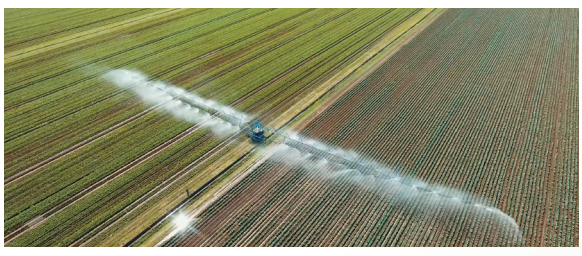
ARMAŞ®

www.armas.com.tr

SMART SOLUTIONS
FOR WATER

FILTRATION SYSTEMS

Irrigation • Water Treatment


AutoFlush
ARMAS
filtration
ARMAS
valve & filtration
AutoFlush®
PATENTED

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.

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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.

- Maximum and Minimum Pressure
- Water Source and Type of impurity
- Future needs and Modifications
- Required Flow (Capacity)
- Required Water Quality
- Required Filtration (Pore size or micron)
- Pre-Filtration Requirement

• Filter Selection Table

Type of Impurity	Type Of Filter To Be Used
Sands (Wells)	Hydrocyclone AutoFlush® Automatic Disc Filter AutoFlush® Automatic Screen Filter
Algae Organic Matter (River water, Reservoirs)	Hydrocyclone Gravel (Sand-Media) Filter AutoFlush® Automatic Disc Filter AutoFlush® Automatic Screen Filter
Suspended Solids Silt(Rivers, Lakes, Channels)	Gravel (Sand-Media) Filter AutoFlush® Automatic Disc Filter
Well, Lake, Creek Silts	Hydrocyclone Gravel (Sand-Media) Filter AutoFlush® Automatic Disc Filter
Wastewater Reuse (Wastewater after secondary treatment)	Gravel (Sand-Media) Filter AutoFlush® Automatic Disc Filter
Pre-Filtration	Suction Filter

• Type Of Filter To Be Used

1. Sand Separators (Hydrocyclones) :

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.

2. Screen Filter :

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.

3. Disc Filters :

It is a filter which is constructed by assembling many tiny synthetic discs manufactured from polypropylene material on filter body. The most advantage of the filter than screen filter is performing deep filtration, easy back-flushing and long term usage.

4. Media Tanks for Sand-Gravel Filters :

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. Sand-Gravel Filters can be cleaned up with automatically or manually. The gravels which is used as filter element must be replaced with new ones at the end of the season.

• Mesh and Disc Numbers Based On Particulate Matter Dimension Classification

Particle Class	Particle Size (mm)	Screen and Disc Number (mesh)	Screen and 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

• 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 standard 130 micron filter size, different screen sizes are available for different dirt levels.

• AutoFlush® SERIES

• Electric Activated Automatic Screen Filter

VE Series

HE Series

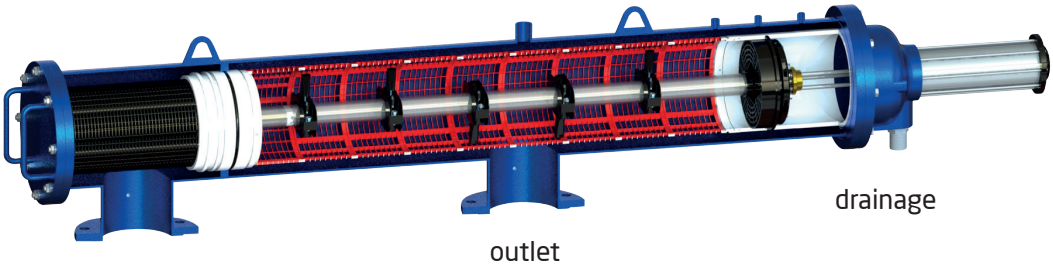
• Hydraulic Controlled Automatic Screen Filter

VH Series

HH Series

• Operation Principle

AutoFlush® series can perform automatic cleaning without any external power supply or optionally with electrical activation from a distance. The filter screen can achieve filtration capacities from 25 m³/h to 200 m³/h. Standard filter screen degree is 130 micron and inlet/outlet diameters are available from 2"up 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.

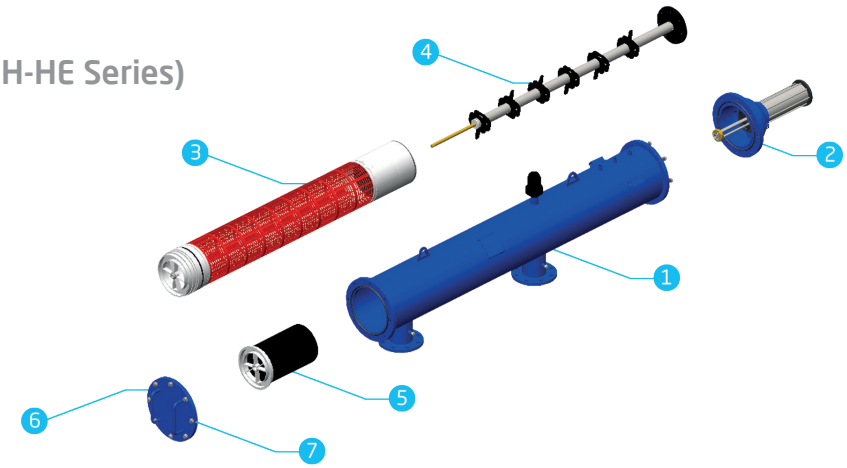
• Features

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

• Applications

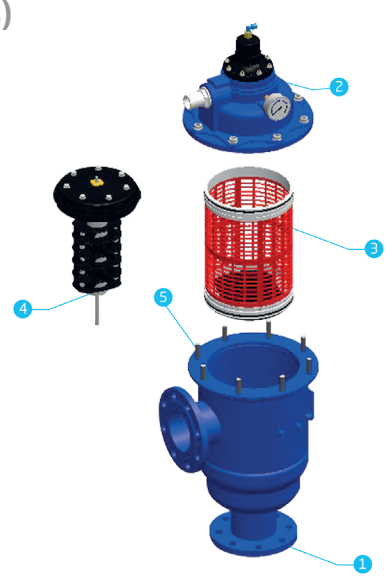
•Agricultural applications
•Industrial applications
•Municipal applications
•Water management
•Cooling towers

• Material List (HH-HE Series)



Part No	Part Name	Material
1	Body	ST37-2 Polyester Coating
2	Bonnet and Piston Mechanism	GG25+SST
3	Screen Group	PVC+PA6 Polyamide
4	Drain and Suction Nozzle Set	SST Pipe+PA6 Polyamide
5	Coarse Screen	PA6 Polyamide
6	Bonnet	ST37-2 Polyester Coating
7	Bolts and Nuts	SST

• Material List (VH-VE Series)



Part No	Part Name	Material
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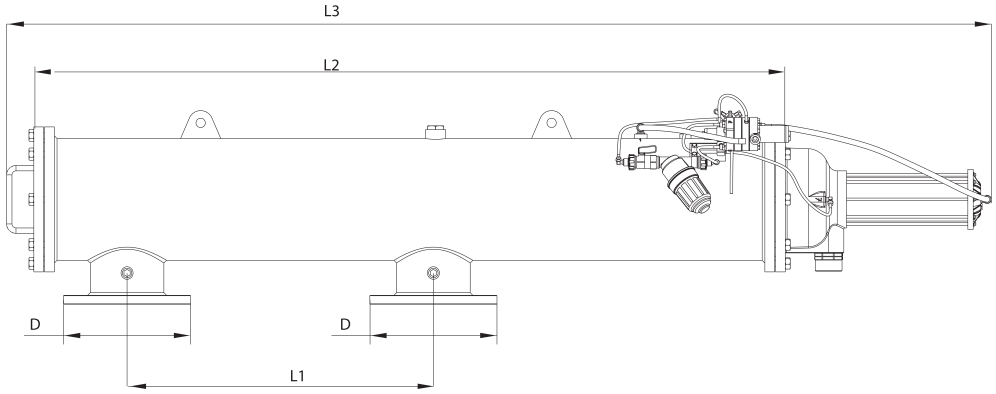
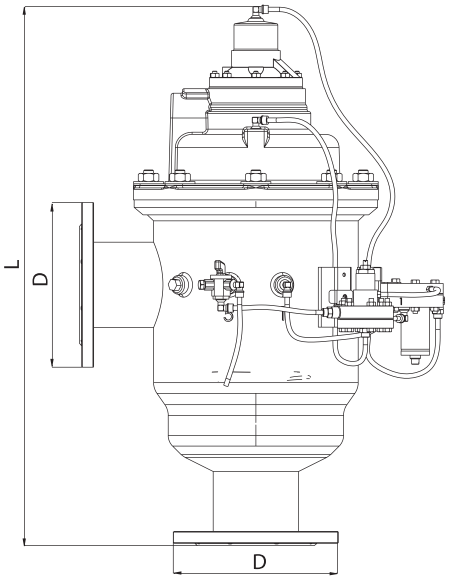
3	Screen Group	PVC+PA6 Polyamide
4	Drain and Suction Nozzle Set	SST Pipe+PA6 Polyamide
5	Bolts and Nuts	SST



• Dimensions

Model	D	L	L1	L2	L3
	inch	mm	mm	mm	mm
VH-VE-25	2"	630	-	-	-
VH-VE-35	3"	630	-	-	-
VH-VE-50	3"	760	-	-	-
VH-VE-70	4"	760	-	-	-
VH-VE-100	4"	875	-	-	-
HH-HE-100	4"	-	900	1907	2410
HH-HE-120	5"	-	900	1907	2410
HH-HE-160	6"	-	900	1907	2410
HH-HE-200	8"	-	900	1907	2410

