filters operates in two different modes including filtration process and back flushing process. Armaş media filters are back flushing control gates assembled on the filters to be operated in filtration or back flushing procedures.

filtration process

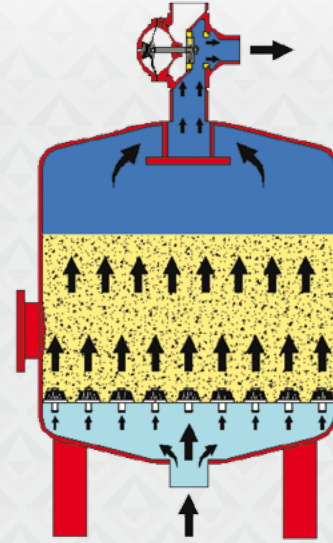
Polluted water entering from inlet manifold of the filter reaches media filter via back flushing control gate. At this position, inlet port of the back flushing control gate is towards the filter's direction and discharge port is closed. Polluted water reaching the media filter slowly progresses through sand layer placed in the filter depending on the desired filtration degree and thus, it is deeply filtered. Particles found in polluted water are trapped by sand later. Water passing through sand layer and filter corks will supplied to the system via outlet (clean water) manifold.





back-flushing process

Throughout the filtration process, particles suspended in the sand layer shall later cause obstruction in the filter following a particular operation period. Therefore, pressure loss in the system will increase and media filter is required to be cleaned. Cleaning process of media filters is referred as back flushing. During back flushing process, the issue required to be considered is to wash the filter using clean water. Element ensuring back flushing process is the back flushing control gate assembled on the filter. In this case, inlet port of the back flushing control gate is closed and discharge port is at open position. Pressure clean water supplied from outlet (clean water) manifold progresses to sand layers from filter corks. Particles suspended among sand layers are pushed forward under effect of pressure clean water and they are released to the atmosphere from discharge port of the back flushing control gate. Thus, filter is efficiently cleaned. Duration of back flushing process is adjusted according to obstruction degree of the filter. It is highly recommended that a short-term back flushing process in regular intervals is performed rather than long-term back flushing process.



Filtration Rate in Gravel Filters

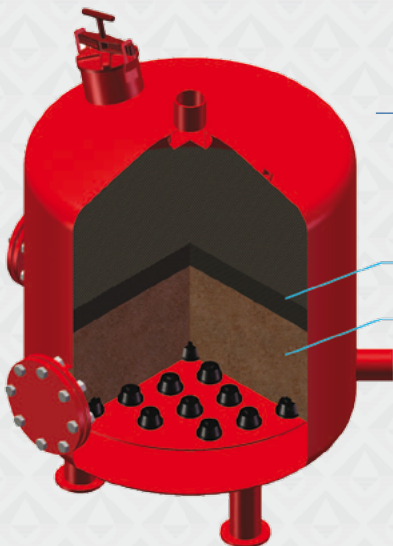
In a filtration process, filtration rate of the filter not only determines efficiency of the filter, but is also directly proportional to the capacity of the filter. Filtration rate defines amount of water passing from unit surface of the filter, or amount of water filtered. If filtration rate of a filter is between 0.5 m/h and 15 m/h, then it will be referred as slow filter and if it is over 15 m/h, it is referred as rapid filter. Filtration rate can be calculated using below equation.

$$V = 1.273 \times 10^{-6} \times \frac{Q}{D^2} \quad V = \text{m/h} \quad Q = \text{m}^3/\text{h} \quad D = \text{mm}$$

filtering degrees of gravel filters

Media Sand Number	Material	Sand Size		Filtration Degree	
		mm	inch	micron	mesh
16	Grinded Silica	0,66	0,026	70 - 100	140 - 200
20	Grinded Silica	0,46	0,018	65 - 80	200- 230
12	Quartz Sand	1,2 - 2,4	0,047 - 0,094	80 - 110	130 - 140
-	Quartz Sand*	0,8 - 1,2	0,047 - 0,031	80 - 120	130 - 200
-	Quartz Sand*	1,2 - 1,5	0,047 - 0,059	100 - 150	100 - 150

* Quartz Sand is typically used in agricultural irrigation systems



sand distribution diagram of gravel filters

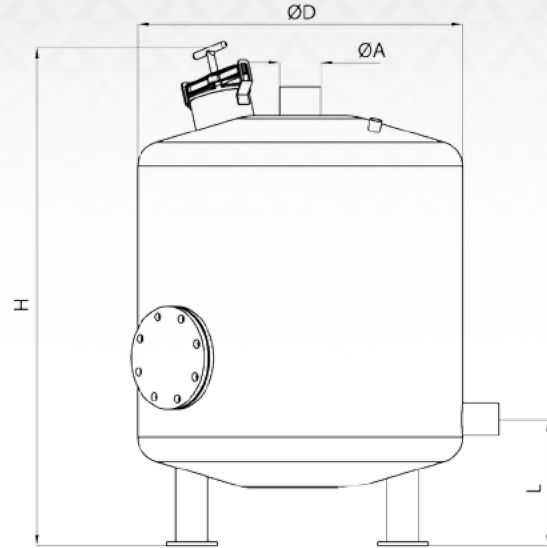
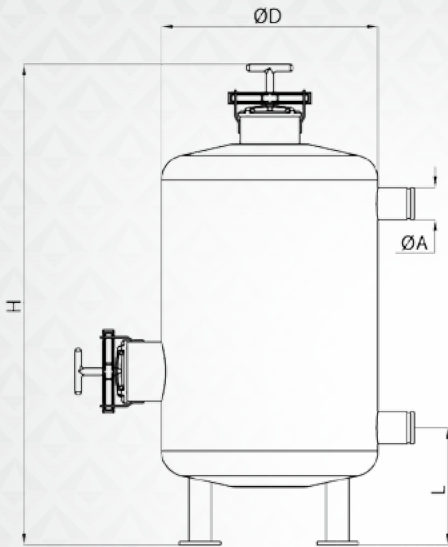


gravel (media) filter

1000 series



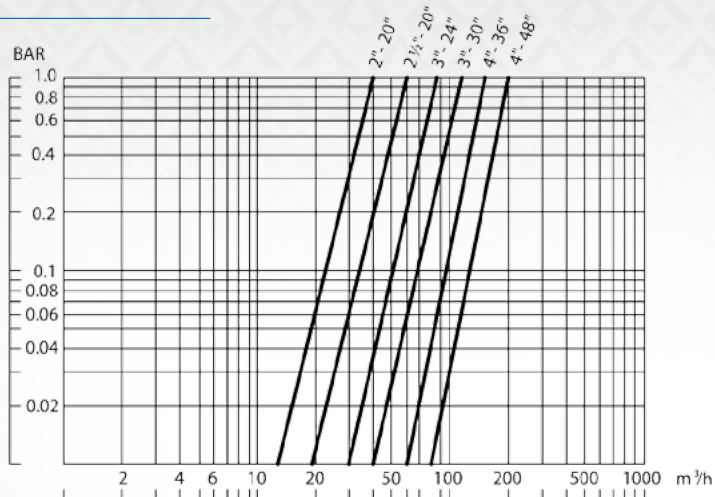
dimension and weight



available models and recommended flow rates

model	ØA		ØD		H		L		Weight		Recommended Flow Rate	
	mm	inch	mm	inch	mm	inch	mm	inch	kg	lbs.	m ³ /h	l/s
1020	50	2"	450	20"	1200	47"	180	7,1"	72	158	14 - 18	3,9 - 5
1520	65	2½"	450	20"	1200	47"	180	7,1"	74	163	24 - 30	6,6 - 8,3
1024	80	3"	600	24"	1300	51"	260	10,2"	100	220	35 - 40	9,7 - 11,1
1030	80	3"	760	30"	1050	41"	270	10,6"	132	291	40 - 45	11,1 - 12,5
1036	80	3"	910	36"	1110	43"	270	10,6"	186	410	50 - 60	13,9 - 16,6
1536	100	4"	910	36"	1110	43"	270	10,6"	188	414	60 - 70	16,6 - 19,4
1048	100	4"	1220	48"	1110	43"	270	10,6"	240	530	80 - 100	22,2 - 27,7