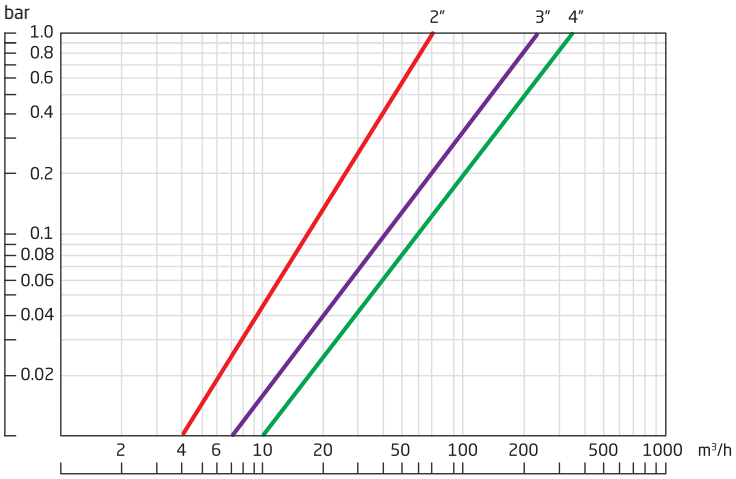


• Available Models

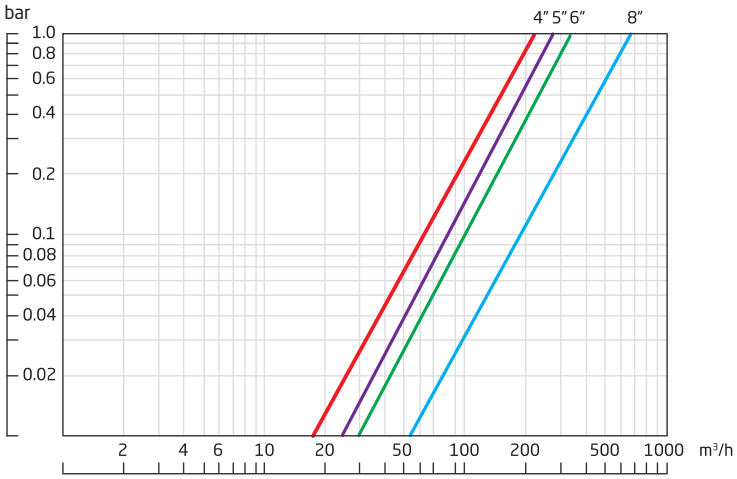
Filter Model Code	VH-25	VH-35	VH-50	VH-70	VH-100	HH-100	HH-120	HH-160	HH-200
	VE-25	VE-35	VE-50	VE-70	VE-100	HE-100	HE-120	HE-160	HE-200
Max. Flow Rate	25 m³/h	35 m³/h	50 m³/h	70 m³/h	100 m³/h	100 m³/h	120 m³/h	160 m³/h	200 m³/h
Inlet/Outlet Dimension	2"	3"	3"	4"	4"	4"	5"	6"	8"
Standard Filtration Degree	130 micron	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	2,5 bar
Max. Operation Pressure	10 bar	10 bar	10 bar	10 bar	10 bar	10 bar	10 bar	10 bar	10 bar
Max. Operation Temperature	60°C	60°C	60°C	60°C	60°C	60°C	60°C	60°C	60°C
Minimum flow for flushing (at 2.5 bar - 35 psi)	15 m³/h	15 m³/h	20 m³/h	20 m³/h	22 m³/h	30 m³/h	30 m³/h	30 m³/h	30 m³/h
Flushing Cycle Time	10-16 sn	10-16 sn	10-16 sn	10-16 sn	10-16 sn	22-30 sn	22-30 sn	22-30 sn	22-30 sn
Filtration Area	750 cm²	750 cm²	1500 cm²	1500 cm²	2250 cm²	6800 cm²	6800 cm²	6800 cm²	6800 cm²

** Consult to Armas Team for getting optimum flow depending on water quality and filtration degrees.*

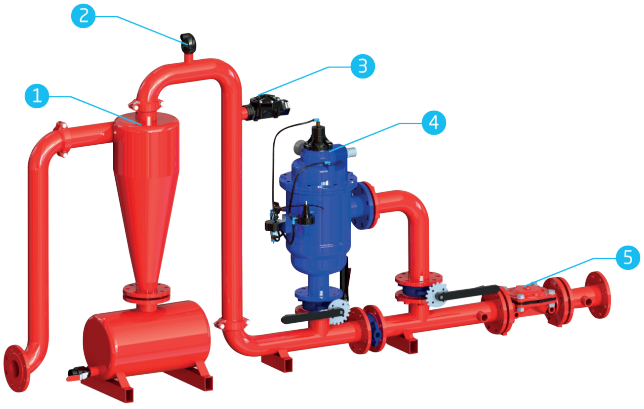
• Head Loss Chart (VH-VE)



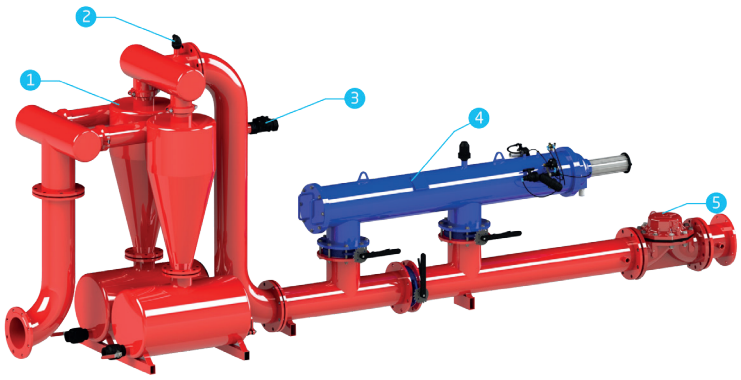
• Head Loss Chart (HH-HE)



• Sample Application



Part No	Part Name
1	Hydrocyclone
2	Air Valve
3	Quick Pressure Relief Valve
4	VE/VH AutoFlush® Automatic Screen Filter
5	Pressure Sustaining Valve



Part No	Part Name
1	Hydrocyclone
2	Air Valve
3	Quick Pressure Relief Valve
4	HH/HE AutoFlush® Automatic Screen Filter
5	Pressure Sustaining Valve

AutoFlush® AUTOMATIC PLASTIC DISC FILTER

Europaisches Patentamt
European Patent Office
Office européen des brevets

1BAR
BACK-FLUSHING PRESSURE

• Description

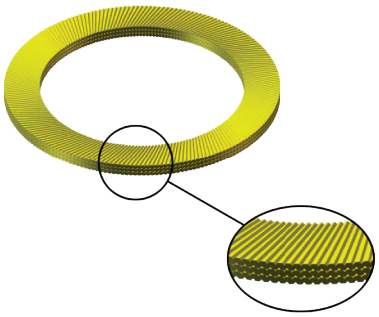
AutoFlush® Automatic Plastic Disc Filter is constructed by assembling many tiny synthetic disc manufactured from polypropylene material on filter body with telescopic structure. When synthetic discs arranged one-on-other are centralized around within telescopic filter body, center of discs forms a hollow 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.

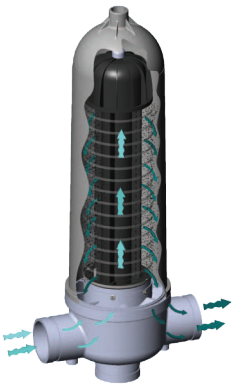
• Operating Principle

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 continuousoperation.

• Filtration Process

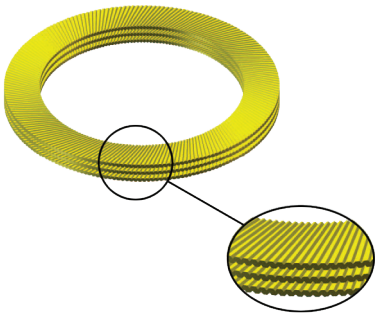
Many synthetic discs assembled on telescopic filter body create a hollow cylinder. Those discs assembled on the filter body are compressed using spring force and water pressure. Due to above mentioned arrangement of discs, many crosswise water channels intersecting each other are formed between two discs.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



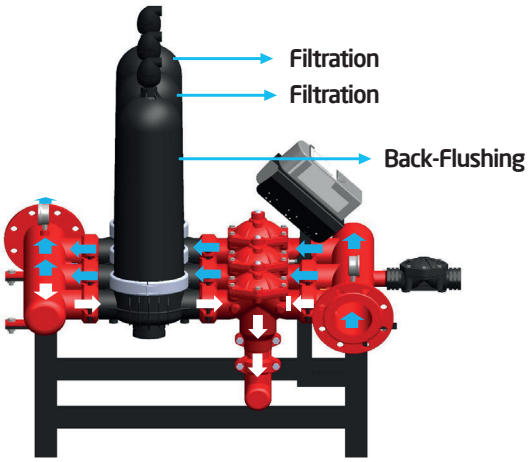


• Back-Flushing Process

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 timedependently started using pressure gradient (DP) sensor or a control de- Groovede. 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 timedependent parameters.It is possible to control the system manually with 3-way butterfly valves and ball valves instead of back-flushing valves.

• Disc Filter Degree Measures

Model No	Micron	Effective Filtering Surface (%)	Disc Color
AF80	200	%39	Blue
AF120	130	%39	Red
AF150	100	%40	Yellow

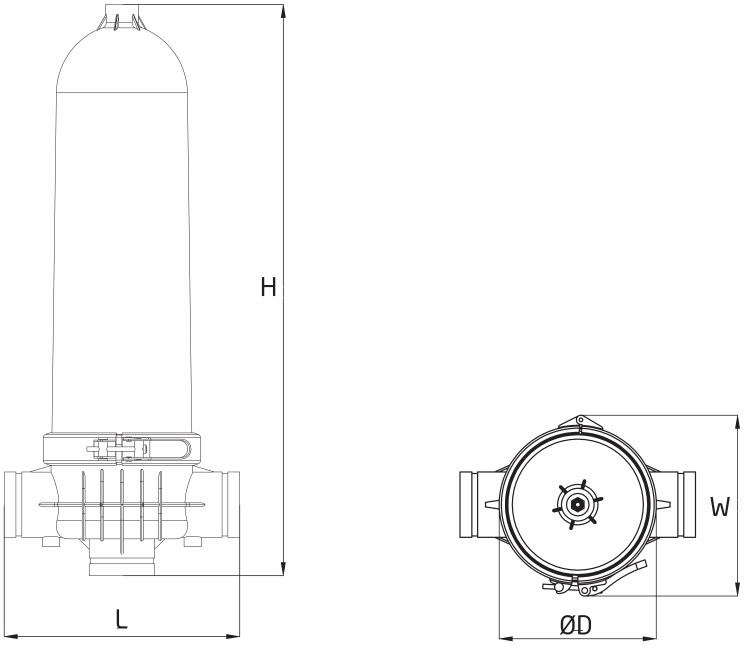
• Applications

- 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	W	ØD	H	L	Weight	Filtration Area	Recommended Flow Rate
Auto	246 mm	214 mm	776 mm	320 mm	9 kg	1520 cm²	25-35 m³/h

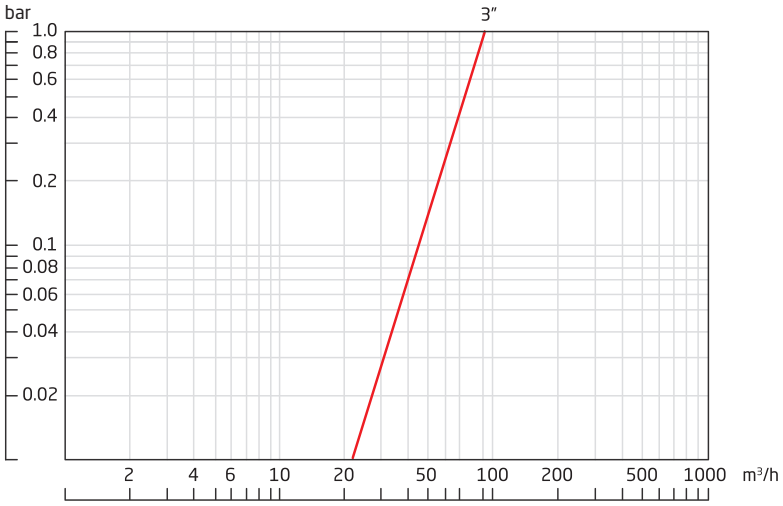
• Technical Specifications

Max. Operating Pressure	Min. Back-Flushing Pressure	Min. Back-Flushing Flow Rate	Temperature	Connection
8 (bar) 120 (psi)	1 (bar) 14 (psi)	9 - 11 m³/h	0 °C - 60 °C (32 °F - 132 °F)	3" (80 mm) Grooved End

• Material List

Part No	Part Name	Material
1	Body	PA6 GFR30
2	Lid	PA6 GFR30
3	Hydrocyclone Wing	Nylon 6
4	Filter Frame	PA6 GFR30
5	Disc	Nylon Reinforced PP
6	Collar	AISI 304