head loss chart





specifications

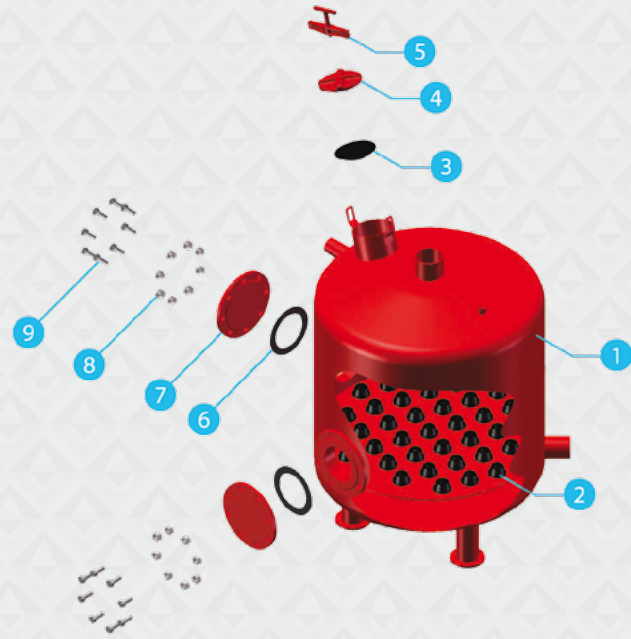
- It provides ease of use and of maintenance due to simple structure.
- Pre-painting phosphorization is performed for maximum resistance against corrosion.
- It has long economic life based on Epoxy – Polyester coating.
- It designed for homogenous distribution of raw water and highly efficiency filtration.
- It performs efficient back flushing process when minimum pressure loss occurs.
- Single or modular systems can be used for various application fields with different diameters.
- Options of manual or automatic back flushing are available.

fields of use

- Filtration of reserve waters such as river, lake and pool water
- Filtration of waters containing organic material
- Agricultural drip and micro-irrigation systems
- Filtration of industrial cooling water
- Preliminary filtration of reverse osmosis systems

material list

Part No	Part Name	Material
1	Body	ST37-2 (DIN 17100)
2	Mushroom Diffuser	Reinforced Nylon
3	Lid Seal	NBR/EPDM
4	Lid	DIN EN 10131
5	Arm	GGG40
6	Flange O-ring	NBR/EPDM
7	Blind Flange	ISO 7005-2
8	Nut	8.8 JS-500 STEEL
9	Bolt	8.8 JS-500 STEEL



technical specifications

Recommended Operating Pressure Range	Max. Operating Pressure	Min. Back-Flushing Pressure	Test Pressure	Temperature	Connection	Coating
1 - 8 (bar) 14 - 120 (psi)	8 (bar) 120 (psi)	2 (bar) 30 (psi)	12 (bar) 175 (psi)	0 °C – 80 °C (32 °F – 176 °F) DIN 2401 / 2	Flanged ISO 7005-2, ANSI Threaded BSPT-NPT Grooved End	1. Phase: Phosphorization 2. Phase: Electrostatic Powdering Polyester - Epoxy

sample order form

Model	Inlet Diameter	Tank Diameter	Connection	Control Feature	Additional Features
1020	2"	20"	Grooved End (GRO) Threaded (TH) Flanged (F)	Manual (M) Power Controlled (EL) Battery Controlled (BT)	Pressure Sustaining Valve (PS) Flow Rate Control Valve (FR) Quick Pressure Relief Valve (QR)
1520	2½"	20"			
1024	3"	24"			
1030	3"	30"			
1036	3"	36"			
1536	4"	36"			
1048	4"	48"			

1030

3

30

VIC

EL

PS



gravel (media) filter systems



Sand, Controller, connection equipments, air valves and pressure gauges are included in the system.

automatic gravel filter system

Code	Collector Size (inch)	Tank Size (inch)	Tank Quantity	Recommended Flow Rate (m ³ /h)
A10-G2-0220	3"	20" - 2"	2	24
A10-G3-0220	4"	20" - 2"	3	36
A10-G4-0220	4"	20" - 2"	4	48
A10-G2-0324	4"	24" - 3"	2	40
A10-G3-0324	4"	24" - 3"	3	60
A10-G4-0324	5"	24" - 3"	4	80
A10-G2-0330	4"	30" - 3"	2	60
A10-G3-0330	5"	30" - 3"	3	90
A10-G4-0330	6"	30" - 3"	4	120
A10-G6-0330	8"	30" - 3"	6	180
A10-G8-0330	10"	30" - 3"	8	240
A10-G2-0336	5"	36" - 3"	2	84
A10-G3-0336	6"	36" - 3"	3	126
A10-G4-0336	8"	36" - 3"	4	168
A10-G6-0336	10"	36" - 3"	6	252
A10-G8-0336	12"	36" - 3"	8	336
A10-G2-0436	15"	36" - 4"	2	120
A10-G3-0436	6"	36" - 4"	3	180
A10-G4-0436	8"	36" - 4"	4	240
A10-G6-0436	10"	36" - 4"	6	360
A10-G8-0436	12"	36" - 4"	8	480
A10-G2-0448	5"	48" - 4"	2	144
A10-G3-0448	6"	48" - 4"	3	216
A10-G4-0448	8"	48" - 4"	4	288
A10-G6-0448	10"	48" - 4"	6	432
A10-G8-0448	12"	48" - 4"	8	576

semi-auto gravel filter system



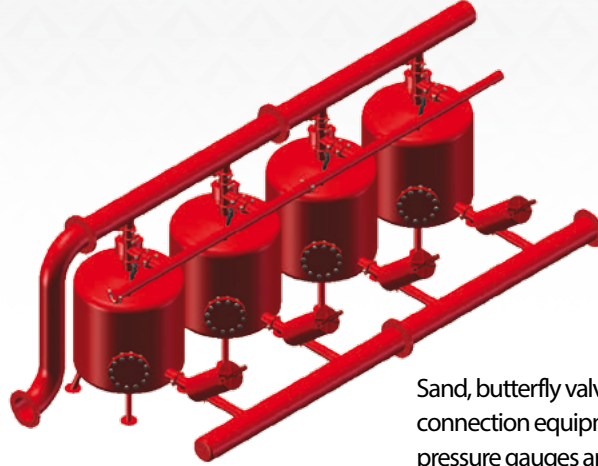
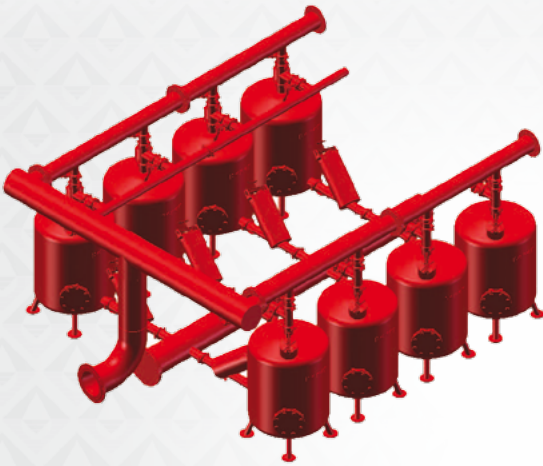
semi-auto gravel filter system