• Head Loss Chart



• Available Model and Recommended Flow Rates

Modules pcs	Recommended Flow (100,150,200 micron)	Min. Back-Flushing Flow Rate	Max. Operating Pressure	Min. Back-Flushing Pressure	Filtering Area	Connection
2 module	60 m³/h	18 m³/h	8 bar	1 bar	3040 cm²	Grooved End
3 module	90 m³/h	27 m³/h	8 bar	1 bar	4560 cm²	Grooved End
4 module	120 m³/h	36 m³/h	8 bar	1 bar	6080 cm²	Grooved End
5 module	150 m³/h	45 m³/h	8 bar	1 bar	7600 cm²	Grooved End
6 module	180 m³/h	54 m³/h	8 bar	1 bar	9120 cm²	Grooved End

**Please consult us for higher flow rate systems.*

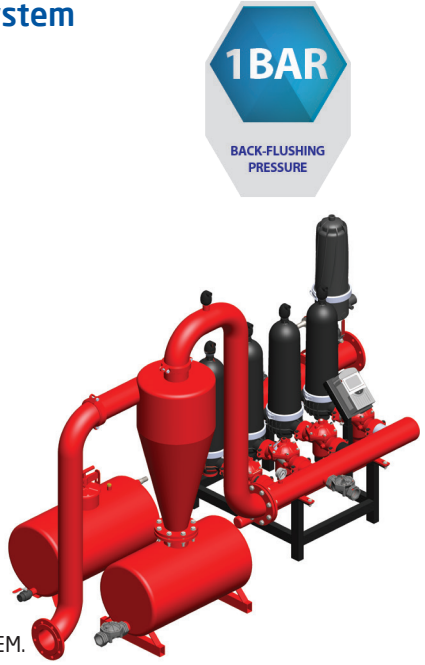
• AutoFlush® Automatic Disc Filter System

Code	Collector Size	Disc Filter Quantity	Capacity
	inch		m³/h
ADF-02	4"	2	50
ADF-03	4"	3	75
ADF-04	5"	4	100
ADF-05	6"	5	125
ADF-06	6"	6	150
ADF-07	8"	7	175
ADF-08	8"	8	200

•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® Hydrocyclone+Fertilization+Automatic Disc Filter System

Code	Collector Size	Disc Filter Quantity	Hydrocyclone Quantity	Fertilizer Tank Quantity	Capacity
	inch			lt	m³/h
A-4H-100G-P2	4"	2	1x4"	100	50
A-4H-100G-P3	4"	3	1x4"	100	75
A-5H-100G-P4	5"	4	1x5"	100	100
A-6H-200G-P5	6"	5	1x6"	200	125
A-6H-200G-P6	6"	6	1x6"	200	150
A-2x5H-300G-P7	8"	7	2x5"	200	175
A-2x5H-300G-P8	8"	8	2x5"	300	200



•CONTROL UNIT, CONNECTION EQUIPMENTS, AIR VALVE, PRESSURE GAUGE ARE INCLUDED IN THE SYSTEM.
•FERTILIZATION KIT AND FERTILIZER TANK ARE INCLUDED IN THE SYSTEM.
•STANDARD FILTRATION DEGREE: 130 MICRON (120 MESH)
•STANDARD CONNECTION IS FLANGED. GROOVED END AND THREADED CONNECTIONS ARE ON REQUEST.
•PACKAGE: WOODEN CRATE.

MANUAL PLASTIC DISC FILTER

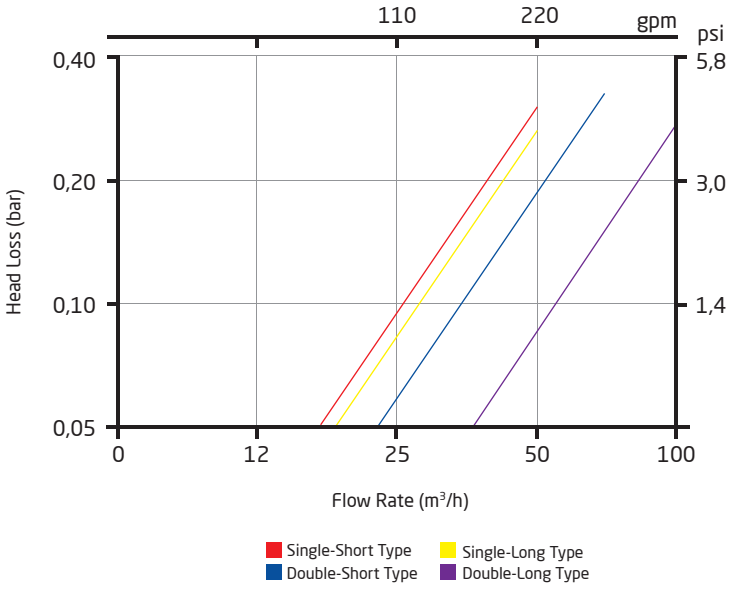
• Description

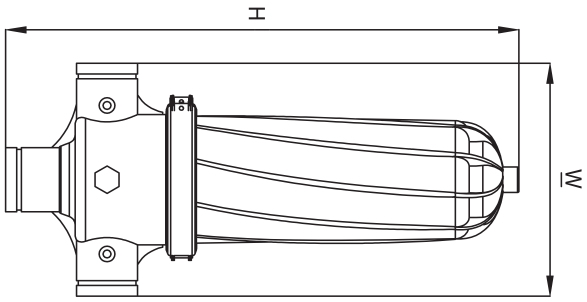
Armaş Disc Filters are designed to ensure deep filtration as a consequence of one-on-one order of many disc sheets manufactured from nylon reinforced polypropylene material on a filter body. Having a simpler design Relative to different filter groups, Armaş Screen Filters are successful in filtration of water well and water resources containing sand.

• Operating Principle

Armaş Manual Disc Filters have same operation principles with AutoFlush® Disc Filters. Manual Disc Filters have wider options regarding to Filtration Area. Cleaning process is available with back-flushing. Nevertheless, It had better perform manually cleaning as dissambling the filter parts for efficient filtering performance.

• Filtration Process



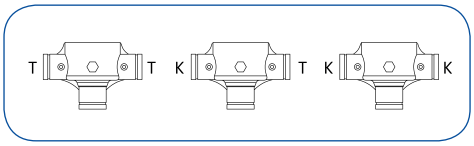


• Dimensions and Features

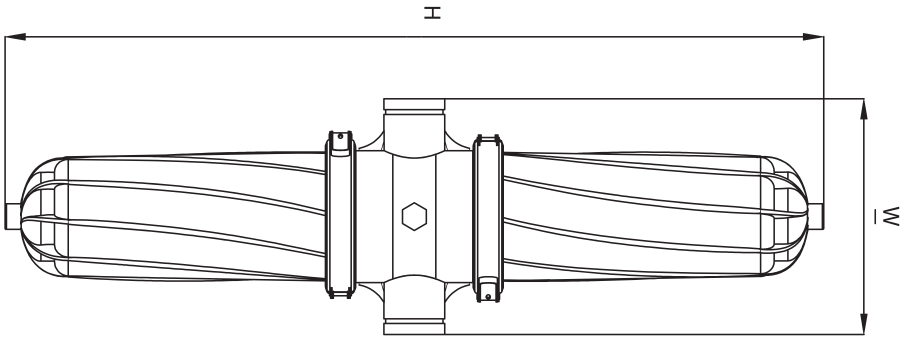
Model	Connection	Connection Type	Type	Capacity	W	H
			Long / Short	m³/h	mm	mm
MF50-S	2"	BSPT x BSPT x BSPT NPT x NPT x NPT K x K x BSPT K x K x NPT K x BSPT x K K x NPT x K	S	25	340	630
MF65-S	2 ½"		S	35	340	630
MF80-S	3"		S	40	340	630
MF50-L	2"		L	30	340	740
MF65-L	2 ½"		L	40	340	740
MF80-L	3"		L	45	340	740

■ 130 Micron | 120 Mesh

Connection Type



K: Grooved End **T**: Threaded BSPT | NPT

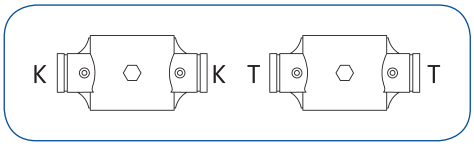


• Dimensions and Features

Model	Connection	Connection Type	Type	Capacity	W	H
			Long / Short	m³/h	mm	mm
DF80-S	3"	BSPT x NPT NPT x NPT K x K	S	50	340	960
DF100-S	4"		S	70	340	960
DF80-L	3"		L	60	340	1200
DF100-L	4"		L	90	340	1200

■ 130 Micron | 120 Mesh

Connection Type



K: Grooved End **T**: Threaded BSPT | NPT

• Mini Plastic Screen Filter

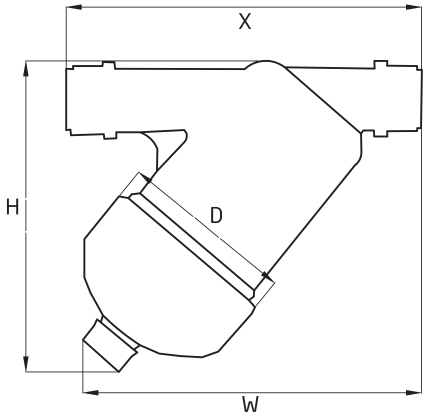
530 Micron | 35 Mesh
130 Micron | 120 Mesh
200 Micron | 75 Mesh
100 Micron | 150 Micron

• Mini Plastic Disc Filter

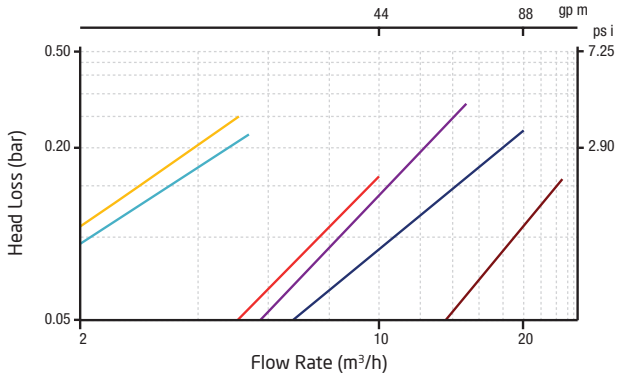
130 Micron | 120 Mesh

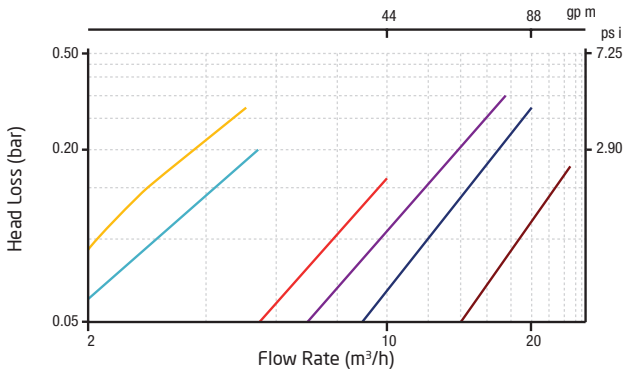
Model	Connection	Connection Type	Capacity	W	H	X	D
			m³/h	mm	mm	mm	mm
MSF1	¾"	BSPT x NPT	5	182	170	170	93,5
MSF2	1"		6				
MSF3	1 ¼"		10	225	205	230	115
MSF4	1 ½"		15				
MSF4-P	1 ½"		20	275	250	263	143
MSF5-P	2"		25				

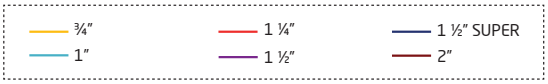
Model	Connection	Connection Type	Capacity	W	H	X	D
			m³/h	mm	mm	mm	mm
MDF1	¾"	BSPT x NPT	5	182	170	170	93,5
MDF2	1"		6				
MDF3	1 ¼"		10	225	205	230	115
MDF4	1 ½"		15				
MDF4-P	1 ½"		20	275	250	263	143
MDF5-P	2"		25				



• Filtration Process







• 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, Anthracyte 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.