Sand, butterfly valves, ball valves connection equipments, air valves and pressure gauges are included in the system.

Code	Collector Size (inch)	Tank Size (inch)	Tank Quantity	Recommended Flow Rate (m ³ /h)
M10-G2-0220	3"	20" - 2"	2	24
M10-G3-0220	4"	20" - 2"	3	36
M10-G4-0220	4"	20" - 2"	4	48
M10-G2-2520	3"	20" - 2½"	2	28
M10-G3-2520	4"	20" - 2½"	3	42
M10-G4-2520	4"	20" - 2½"	4	56
M10-G2-0324	4"	24" - 3"	2	40
M10-G3-0324	4"	24" - 3"	3	60
M10-G4-0324	5"	24" - 3"	4	80
M10-G2-0330	4"	30" - 3"	2	60
M10-G3-0330	5"	30" - 3"	3	90
M10-G4-0330	6"	30" - 3"	4	120
M10-G6-0330	8"	30" - 3"	6	180
M10-G8-0330	10"	30" - 3"	8	240
M10-G2-0336	5"	36" - 3"	2	84
M10-G3-0336	6"	36" - 3"	3	126
M10-G4-0336	8"	36" - 3"	4	168
M10-G6-0336	10"	36" - 3"	6	252
M10-G8-0336	12"	36" - 3"	8	336
M10-G2-0436	5"	36" - 4"	2	120
M10-G3-0436	6"	36" - 4"	3	180
M10-G4-0436	8"	36" - 4"	4	240
M10-G6-0436	10"	36" - 4"	6	360
M10-G8-0436	12"	36" - 4"	8	480
M10-G2-0448	5"	48" - 4"	2	144
M10-G3-0448	6"	48" - 4"	3	216
M10-G4-0448	8"	48" - 4"	4	288
M10-G6-0448	10"	48" - 4"	6	432
M10-G8-0448	12"	48" - 4"	8	576



semi-auto gravel filter system



Sand, butterfly valves, ball valves connection equipments, air valves and pressure gauges are included in the system.

semi-auto gravel filter system + metal "Y" type screen-disc filter

Code	Collector Size (inch)	Tank Size (inch)	Tank Quantity	Recommended Flow Rate (m ³ /h)
M10-GY2-0220	3"	20" - 2"	2	24
M10-GY3-0220	4"	20" - 2"	3	36
M10-GY4-0220	4"	20" - 2"	4	48
M10-GY2-2520	3"	20" - 2½"	2	28
M10-GY3-2520	4"	20" - 2½"	3	42
M10-GY4-2520	4"	20" - 2½"	4	56
M10-GY2-0324	4"	24" - 3"	2	40
M10-GY3-0324	4"	24" - 3"	3	60
M10-GY4-0324	5"	24" - 3"	4	80
M10-GY2-0330	4"	30" - 3"	2	60
M10-GY3-0330	5"	30" - 3"	3	90
M10-GY4-0330	6"	30" - 3"	4	120
M10-GY6-0330	8"	30" - 3"	6	180
M10-GY8-0330	10"	30" - 3"	8	240
M10-GY2-0336	5"	36" - 3"	2	84
M10-GY3-0336	6"	36" - 3"	3	126
M10-GY4-0336	8"	36" - 3"	4	168
M10-GY6-0336	10"	36" - 3"	6	252
M10-GY8-0336	12"	36" - 3"	8	336
M10-GY2-0436	5"	36" - 4"	2	120
M10-GY3-0436	6"	36" - 4"	3	180
M10-GY4-0436	8"	36" - 4"	4	240
M10-GY6-0436	10"	36" - 4"	6	360
M10-GY8-0436	12"	36" - 4"	8	480



description

Armaş 2000 series hydrocyclones are designed in simple structure to be used in the filtration of well water or other water sources containing sand, gravel or particles heavier than the water. Due to simple structure, it is more economic and easy to use relative to other sand separators. Armaş hydrocyclones causes minimum pressure loss in filtration systems and therefore, they operate at maximum efficiency. Armaş 2000 series hydrocyclones, used as primary filtering element in filtration systems, are provided in single or modular forms which ensure manual or fully automatic cleaning process.

operating principle



Armaş 2000 series hydrocyclones is a separator removing particles heavier than the water before they enter into the system. It is consisted of two main parts including the body and collection container. Water containing particles heavier than the water enters into cylindrical wall found on the body of the hydrocyclone in tangential manner. Water reaches a particular speed in the cylindrical wall and thus, it creates centrifugal force. Due to this centrifugal power, solid particles heavier than water fall down from narrowing conic part of the hydrocyclone and trapped in the collection container. While solid particles heavier than water fall down to collection container due to centrifugal force, clean water free from particles is supplied to the system via outlet pipe. Water reaches desired speed on cylindrical wall due to perfect cylindrical wall and conical body design of the Armaş 2000 series hydrocyclone and thus, water increases efficiency of the filtration as it creates a cycloid orbit.



hydrocyclone (sand separator)

2000 series



In order to get a regular filtration in Armaş 2000 series hydrocyclones, collection container should be regularly monitored and cleaned depending on the water quality. Based on the application type, hydrocyclones are provided in to forms, including manual and automatic, to the users. It is recommended that users prefer automatic model ensuring regular monitoring and cleaning of collection container.

applications

- Filtration of reserve water such as deep well
- Filtration of water containing sand, gravel or particles heavier than water
- Preliminary filtration of gravel, Disc and mesh filters
- Agricultural drip and micro-irrigation systems
- Separation of solid particles larger than mesh diameter of 200.