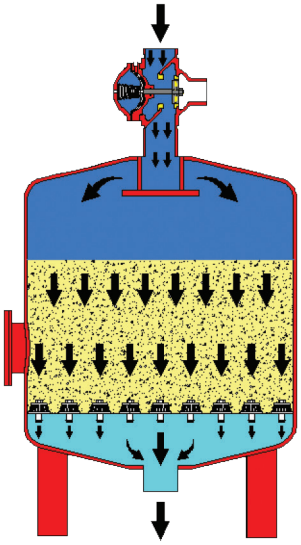
Armaş 1000 series Gravel Filters are projected to operate single or modular and manual or fully automatic back flushing procedure based on the water flow rate to be filtered within scope of the field of use. In order to increase filtration efficiency of gravel filters, it is recommended that modular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

• Operating Principle

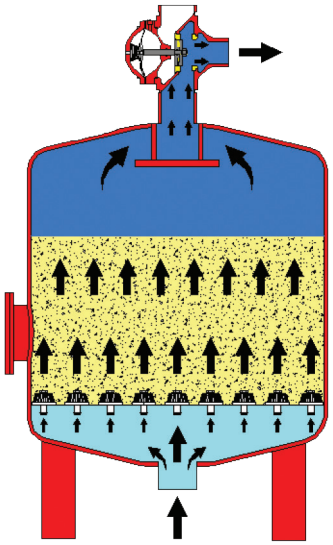
Armaş 1000 series Gravel Filters operates in two different modes including filtration process and back flushing process.
Armaş media filters are back flushing control gates assembled on the filters to be operated in filtration or back flushing procedures.

• 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



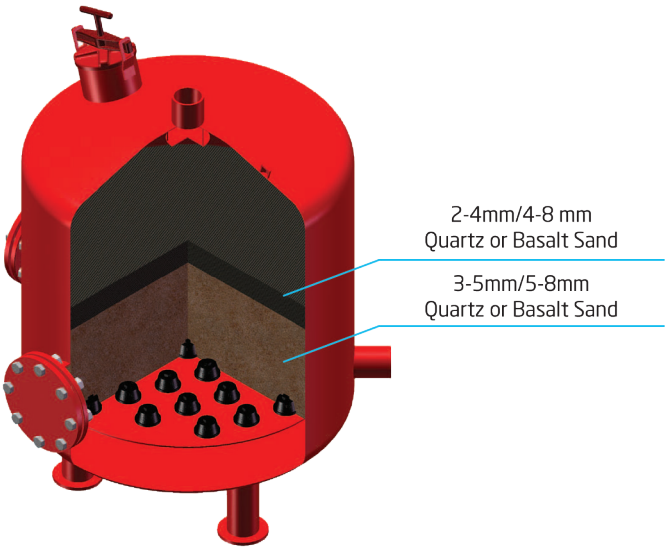
Throughout the filtration process, particles suspended in the sand layer shall later cause obstruction in the filter following a particular operation period. Therefore, pressure loss in the system will increase and media filter is required to be cleaned. Cleaning process of media filters is referred 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.

• Filtering Degrees of Media 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

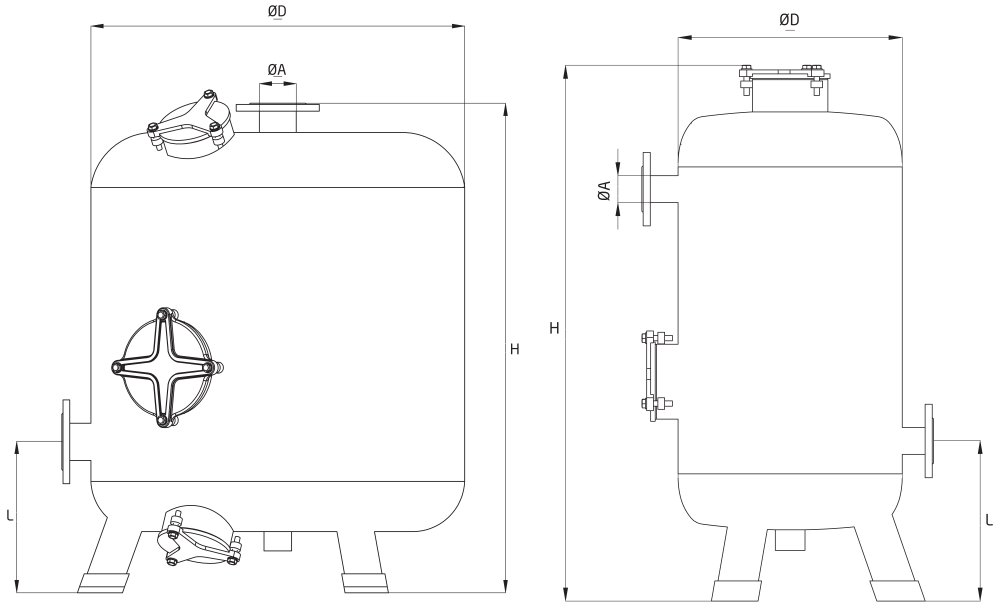
** Quartz sand is standard on agricultural irrigation systems.*

• Sand Distribution Diagram of Gravel Filters



Model	Recommended Sand Volume	
	kg	lbs
1020	100	220,5
1520	100	220,5
1024	150	330,7
1030	225	496,0
1036	250	551,2
1536	250	551,2
1048	500	1102,3

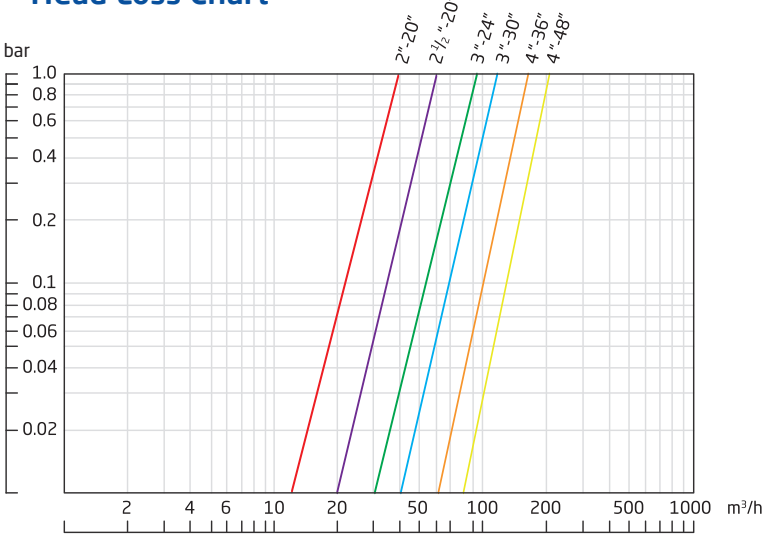
• Dimension



• Available Models and Recommended Flow Rates

Model	ØA	ØD		H		L		Recommended Flow Rate	
		mm	inch	mm	inch	mm	inch	m³/h	l/s
1020	2"	500	20	1200	47,2	360	14,2	10 - 15	2,8 - 4,2
1520	2½"	500	20	1200	47,2	360	14,2	15 - 20	4,2 - 5,6
1024	3"	600	24	1170	46,1	360	14,2	20 - 30	5,6 - 8,3
1030	3"	750	30	1170	46,1	360	14,2	30 - 42	8,3 - 11,6
1036	3"	900	36	1170	46,1	360	14,2	42 - 60	11,6 - 16,7
1536	4"	900	36	1170	46,1	360	14,2	60 - 75	16,7 - 20,8
1048	4"	1200	48	1170	46,1	360	14,2	80 - 100	22,2 - 27,8

• Head Loss Chart



MEDIA (GRAVEL) FILTER 1000 SERIES

• 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 Polyester Coating
2	Mushroom Filter	Nylon 6
3	Bonnet Gasket-Monolithic	Natural Rubber / EPDM
4	Bonnet	GGG40 - Ductile Iron
5	Bolts and Nuts	SST

• 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 Powding 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**	**GRO**	**EL**	**PS**

• Automatic Gravel Filter System

Code	Capacity	Tank Quantity	Tank Size	Collector Size
A10-G2-0220	24 m³/h	2	20"-2"	3"
A10-G3-0220	36 m³/h	3	20"-2"	4"
A10-G4-0220	48 m³/h	4	20"-2"	4"
A10-G2-0324	40 m³/h	2	24"-3"	4"
A10-G3-0324	60 m³/h	3	24"-3"	4"
A10-G4-0324	80 m³/h	4	24"-3"	5"
A10-G2-0330	60 m³/h	2	30"-3"	4"
A10-G3-0330	90 m³/h	3	30"-3"	5"
A10-G4-0330	120 m³/h	4	30"-3"	6"
A10-G6-0330	180 m³/h	6	30"-3"	8"
A10-G8-0330	240 m³/h	8	30"-3"	10"
A10-G2-0336	84 m³/h	2	36"-3"	5"
A10-G3-0336	126 m³/h	3	36"-3"	6"
A10-G4-0336	168 m³/h	4	36"-3"	8"
A10-G6-0336	252 m³/h	6	36"-3"	10"
A10-G8-0336	336 m³/h	8	36"-3"	12"
A10-G2-0436	120 m³/h	2	36"-4"	5"
A10-G3-0436	180 m³/h	3	36"-4"	6"
A10-G4-0436	240 m³/h	4	36"-4"	8"
A10-G6-0436	360 m³/h	6	36"-4"	10"
A10-G8-0436	480 m³/h	8	36"-4"	12"
A10-G2-0448	144 m³/h	2	48"-4"	5"
A10-G3-0448	216 m³/h	3	48"-4"	6"
A10-G4-0448	288 m³/h	4	48"-4"	8"
A10-G6-0448	432 m³/h	6	48"-4"	10"
A10-G8-0448	576 m³/h	8	48"-4"	12"

•CONTROL UNIT, BACK-FLUSHING VALVES, CONNECTION EQUIPMENTS, QUARTZ SAND, AIR VALVE, PRESSURE GAUGE ARE INCLUDED IN THE SYSTEM.
•BONNETS ARE GGG40 DUCTILE IRON AND GASKETS ARE MONOLITHIC NATURAL RUBBER.

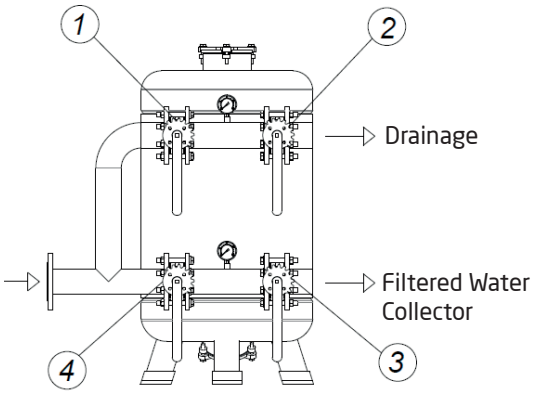
• Description

Gravel Filters can be also used as single unit by-pass modules except manual or automatic systems.