specifications

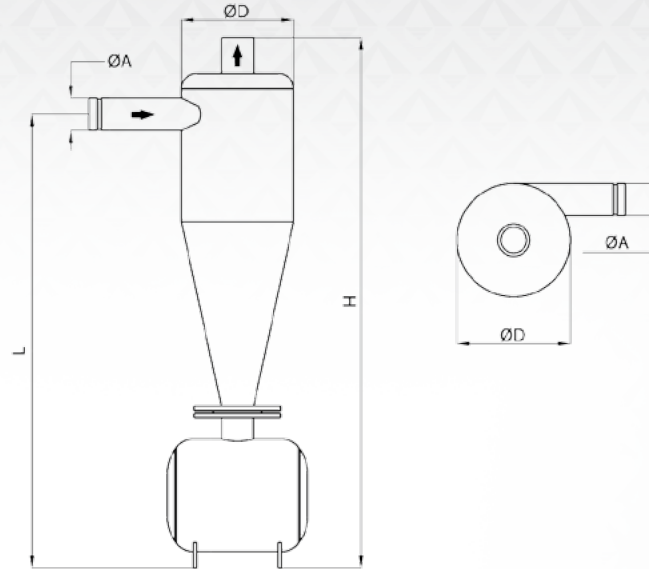
- It provides ease of use and of maintenance due to simple structure.
- Pre-painting phosphorization is performed for maximum resistance against corrosion.
- It has long economic life based on Epoxy – Polyester coating.
- It operates completely based on cyclone principle
- It performs filtration (separation) process with minimum pressure loss.
- Single or modular systems can be used for various application fields with different diameters.
- Two different models are available including manual and automatic.
- Automatic models can perform self-cleaning process without any disruption in water supply.

technical specifications

Recommended Operating Pressure Range	Max. Operating Pressure	Test Pressure	Temperature	Connection	Coating
0.3 – 8 (bar) 4 – 120 (psi)	8 (bar) 120 (psi)	12 (bar) 175 (psi)	- 10 °C – 80 °C (14 °F – 176 °F) DIN 2401 /2	Flanged ISO 7005-2, ANSI Threaded BSPT-NPT Grooved End	1. Phase: Phosphorization 2. Phase: Electrostatic Powdering Polyester - Epoxy



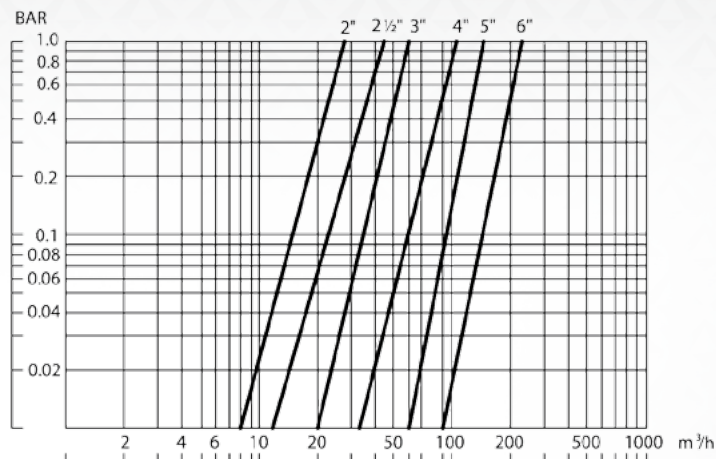
dimension and weight



available models and recommended flow rates

Model	ØA		ØD		H		L		Weight		Recommended Flow Rate	
	mm	inch	mm	inch	mm	inch	mm	inch	kg	Lbs.	m ³ /h	U.S gpm
2050	50	2"	220	8,6"	1100	43,3"	1000	39,4"	20	44	14-18	3,9-5
2065	65	2½"	220	8,6"	1100	43,3"	1000	39,4"	24	53	24-30	6,6-8,3
2080	80	3"	300	11,8"	1420	56"	1260	49,6"	28	62	45-65	12,5-18
2100	100	4"	300	11,8"	1420	56"	1260	49,6"	60	132	70-95	19,4-26,4
2125	125	5"	400	15,7"	1600	63"	1410	55,5"	80	176	105-145	29,2-40
2150	150	6"	400	15,7"	1650	63"	1440	56,7"	82	180	120-165	33,3-45,8
2200	200	8"	640	25,2"	2100	82,6"	1770	69,7"	240	528	200-250	55,5-69,4

head loss chart





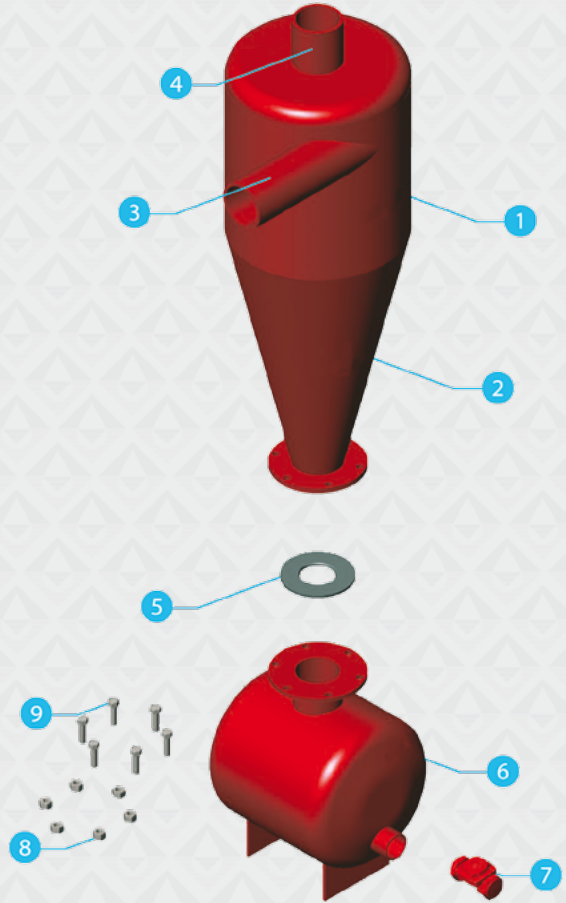
hydrocyclone (sand seperator)

2000 series



material list

Part No	Part Name	Material
1	Cylindrical Wall	ST37-2 (DIN 17100)
2	Conic Body	ST37-2 (DIN 17100)
3	Inlet	ST37-2 (DIN 17100)
4	Outlet	ST37-2 (DIN 17100)
5	Flange O-Ring	NBR/EPDM
6	Collection Container	ST37-2 (DIN 17100)
7	Drainage Valve	GG25 / GGG40
8	Nut	8.8JS-500 STEEL
9	Bolt	8.8JS-500 STEEL



sample order form

Model	Inlet Diameter	Connection	Control Feature
2050	2"	Grooved End (GRO) Threaded (TH) Flanged (F)	Manual (M) Power Controlled (EL) Batter Controlled (BT)
2065	2½"		
2080	3"		
2100	4"		
2125	5"		
2150	6"		
2180	8"		

2150	6	VIC	EL
------	---	-----	----



description

Suction filter is designed to protect the pumps from debris and foreign matters. It is generally used in water sources containing algae, debris, and other heavy wastes. It is connected to pump suction and submerged into water (river, lake, reservoir, etc.)

operation principle

Water is sucked by the pump passes through the strainer and debris is kept outside by the stainless steel screen. Rotating nozzles are fed with water taken from the pump exit. Water jets sprayed from the nozzles blow away the debris collected on the outer surface of the screen and thus the filter is cleaned.

Thus the pump is protected against clogging and failures. Pump efficiency increases and maintenance costs decrease.