• Operating Principle

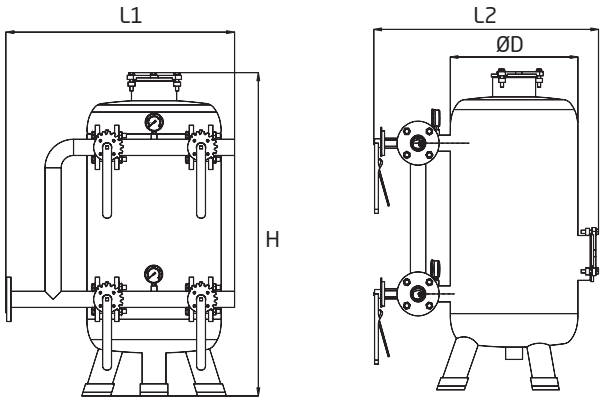
There are two types of flow; filtration and backflushing function. İncoming dirty water from by-pass line is spread to inside of the gravel filter homogeneously. The filtration is completed when the filtered water passed from mushrooms. Accumulated dirt materials in filter will cause pressure loss. İt will cause reduce the passing filtered flow. In this case, the filter must switch to the backflushing mode in order to clean the filter. In the backflushing mode, incoming dirty water from second chamber pass to mushroom plate. It act to the accumulated dirt materials and provides to discharge from drain line. At this time, the butterfly valve which is on the drain port of the by-pass line is open, other butterfly valve is close.

Filtration Mode: 1,3: Open - 2,4: Closed



Back-Flushing Mode: 2,4: Open - 1,3: Closed

• Available Model Dimensions



Model	Inlet/Outlet Sizes	ØD		H		L1		L2		Recommended Flow Rate	
		mm	inch	mm	inch	mm	inch	mm	inch	m³/h	l/s
1020-BP-500	2"	500	20	1204	47,4	852	33,5	884	34,8	10 - 15	2,8 - 4,2
1520-BP-500	2½"	500	20	1204	47,4	852	33,5	884	34,8	15 - 20	4,2 - 5,6
1024-BP-600	3"	600	24	1212	47,7	929	36,6	1022	40,2	20 - 30	5,6 - 8,3
1030-BP-750	3"	750	30	1239	48,8	1054	41,5	1215	47,8	30 - 42	8,3 - 11,6

• Description

Armaş Double Gravel Filters are designed to use for the filtration of the water sources such as lake, dams, canals, creeks, water pools, etc. which has algae and organic matters. It provides easy usage and maintenance thanks to its unique design.

• Operation Principle (Automatic)

Filter tank has two chambers. First chamber is distributer that dirty water entering in it. The section contains quartz sand and mushroom diffusers is named media. The media chamber consists of two regions.There are two seperate cleaning chamers. The second chamber, clean water chamber is under the media. The mushroom plate separates 2 chambers from each other. There are two types of flow; filtration and backflushing function. İncoming dirty water from opening to gravel filter ports of backflushing valve is spread to inside of gravel filter homogeneously from distributer.The filtration is completed when the filtered water passed from mushrooms. Materials that accumulated in filter will cause pressure loss. İt will cause reduce the passing filtered flow.In this case, filter is necessary to switch to the backflushing mode in order to clean the filter. İn the backflushing mode, incoming filtered water from second chamber pass to mushroom diffuser plate. It act to accumulated dirt materials and provides to discharge from drain line of 3 way valve.At this time, connected ball valve section of 3 way valve is open, other port is close. All directions do manually. All of the media chamber don't swich to backflushing mode at the same time. While one side of the gravel is doing backflushing, the other side continue to filtration.

• Filtration Mode

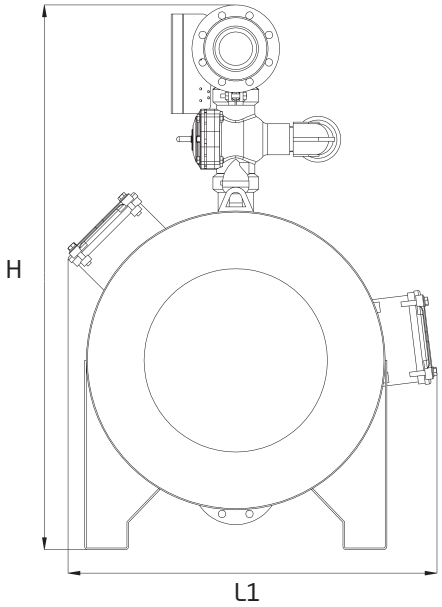
• Back-Flushing Mode

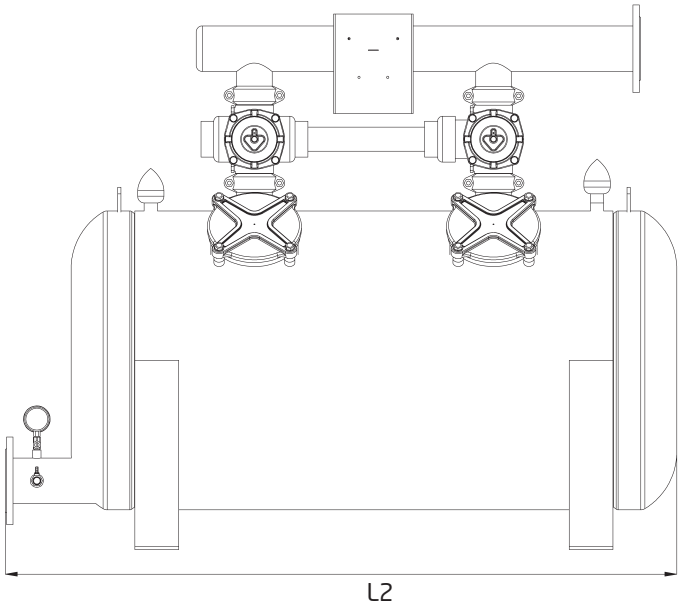
• Operation Principle (Manual)

Unlike automatic double gravel filtration, butterfly and ball valves are used instead of control panel and back-flushing valves. For this reason, the filter can be manually switched to the filtering or back-flushing mode when required.

• Available Model Dimensions

	Model	Inlet/Outlet Sizes	Tank Size	H		L1		L2		Recommended Flow Rate	
				mm	inch	mm	inch	mm	inch	m³/h	l/s
Automatic	ADG-500	2"	20"	1034	40,7	639	25,2	1098	43,2	11-21	3,1-5,8
	ADG-550	3"	22"	1074	42,3	674	26,5	1081	42,6	27-54	7,5-15
	ADG-750	4"	30"	1367	53,8	921	36,3	1685	66,3	42-85	11,7-23,6
	ADG-900	5"	36"	1542	60,7	1045	41,1	1771	69,7	66-132	18,3-36,7
Manual	MDG-500	2"	20"	1061	41,8	639	25,2	1098	43,2	11-21	3,1-5,8
	MDG-550	3"	22"	1102	43,4	671	26,4	1015	40,0	27-54	7,5-15
	MDG-750	4"	30"	1297	51,1	921	36,3	1685	66,3	42-85	11,7-23,6
	MDG-900	5"	36"	1476	58,1	1045	41,1	1771	69,7	66-132	18,3-36,7





• 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.

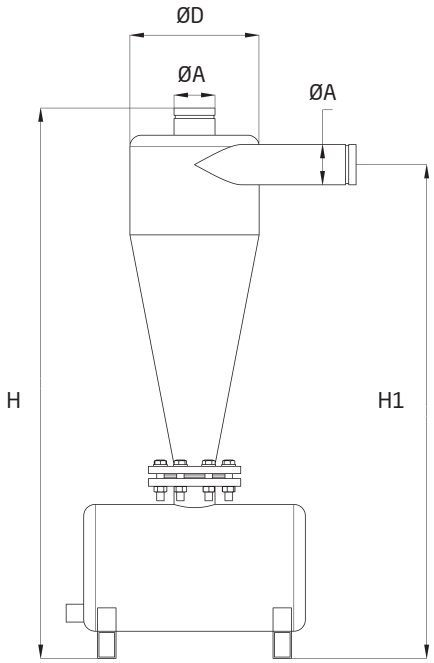
• Specifications

•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 Powding Polyester - Epoxy)

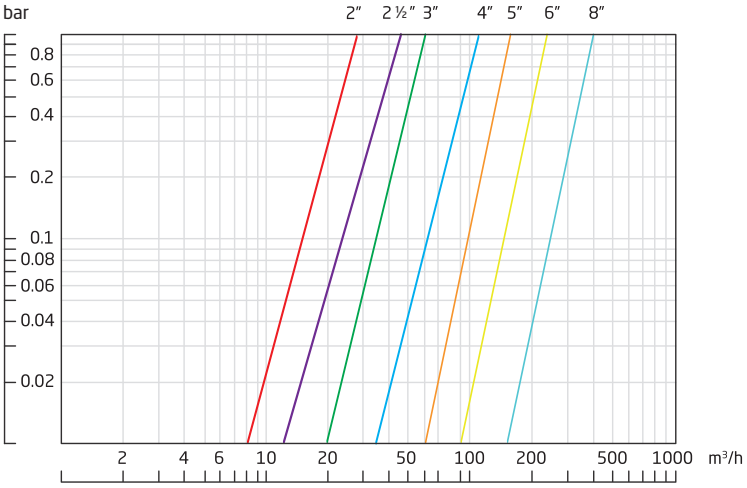
• Dimension



• Available Models and Recommended Flow Rates

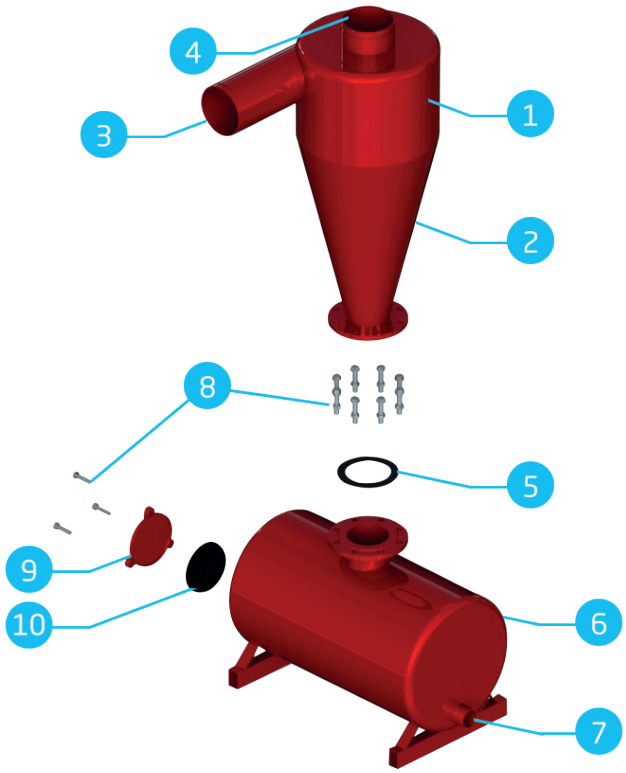
Model	ØA		Connection Types			ØD		H		H1		Recommended Flow Rate			
	mm	inch	Grooved End	Flanged	Threaded	mm	inch	mm	inch	mm	inch	m³/h		l/s	
2050	50	2"	✓	✓	✓	219	8,6	1045	41,1	955	37,6	10,5	17	2,9	4,7
2065	65	2½"	✓	✓	✓	280	11,0	1215	47,8	1090	42,9	16	26,5	4,4	7,4
2080	80	3"	✓	✓	✓	280	11,0	1215	47,8	1090	42,9	25	42	6,9	11,7
2100	100	4"	✓	✓	✓	350	13,8	1425	56,1	1290	50,8	44	73,5	12,2	20,4
2125	125	5"	✓	✓		450	17,7	1675	65,9	1505	59,3	69,5	116	19,3	32,2
2150	150	6"	✓	✓		450	17,7	1675	65,9	1495	58,9	101	169	28,1	46,9
2200	200	8"	✓	✓		600	23,6	2200	86,6	1980	78,0	176	293	48,9	81,4

• Head Loss Chart



• Material List

Part No	Part Name	Material/Equipment
1	Cylindrical Wall	St37-2
2	Conical Body	St37-2
3	Inlet Pipe	St37-2
4	Outlet Pipe	St37-2
5	Bolts and Nuts	Natural Rubber / EPDM
6	Storage Chamber	St37-2
7	Drainage	Ball Valve/Control Valve
8	Bolt/Nut	Stainless Steel
9	Bonnet	GGG40/50 Ductile Iron
10	Gasket for Bonnet	Natural Rubber / EPDM



• 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"		

2150	**6**	**GRO**	**EL**

• Description

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

• Operation Principle

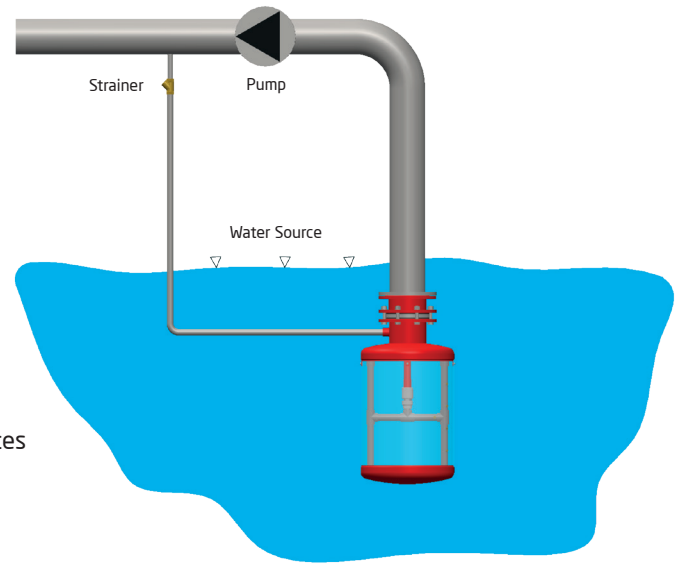
Water sucked by the pump passes through the strainer and debris is kept outside by the stainless steel screen. Rotating nozzles are fed with water taken from the pump outlet. Water jets sprayed from the nozzles blow away the debris collected on the outer surface of the screen and thus the filter is cleaned.

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
•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", 10", 12"

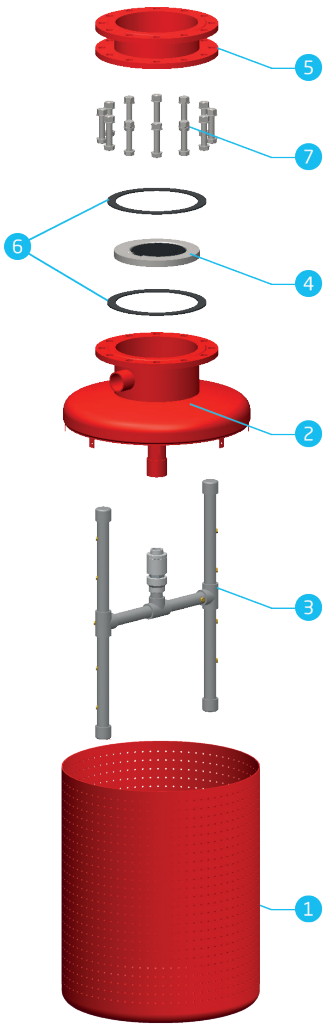
• Specifications

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



• Applications

•Agricultural applications
•The water source which has Alga, Trash, Sand and the other heavy wastes (Creek, lake, reservoir and etc.)



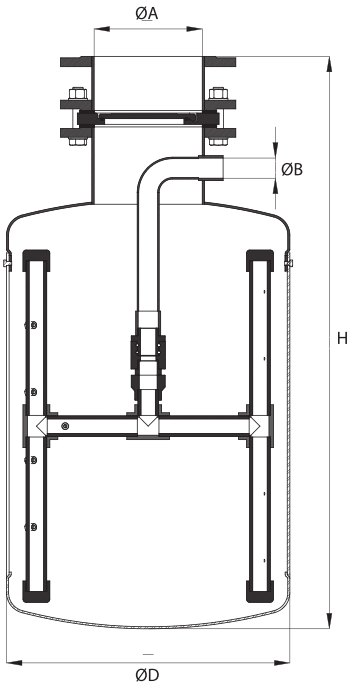
• Material List

Part No	Part Name	Material
1	Body/Screen	St37-2
2	Upper Bonnet	St37-2
3	Turbine Mechanism	PVC
4	Check Valve	GG25+AISI304
5	Connection Bonnet	St37-2
6	Gasket for Flange	Natural Rubber
7	Bolts and Nuts	Stainless Steel

• Technical Specifications

Model No	SF-4	SF-6	SF-8	SF-10	SF-12
Maximum Flow Rate	80 m³/h	180 m³/h	315 m³/h	495 m³/h	710 m³/h
Connection Size	4"	6"	8"	10"	12"
Standard Filtration Degree	5000* micron	5000* micron	5000* micron	5000* micron	5000* micron
Min. Operation Pressure	1,5 bar	1,5 bar	1,5 bar	1,5 bar	1,5 bar
Max. Operation Pressure	10 bar	10 bar	10 bar	10 bar	10 bar
Max. Operation Temperature	60°C	60°C	60°C	60°C	60°C

** Please consult to Armas Team for different filtration degrees.*



• Dimensions

Model	ØA	ØB	ØD		H	
			mm	inch	mm	inch
SF-4	4"	1 ¼"	380	15,0	814	32,0
SF-6	6"	1 ¼"	450	17,7	934	36,8
SF-8	8"	1 ¼"	550	21,7	1111	43,7
SF-10	10"	2"	600	23,6	1236	48,7
SF-12	12"	2"	640	25,2	1321	52,0

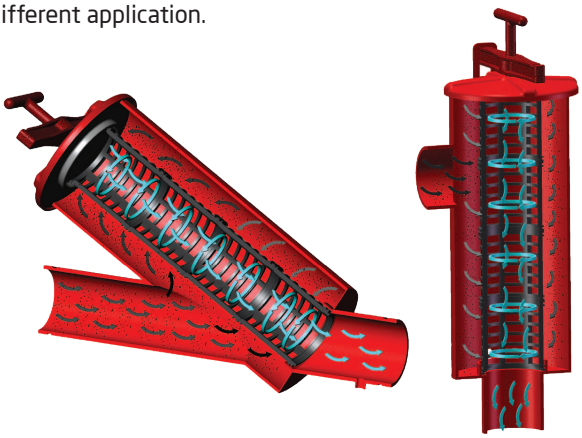
• Sample Order Form

Model	Connection Size	Connection Type
SF-4	4"	Flanged (F)
SF-6	6"	Flanged (F)

• 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 hydrocyclon 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.

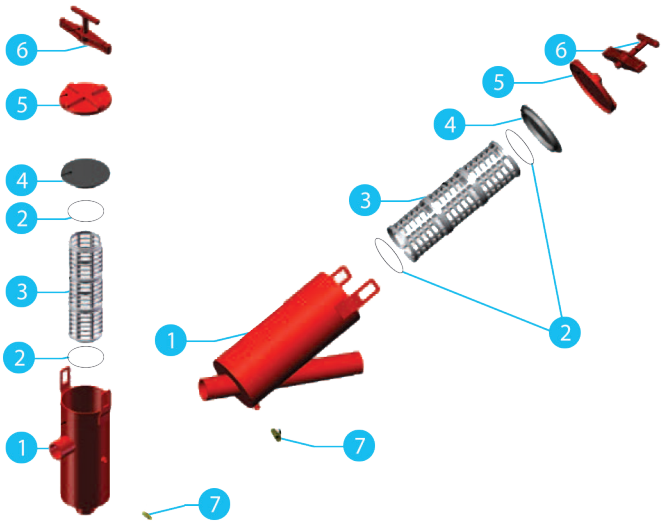
• Disc-Screen Filter Degree Measures

Mesh No	Micron	Effective Filtering Surface	Color
**80	200	%39	Blue
*120	130	%39	Red
*150	100	%40	Yellow

** 130 micron (120 mesh) screen is standard.*
***100 micron (150 mesh) and 200 micron (80 mesh) on request.*

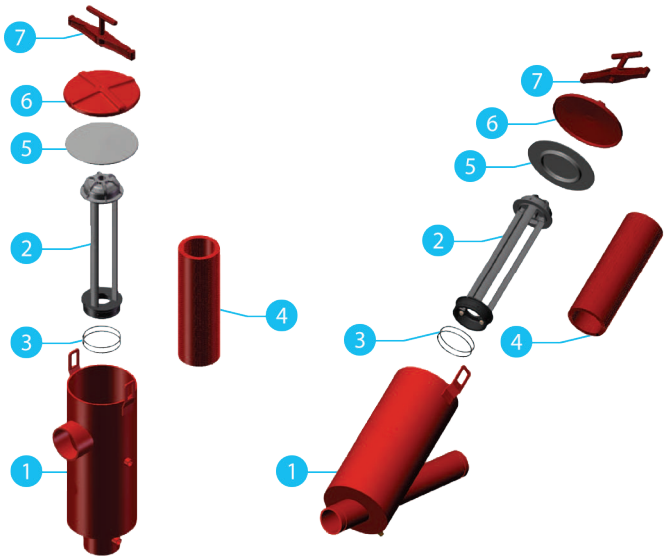
• Material List (Screen Filter)

Part No	Part Name	Material
1	Body	St37-2
2	O - Ring	NBR
3	Screen	PA6 Polyamid
4	Lid Seal	NBR/EPDM
5	Lid	GGG40/50
6	Arm	GGG40/50
7	Discharge Valve	GG 25/GGG 40

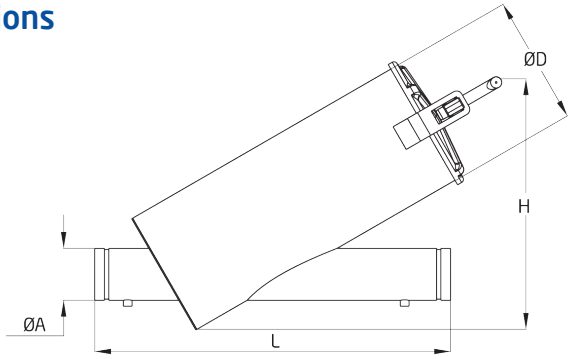


• Material List (Disc Filter)