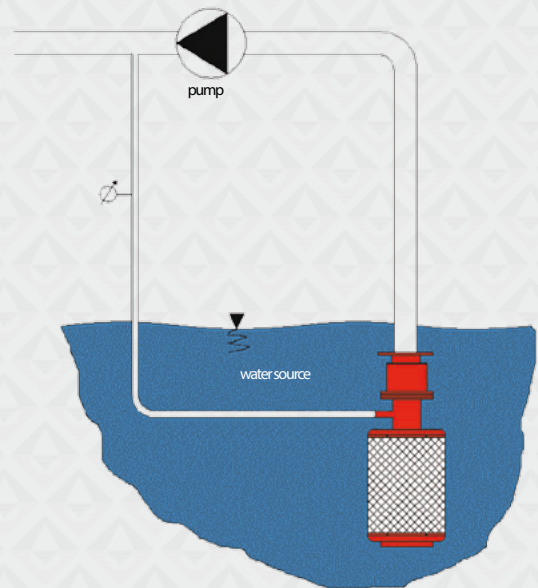
- Minimum working pressure: 1.5 bar (22 psi)
- Suggested working pressure: 3-4 bar
- By-pass flow rate : 4 m³/h (3"-4")
- Electrostatic coated body
- Rotating Nozzles
- Flange type Connection
- Electrostatic applied and oven-cured zinc-phosphate coating for anti-corrosion protection
- Available models: 4", 6", 8"

specifications

- Protection of pumps
- Low head loss
- Automatic self-cleaning system
- Uninterrupted filtration during automatic self-cleaning
- Low maintenance costs

applications

- Agricultural applications





suction filter

material list

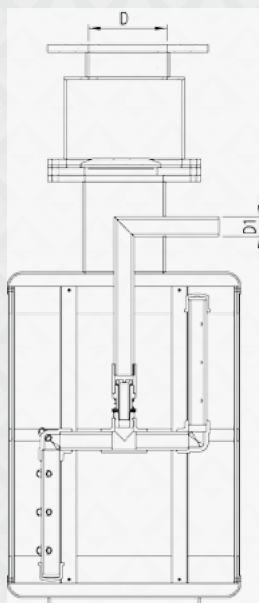


Part No	Part Name
1	Screen and body
2	Nozzle mechanism
3	Upper cover
4	Check valve
5	Connection head
6	Lower cover

available models

Filter Model Code	SF-4	SF-6	SF-8
Max. Flow Rate	75 m ³ /h	120 m ³ /h	160 m ³ /h
Inlet-Outlet Diameter	4"	6"	8"
Standard Filtration Degree	460 micron 40 mesh	460 micron 40 mesh	460 micron 40 mesh
Min. Working Pressure	1,5 bar	1,5 bar	1,5 bar
Max. Working Pressure	10 bar	10 bar	10 bar
Max. Working Temperature	60 °C	60 °C	60 °C
Filtration Area	1400 mm ²	1800 mm ²	2000 mm ²

dimensions



Flow Rate	Inlet Connection Flanged (D)	Return Line Connection (D1)
m ³ /h	inch	inch
75	4"	1"
120	6"	1"
180	8"	1"

sample order form

Model	Connection Size	Connection Type	Screen Degree
SF-4	4"	Flanged (F)	460 Micron
SF-6	6"	Flanged (F)	460 Micron



description

Armaş D-3000 series disc filters are designed to ensure deep filtration as a consequence of one-on-one order of many disc sheets manufactured from nylon reinforced polypropylene material on a filter body.

Having a simpler design Relative to different filter groups, Armaş 3000 series screen filters are really successful in filtration of water well and water resources containing sand. Armaş 3000 series screen filters are manufactured in two body form including angle and horizontal type for meeting needs of different application.



operating principle

Polluted water containing particles heavier than water such as sand and gravel enters into the filter from inlet pipe of the Armaş 3000 series screen and disc filters. The water is filtered from the mesh found in screen-disc filters providing desired filter grade at micron level. Particles with larger diameter than that of diameter of screen-disc are trapped by the mesh. Clean water filtered is supplied to the system via outlet pipe of the filter. Heavy particles failing to pass from pores of the screen-disc are released to the atmosphere via discharge gate found beneath the body of the filter.

applications

- Filtration of well water
- Filtration of water containing sand, gravel or particles heavier than water
- Filtration of river, lake and reserve water
- Preliminary filtration of ultra-filtration systems
- Downwards the hydrocyclone and gravel filter systems
- Agricultural drip and micro-irrigation systems
- For recreational irrigation system practices
- Downwards the fertilization system

specifications

- It provides ease of use and of maintenance due to simple structure.
- Pre-painting phosphorization is performed for maximum resistance against corrosion.
- It has long economic life based on Epoxy – Polyester coating.
- It performs filtration process with minimum pressure loss occurs.
- It can be used in wide range of applications due to varying filtration rates and degrees.
- It has long economic life due to nylon polypropylene discs
- It may be used in single or modular form in the application fields.
- It ensures easy assembly to systems with angle and horizontal type models.

disc-screen filter degree measures

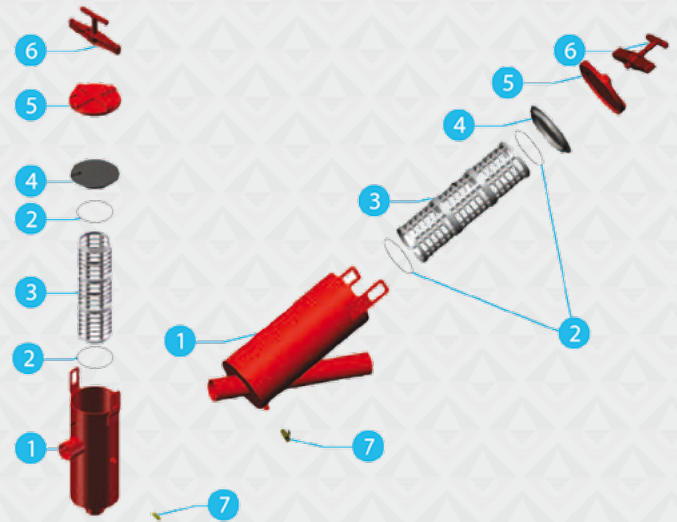
Mesh No	Micron	Number of Pores (cm)	Effective Filtering Surface (%)	Color
**80	200	31	%39	Blue
*120	130	47	%39	Red
*150	100	59	%40	Yellow

*Mesh with size of 100, 120 ve 150 are standard meshes.