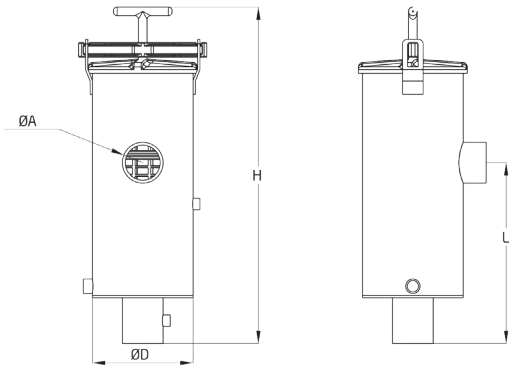
Part No	Part Name	Material
1	Body	St37-2
2	Disc Frame	PA6 GFR30
3	O - Ring	NBR/EPDM
4	Disc	Nylon Reinforced PP
5	Lid O-Ring	NBR/EPDM
6	Lid	GGG40/50
7	Arm	GGG40/50



• Dimensions



Y Type disc-screen filter (Y-D 3000 series)

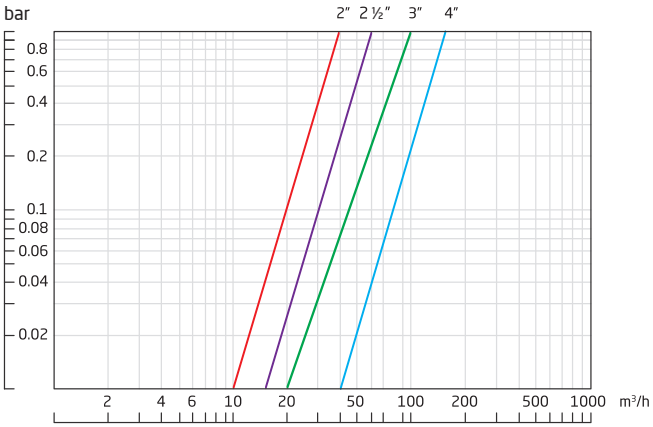


Angle Type dic-screen filter (L-D 3000 series)

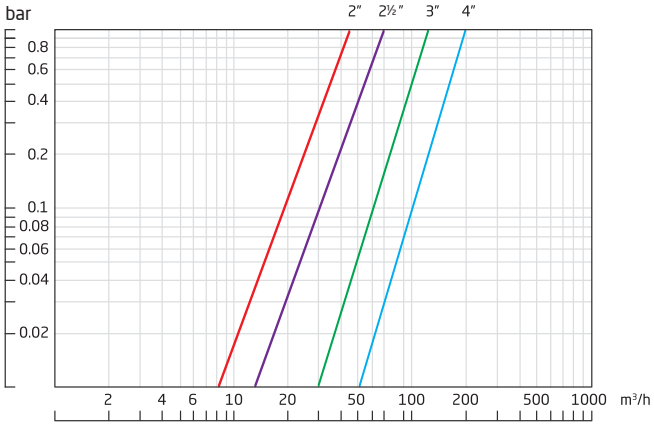
• Available Models and Recommended Flow Rates

Model	ØA		ØD		H		L		Recommended Flow Rate			
	mm	inch	mm	inch	mm	inch	mm	inch	m³/h		U.S gpm	
Y(D)3050	50	2	168	6"	350	13,8	485	19,1	18	25	5,0	6,9
Y(D)3065	65	2½"	168	6"	350	13,8	490	19,3	28	42	7,8	11,7
Y(D)3080	80	3"	219	8"	450	17,7	600	23,6	38	50	10,6	13,9
Y(D)3100	100	4"	219	8"	450	17,7	600	23,6	40	75	11,1	20,8
Y(D)3125	125	5"	219	8"	600	23,6	730	28,7	90	125	25,0	34,7
L(D)3050	50	2	168	6"	600	23,6	140	5,5	18	25	5,0	6,9
L(D)3065	65	2½"	168	6"	600	23,6	140	5,5	28	42	7,8	11,7
L(D)3080	80	3"	219	8"	875	34,4	160	6,3	38	50	10,6	13,9
L(D)3100	100	4"	219	8"	875	34,4	160	6,3	40	75	11,1	20,8

• Head Loss Chart



Y Type disc-screen filter (Y-D 3000 series)



Angle Type disc-screen filter (L-D 3000 series)

• Sample Order Form

Model	Inlet Diameter	Connection Type	Control Feature	Filtration Degree
YD3065-LD3065	2"	Grooved End (GRO) Threaded (TH) Flanged (F)	Manual (M) Power Controlled (EL) Batter Controlled (BT)	100 Micron 130 Micron 200 Micron
YD3080 - LD3080	3"			
YD3125	5"			

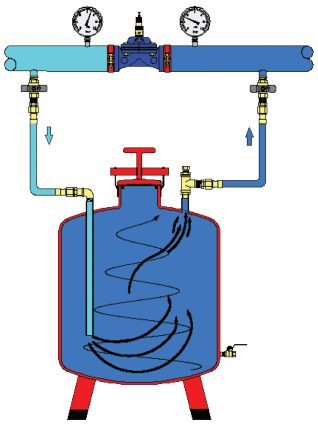
YD3050	4	GRO	M	130

• 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

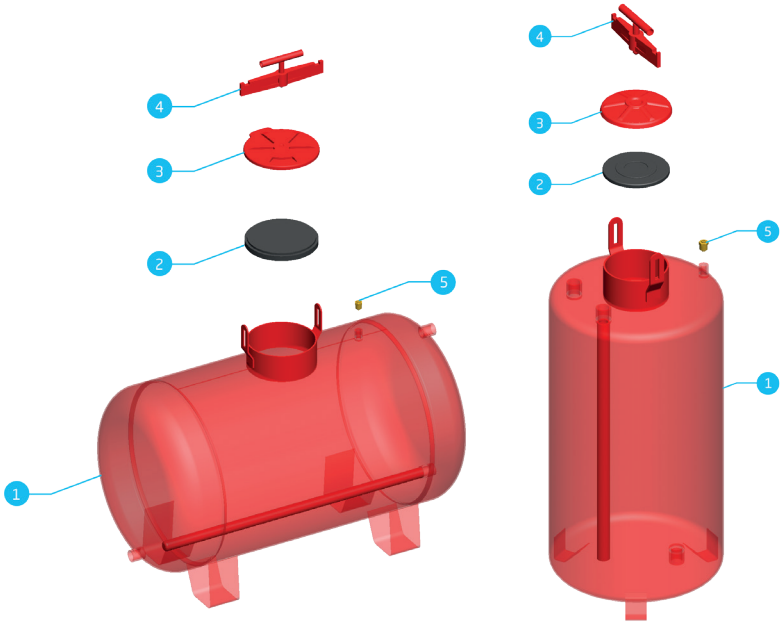
•Chemical fertilization applications by pressure agricultural irrigation systems
•Pesticide administration by pressure agricultural irrigation systems

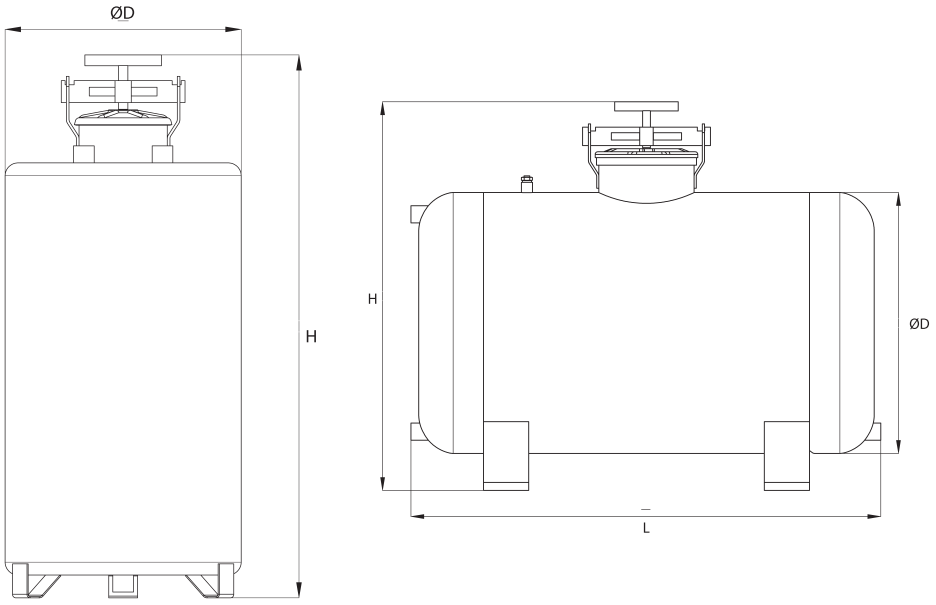
• Features

•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.

• Material List

Part No	Part Name	Material
1	Body	St37-2
2	Lid Seal	NBR/EPDM
3	Lid	GGG40/50
4	Arm	GGG40/50
5	Air Vent	Ms58+AISI 302





• Dimensions

Model		ØD		H		L		Capacity
		mm	inch	mm	inch	mm	inch	liter
Vertical	V5060	380	15,0	794	31,3	-	-	60
	V5100	450	17,7	1054	41,5	-	-	100
	V5200	600	23,6	1200	47,2	-	-	200
Horizontal	H5100	450	17,7	750	29,5	866	34,1	100
	H5200	600	23,6	894	35,2	831	32,7	200
	H5300	600	23,6	894	35,2	1081	42,6	300
	H5400	600	23,6	894	35,2	1331	52,4	400

• Description

Back-Flushing control valves are the 3-way control valves which are operated by line pressure or an external pneumatic pressure. Valve works in filtration and back flushing mode as coordinated with filter elements in the system. Diaphragm-pilot valve assembly of valve works as bidirectional. While valve is switching into backflushing mode in filtration mode, pilot valve changes its way and opens relief way. It thereby prevents that fresh water is mixed with waste water and cleans filter elements in the best manner.