**Mesh with size of 60,80 ve 180 are manufactured upon request

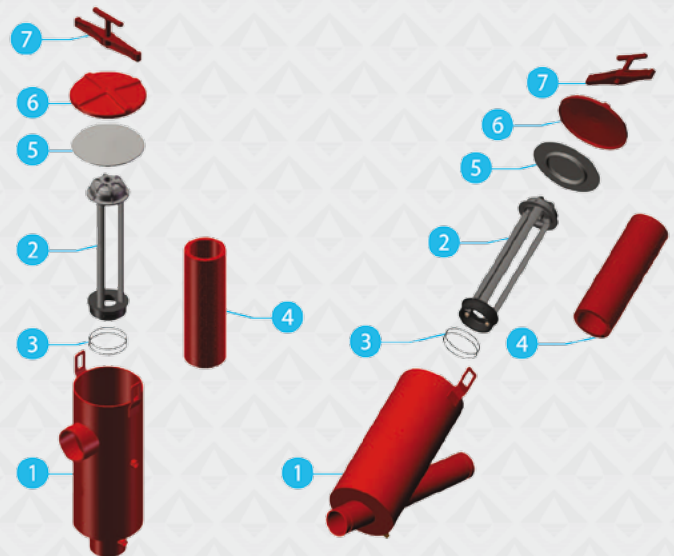
material list (screen filter)

Part No	Part Name	Material
1	Body	ST37-2 (DIN 17100)
2	O-Ring	NBR
3	Screen	AISI 304
4	Lid Seal	NBR / EPDM
5	Lid	DIN EN 10131
6	Arm	GGG40
7	Discharge Valve	GG25/GGG40 - ISO R 426



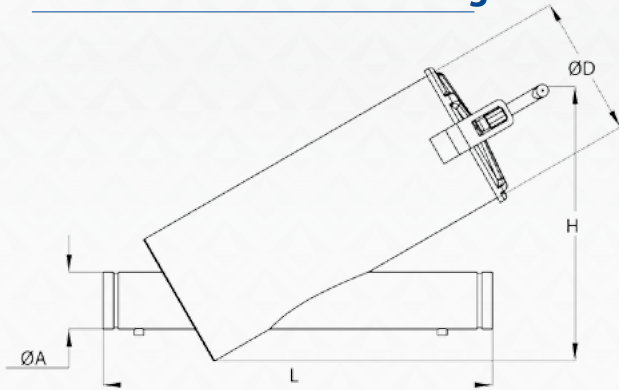
material list (disc filter)

Part No	Part Name	Material
1	Body	ST37-2 (DIN 17100)
2	Disc Frame	PET-P
3	O-Ring	NBR / EPDM
4	Disc	Nylon Reinforced PP
5	Lid O-Ring	NBR / EPDM
6	Lid	ST37-2 (DIN 17100)
7	Arm	GGG40

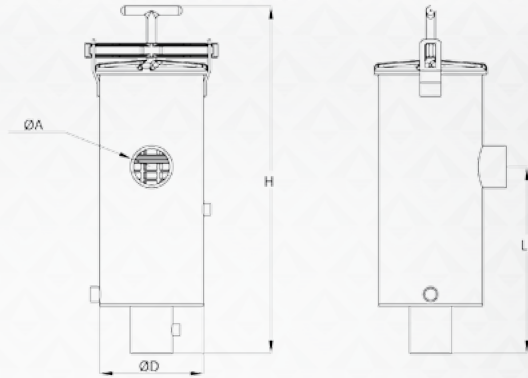




dimensions and weight



YType disc-screen filter(Y-D Series)

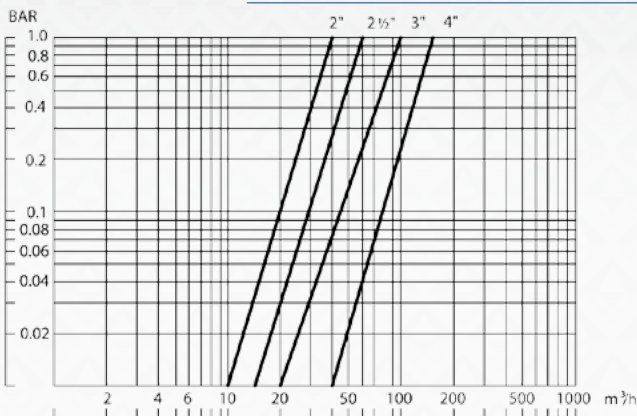


Angle Type dic-screen filter (L-D Series)

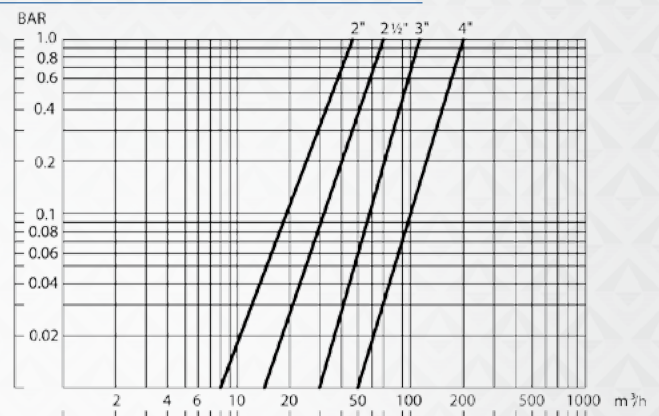
available models and recommended flow rates

Model	ØA		ØD		H		L		Weight		Recommended Flow Rate	
	mm	inch	mm	inch	mm	inch	mm	inch	kg	Lbs.	m ³ /h	U.S gpm
Y(D)3050	50	2"	165	6"	350	14	460	18	15	32	26 - 34	88 - 123
Y(D)3060	65	2½"	165	6"	350	14	470	18,5	16	35	30 - 56	140 - 210
Y(D)3080	80	3"	220	8"	450	18	610	24	24	52	48 - 65	154 - 220
Y(D)3100	100	4"	220	8"	450	18	650	25,5	29	63	62 - 90	228 - 352
L(D)3050	50	2"	165	6"	600	24	140	5,5	14	30	18 - 25	80 - 110
L(D)3065	65	2½"	165	6"	600	24	140	5,5	15	33	28 - 42	123 - 185
L(D)3080	80	3"	220	8"	875	35	160	6,3	26	57	38 - 50	168 - 220
L(D)3100	100	4"	220	8"	875	35	160	6,3	27	58	40 - 75	178 - 330

head loss chart



YType disc-screen filter(Y-D Series)



Angle Type dic-screen filter (L-D Series)

sample order form

Model	Inlet Diameter	Connection Type	Control Feature	Filtration Degree
YD3050 - LD3050	2"	Grooved End (GRO) Threaded (TH) Flanged (F)	Manual (M) Power Controlled (EL) Batter Controlled (BT)	100 Micron 130 Micron 200 Micron
YD3065 - LD3065	2½"			
YD3080 - LD3080	3"			
YD3100 - LD3100	4"			
YD3050	4	VIC	M	120



metal screen-disc filter systems



M-HP Hydrocyclone+Manual Disc Filter System



M-HY Hydrocyclone+ Y Type Screen Filter System



M-HA Hydrocyclone+ Angle Type Screen Filter System

Code	Collector Size (inch)	Hydrocyclone inlet/outlet size (inch)	Manual Disc-Screen Filter inlet/outlet size (inch)	Connection Type	Recommended Flow Rate (m ³ /h)
M20-HP-03	3"	3"	3"	VIC	26
M20-HY-02	2"	2"	2"	VIC	14
M20-HY-25	2½"	2½"	2½"	VIC	21
M20-HY-03	3"	3"	3"	VIC	42
M20-HY-04	4"	4"	4"	VIC	55
M20-HA-02	2"	2"	2"	VIC	14
M20-HA-25	2½"	2½"	2½"	VIC	21
M20-HA-03	3"	3"	3"	VIC	42
M20-HA-04	4"	4"	4"	VIC	55

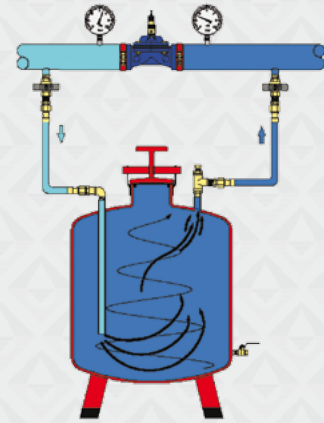


description

Armaş 5000 series fertilizer tanks are developed for chemical fertilizer or pesticide applications directly to root region of the plant using irrigation water of drip or sprinkler irrigation systems. It ensures very practical and convenient fertilizing and pesticide administration in irrigation systems due to simple structure and ease of use. Different models with varying capacities are available including horizontal and vertical types depending on different needs of present irrigation system. Operating based on pressure difference principle in the irrigation systems, Armaş 5000 series fertilizer tanks will operate long years without requiring maintenance due to resistant construction.

operating principle

Armaş 5000 series fertilizing tank is connected parallel to main pipe of irrigation system using elastic hoses via by-pass method. Irrigation water enters into the tank containing soluble chemical from the inlet hose of fertilizer tank connected to the line. Due to pressure gradient created using a valve or pressure reducer assembled on the irrigation line, chemical fertilizer is solved and it is blended within the tank. Solved chemical fertilizer is supplied to the root region of the plant using irrigation water.



applications

- Chemical fertilization applications by pressure agricultural irrigation systems
- Pesticide administration by pressure agricultural irrigation systems

features

- It provides ease of use and of maintenance due to simple structure.
- Pre-painting phosphorization is performed for maximum resistance against corrosion and chemical solution.
- It has long economic life based on Epoxy – Polyester coating.
- It operates based on line pressure of the system.



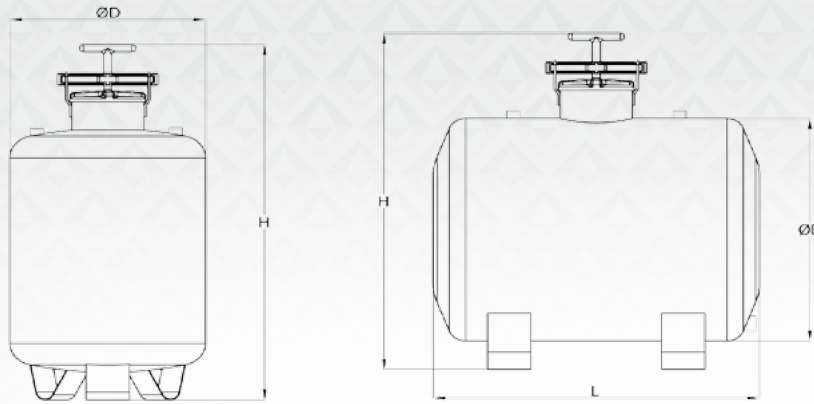
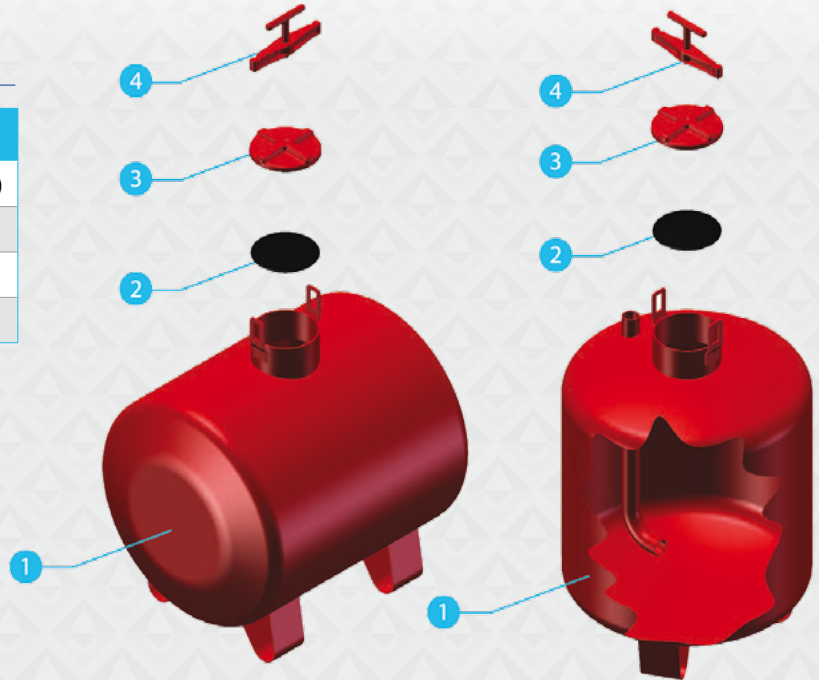
fertilizer tank

5000 series



material list

Part No	Part Name	Material
1	Body	ST37-2 (DIN 17100)
2	Lid Seal	NBR/EPDM
3	Lid	DIN EN 10131
4	Arm	STEEL (DIN 2458)

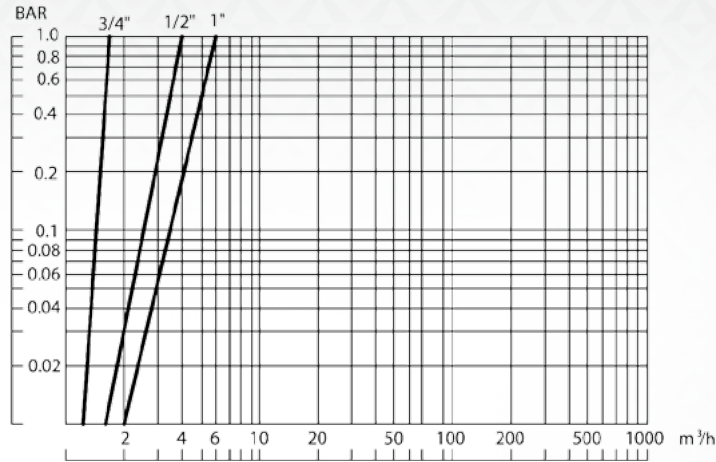


available models and recommended flow rates

Model	Capacity		ØD		H		L		Weight	
	liter	galon	mm	inch	mm	inch	mm	inch	kg	Lbs.
V5060	60	16	380	15"	760	30"	-	-	24	53
H5120	120	32	450	17,7"	800	31,5"	750	29,5"	40	88
H5200	200	52	640	25,2"	950	37,4"	730	28,7"	52	115
H5300	300	79	640	25,2"	950	37,4"	970	38,2"	68	150
H5400	400	106	640	25,2"	950	37,4"	1230	48,4"	76	168
H5500	500	132	640	25,2"	950	37,4"	1480	58,3"	102	225



tank injection rate



Pressure Difference	Injection Rate 3/4" inlet - 3/4" outlet	Injection Rate 1/2" inlet - 1/2" outlet	Injection Rate 1" inlet - 1" outlet
0.9 bar	1400 L/h	3980 L/h	5120 L/h
0.8 bar	1340 L/h	3750 L/h	4830 L/h
0.7 bar	1250 L/h	3510 L/h	4520 L/h
0.6 bar	1160 L/h	3250 L/h	4180 L/h
0.5 bar	1050 L/h	2970 L/h	3800 L/h
0.4 bar	940 L/h	2650 L/h	3420 L/h
0.3 bar	820 L/h	2300 L/h	2950 L/h
0.2 bar	670 L/h	1880 L/h	2400 L/h
0.1 bar	450 L/h	1320 L/h	1700 L/h