• Available Models

Model **21**

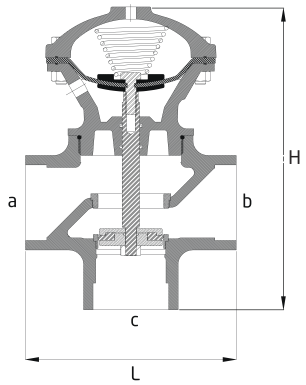
Model **27**

Model **28**

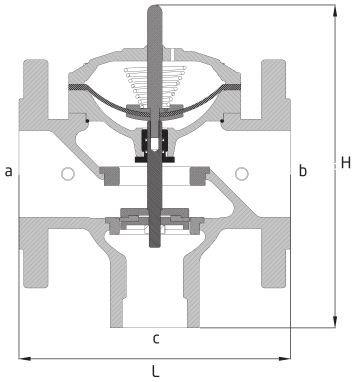
Model **37**

Model **38**

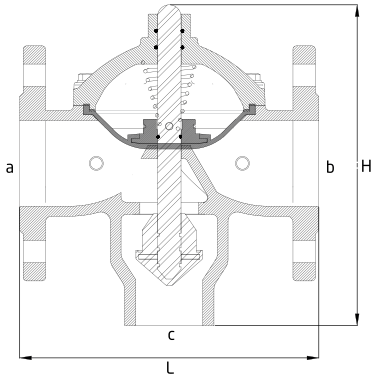
Code	Model	A		B		C		H	L	Weight	
								mm	mm	kg	lbs
2122	21	2"	Threaded / BSP	2"	Threaded / BSP	2"	Threaded/ BSP	230	183	6,5	14,3
2732	27	3"	Flanged / PN16	3"	Flanged / PN16	2"	Threaded/ BSP	285	241	20,0	44,1
2832	28	3"	Grooved End	3"	Grooved End	2"	Threaded/ BSP	285	220	12,5	27,6
2743	27	4"	Flanged / PN16	4"	Flanged / PN16	3"	Threaded/ BSP	293	280	31,0	68,3
2843	28	4"	Grooved End	4"	Grooved End	3"	Threaded/ BSP	293	275	24,0	52,9
3732	37	3"	Flanged / PN16	3"	Flanged / PN16	2"	Threaded/ BSP	275	270	18,0	39,7
3832	38	3"	Grooved End	3"	Grooved End	2"	Threaded/ BSP	275	270	12,0	26,5



Model: 21

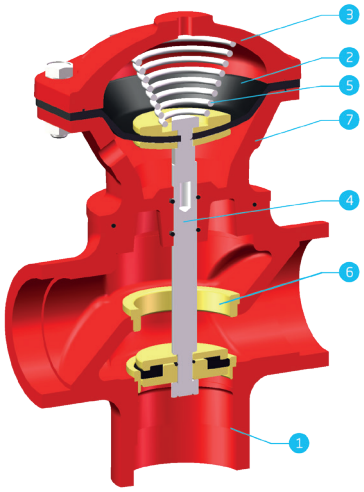


Model: 27 / 28

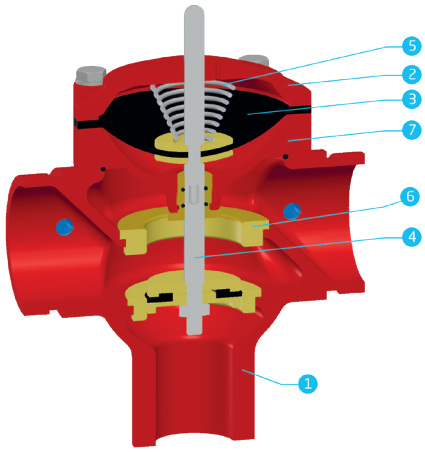


Model: 37 / 38

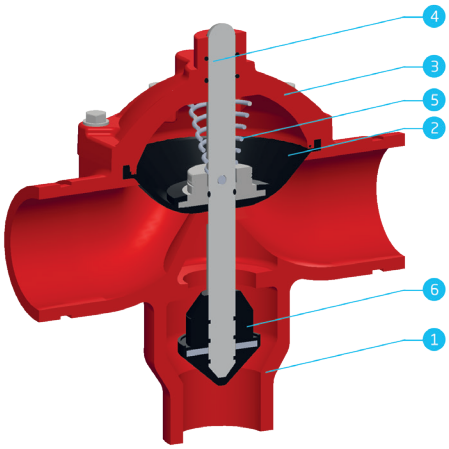
• Main Parts



Model 21		
Part No	Part Name	Material
1	Body	GG25 (Cast Iron)
2	Diaphragm	Natural Rubber Nylon Reinforced
3	Upper Bonnet	GG25 (Cast Iron)
4	Stem	AISI 304
5	Spring	AISI 302
6	Seat	Brass (Ms58)
7	Middle Bonnet	GG25 (Cast Iron)

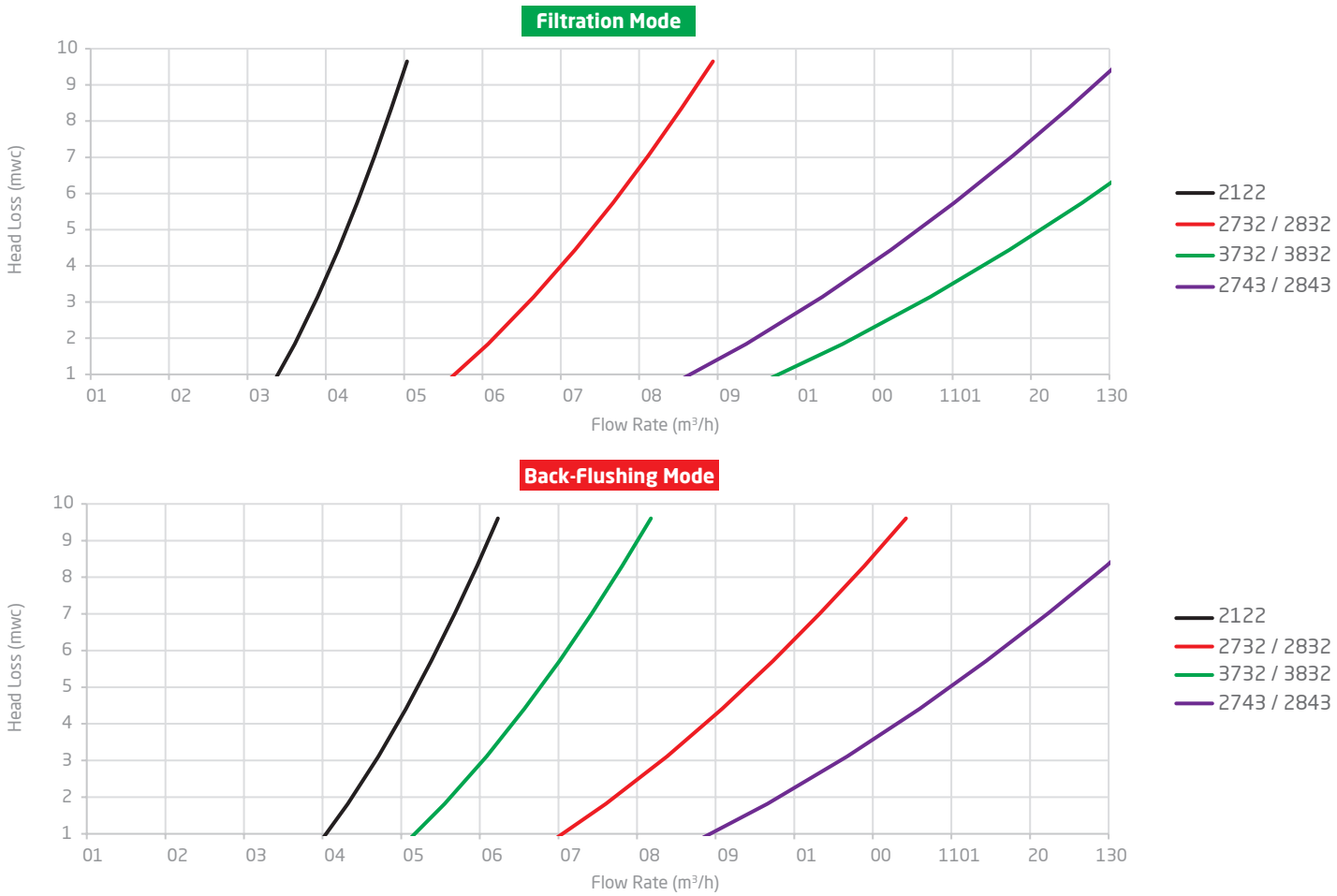


Model 27/28		
Part No	Part Name	Material
1	Body	GG25 (Cast Iron)
2	Upper Bonnet	GG25 (Cast Iron)
3	Diaphragm	Natural Rubber Nylon Reinforced
4	Stem	AISI 304
5	Spring	AISI 302
6	Seat	Brass (Ms58)
7	Middle Bonnet	GG25 (Cast Iron)



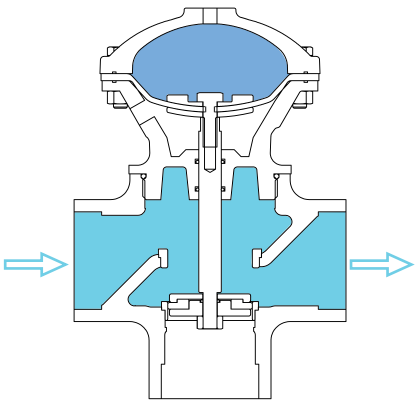
Model 37/38		
Part No	Part Name	Material
1	Body	GG25 (Cast Iron)
2	Diaphragm	Natural Rubber Nylon Reinforced
3	Upper Bonnet	GG25 (Cast Iron)
4	Stem	AISI 304
5	Spring	AISI 302
6	Wedge	AISI 304 + Natural Rubber

• Flow Characteristics

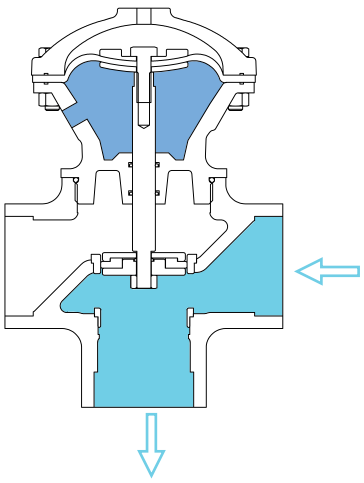


Model	2122		2732-2832		2743-2843		3732-3832	
	Filtration Mode	Back-Flushing Mode	Filtration Mode	Back-Flushing Mode	Filtration Mode	Back-Flushing Mode	Filtration Mode	Back-Flushing Mode
Kv (m³/h @ 1 bar)	30	40	60	80	100	105	115	55
Cv (gpm @ 1 psi)	35	45	69	92	115	121	133	63
Recommended Flow (m³/h)	30	30	60	40	70	25	95	60
Max. Operation Pressure	16 bar							

• Filtration



• Back-Flushing



• HYDRAULIC CONTROL VALVES

800 SERIES

Armaş 800 series automatic hydraulic control valves are designed in the "Y" body model type so as to show maximum resistance to cavitation under minimum head loss in high flow rates. Armaş 800 series automatic hydraulic control valves are double-chamber diaphragm actuated and disc closed type. Valve has a standard double control chamber.

Available Sizes: 2" (50 mm) - 16" (400 mm)
Available Connection Types: Flanged
Available Pressure Norms: PN16 - PN25 - PN40

600 SERIES

Armaş 600 series valves are the direct diaphragm closing automatic hydraulic control valves which work with line pressure. It ensures easy and smooth flow with minimum pressure losses thanks to excellent design of valve body and diaphragm.

Available Sizes: 1½" (40 mm) - 12" (300 mm)
Available Connection Types: Threaded, Flanged, Grooved End
Available Pressure Norms: PN10 - PN16 - PN25

500 SERIES

Armaş 500 series valves are direct diaphragm closing automatic hydraulic control valves which work with line pressure. They ensure easy and smooth flow with minimum pressure losses thanks to excellent design of valve body and diaphragm. Armaş 500 series hydraulic control valves are designed so that it can be used in potable water force network, agricultural irrigation, filtration, applications by even an unskilled personnel.

Available Sizes: 1½" (40 mm) - 4" (100 mm)
Available Connection Types: Threaded, Flanged

• AIR COMBINATION VALVE

AIR COMBINATION VALVES - AAV SERIES

Armaş AAV Series Automatic Air Release Valves are the valves that operate with line pressure. Armaş AAV Series Automatic Air Release Valves are the air valves that provide the venting of the air during filling and preventing of vacuum by taking air into the installation during emptying, releasing of the air that accumulates in the installation during active operation with the help of pressure and that operates in automatic manner.

Available Sizes: 2" (50 mm) - 8" (200 mm)
Available Connection Types: Flanged

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T: +90 332 251 74 15 (Pbx) **F:** +90 332 251 74 17

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