technical specifications

Maximum Operating Pressure	Test Pressure	Temperature	Connection	Coating
8 (bar) 120 (psi)	12 (bar) 175 (psi)	- 10 °C – 80 °C (14 °F – 176 °F) DIN 2401 /2	Threaded - BSPT /NPT Flanged - ISO / ANSI	1. Phase: Phosphorization 2. Phase: Electrostatic Powdering Polyester - Epoxy



back-flushing control valves



model 37

Model	Size	Connection
model 21	2" x 2"	Inlet: 2" Threaded x Drainage: 2" Threaded
model 27	4" x 3"	Inlet: 4" Flanged x Drainage: 3" Threaded
model 28	4" x 3"	Inlet: 4" Grooved End x Drainage: 3" Grooved End



model 38

Model	Size	Connection
model 37	3" x 2"	Inlet: 3" Flanged x Drainage: 2" Threaded
model 38	3" x 2"	Inlet: 3" Grooved End x Drainage: 2" Threaded



Grooved End Butterfly Valve

Size	Connection	Pressure
2" – DN 50	Grooved End	10 bar
2½" – DN 65	Grooved End	10 bar
3" – DN 80	Grooved End	10 bar
4" – DN 100	Grooved End	10 bar

TÜRK STANDARLARI ENSTİTÜSÜ
TSE-TR
HİZMET YETERLİLİK BELGESİ

Belge No: 143-TR-421
Belge Tarihi: 03.05.2019
Belge Geçerlilik Tarihi: 03.05.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSEK TÜRK STANDARLARI ENSTİTÜSÜ KRİTERE UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION CERTIFICATE OF CONFORMANCE TO CRITERIA

Belge No: 1411-42TRK-441
Belge Tarihi: 17.10.2019
Belge Geçerlilik Tarihi: 17.10.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TÜRK PATENT ENSTİTÜSÜ
MARKA TESCİL BELGESİ

Marka No: 2009-00285 - Ticaret

autoflush

Marka Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET ANONİM ŞİRKETİ**
TÜRKİYE CUMHURİYETİ
Organize Sanayi Bölgesi Atayev Sk. No:21 KONYA

Marka Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET ANONİM ŞİRKETİ**
TÜRKİYE CUMHURİYETİ
Organize Sanayi Bölgesi Atayev Sk. No:21 KONYA

Markaların Korunması Hakkında 556 Sayılı Kanun Hükmünde Kararnameyle 13.11.2009 tarihinde ilahere ON VII, maddeleri 13/19/2010 tarihinde tescil edilmiştir.

TÜRK PATENT ENSTİTÜSÜ

TÜRK PATENT ENSTİTÜSÜ
MARKA YENİLEME BELGESİ

Marka No: 20067 - Ticaret

ARMAŞ

Marka Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET ANONİM ŞİRKETİ**
TÜRKİYE CUMHURİYETİ
Organize Sanayi Bölgesi Atayev Sk. No:21 KONYA

15 Ocak 2016 tarihinde 1509/1998 tarihinde tescil edilmiş olup, 556 Sayılı Markaların Korunması Hakkında Kanun Hükmünde Kararname ile, Madde 6 gereğince 15/09/2006 tarihinde ilahere ON VII, tescil yenilenmiştir.

TÜRK PATENT ENSTİTÜSÜ

TSEK TÜRK STANDARLARI ENSTİTÜSÜ KRİTERE UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION CERTIFICATE OF CONFORMANCE TO CRITERIA

Belge No: 1411-42TRK-441
Belge Tarihi: 17.10.2019
Belge Geçerlilik Tarihi: 17.10.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSEK TÜRK STANDARLARI ENSTİTÜSÜ KRİTERE UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION CERTIFICATE OF CONFORMANCE TO CRITERIA

Belge No: 1411-42TRK-441
Belge Tarihi: 17.10.2019
Belge Geçerlilik Tarihi: 17.10.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSEK TÜRK STANDARLARI ENSTİTÜSÜ KRİTERE UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION CERTIFICATE OF CONFORMANCE TO CRITERIA

Belge No: 1411-42TRK-441
Belge Tarihi: 17.10.2019
Belge Geçerlilik Tarihi: 17.10.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSE TÜRK STANDARLARI ENSTİTÜSÜ TÜRK STANDARLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

Belge No: 1411-42TRK-441
Belge Tarihi: 17.10.2019
Belge Geçerlilik Tarihi: 17.10.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSE TÜRK STANDARLARI ENSTİTÜSÜ TÜRK STANDARLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

Belge No: 1411-42TRK-441
Belge Tarihi: 17.10.2019
Belge Geçerlilik Tarihi: 17.10.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSE TÜRK STANDARLARI ENSTİTÜSÜ TÜRK STANDARLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

Belge No: 1411-42TRK-441
Belge Tarihi: 17.10.2019
Belge Geçerlilik Tarihi: 17.10.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSEK KALİTE YÖNETİM SİSTEMİ BELGESİ
QUALITY MANAGEMENT SYSTEM CERTIFICATE

Belge No: 15473
Belge Tarihi: 03.05.2019
Belge Geçerlilik Tarihi: 03.05.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSE İŞ SAĞLIĞI VE GÜVENLİĞİ YÖNETİM SİSTEMİ BELGESİ
OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATE

Belge No: 01932
Belge Tarihi: 03.05.2019
Belge Geçerlilik Tarihi: 03.05.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSEK ÇEVRE YÖNETİM SİSTEMİ BELGESİ
ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE

Belge No: 0920
Belge Tarihi: 03.05.2019
Belge Geçerlilik Tarihi: 03.05.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSEK KALİTE YÖNETİM SİSTEMİ BELGESİ
QUALITY MANAGEMENT SYSTEM CERTIFICATE

Belge No: 15818
Belge Tarihi: 03.05.2019
Belge Geçerlilik Tarihi: 03.05.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSE İŞ SAĞLIĞI VE GÜVENLİĞİ YÖNETİM SİSTEMİ BELGESİ
OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATE

Belge No: 01582
Belge Tarihi: 03.05.2019
Belge Geçerlilik Tarihi: 03.05.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**

TSEK ÇEVRE YÖNETİM SİSTEMİ BELGESİ
ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE

Belge No: 0913
Belge Tarihi: 03.05.2019
Belge Geçerlilik Tarihi: 03.05.2021

Belge Sahibi: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş.**
Organize Sanayi Bölgesi Atayev Sokak No:21 Konya - TÜRKİYE

Belge Açıklaması: **ARMAŞ SU ARMATÜRLERİ SANAYİ VE TİCARET A.Ş. YETKİLİ HİZMETLERİ**



Smart Solutions For Water

armas.com.tr

armas.com.tr



1. Organize Sanayi Bölgesi Atabey Sokak No:11/A 42300 Selçuklu / KONYA / TURKEY
T. +90 332 251 74 15 (Pbx) F. +90 332 251 74 17
M. info@armas.com.tr

