

BALDR
A Superior Manufacturer



CATALOG

01 DISC FILTERS

- 03 Y Type Disc Filters
- 05 ST Type Disc Filters
- 07 T Type Disc Filters
- 10 PT Type Disc Filters
- 12 H Type Disc Filters
- 15 Auto Disc Filters

18 SCREEN FILTERS

- 20 Y Type Screen Filters
- 22 ST Type Screen Filters
- 24 T Type Screen Filters
- 26 H Type Screen Filters
- 28 Semi-automatic Screen Filters

30 CENTRIFUGAL SEPARATOR

34 CONTROL VALVES

- 35 Hydraulic Control Valves
- 51 Backflushing Control Valves
- 55 Actuator Valve (Solenoid)

56 AIR VALVES

- 57 V Type Vacuum Valves
- 59 K Type Kinetic Valves
- 62 C Type Combined Valves

65 AUTOMATIC BACKFLUSHING CONTROLLERS

- 66 BAC601 Series
- 68 BAC901 Series

70 AUTO DISC FILTRATION SYSTEM

- 74 T Type Auto Disc Filtration System
- 79 H Type Auto Disc Filtration System

84 SAND MEDIA FILTRATION

91 WORKSHOP&PROJECT CASE

- 92 Workshop
- 93 Project Case

MORE INFORMATION

www.baldr.com.cn is more than a website, it also provides a lot of water treatment solutions in different applications. Please visit the website for more latest products and information.

www.baldr.com.cn



INTRODUCTION

Founded in October 2012, Baldr specializes in the R&D, design, manufacturing and global sales of irrigation water treatment products and irrigation smart control products.

With a powerful R&D team composed of more than 40 superior engineers, serving for different parts including the software, electronic hardware, mechanical structure and industrial appearance design etc. Baldr focuses on the research of disc water filtration technology, valve control technology, environmental monitoring technology and auto control technology, then applies all to agricultural irrigation, municipal & landscape irrigation and garden irrigation products.

Over the years, Baldr has continued to invest in the research of cloud platform Internet of Things, which represents the future technology and applies it to irrigation products.

Until now, we have obtained hundreds of patents like industrial design, utility model, technology invention and software copyright.

THREE MAIN SERIES OF PRODUCTS:

1. Agricultural irrigation filters, auto backflushing filtration systems, pipe control valves and other products;
2. Home& Garden timers, pump timers, monitoring sensors, drip irrigation kits and other products;
3. Landscape control valves, smart control systems and other series products;

Every product has the safety certificates for European and American countries such as CE, GS, R&TTE, FCC, ROHS, REACH, UL and ETL.



In accordance with the high standards of production and manufacturing requirements, Baldr had built a 24,000m² production and manufacturing base, which consists of mold & injection department, stamping and sheet metal department, SMT Patch binding department, silk screen printing workshop and finished products assembly workshop. It has the capacity of 600,000 annual output of different filters, auto back-flush filtration systems, control valves and smart controllers. And we have obtained ISO 9001:2000 quality management system & BSCI certification.

At Baldr, we devote ourselves to the development and manufacture of environmental water-saving smart control products with the strength of technological innovation, so that people can be more harmonious with the environment, and people can enjoy a better, more convenient and smarter life. This is also our mission that Baldr has always adhered to it since its establishment.

Baldr will adhere to the business philosophy of " INNOVATION AND DEVELOPMENT, CUSTOMER ORIENTATION, SPEED AND PASSION, CREDIBILITY AND INTEGRITY ", with " technological innovation " as its core competitiveness. We aim to build Baldr into a leading international enterprise focusing on water-saving and environmental protection smart control products.

AGRICULTURE IRRIGATION

Provide innovative filtration solutions to solve the water challenges posed across numerous applications for irrigation needs.

LANDSCAPE IRRIGATION

Provide water recycling for urban public parks, residential garden with cost efficient & energy saving solutions.

GOLF COURSE IRRIGATION

Provide clean water service and protection for the irrigation equipment(sprayers, drip irrigation pipes and mist sprayers etc) .

WATER FILTRATION FOR INDUSTRY

Meet various requirements for lower energy consumption and saving water in industrial demands.

THE PRODUCT RANGE FOR WATER FILTRATION ARE AS BELOW

Baldr provides unique and comprehensive water filtration solutions to any agricultural and industrial application. There are a wide range of filters coming out of different filtering elements and materials. Furthermore, Baldr's water filters are in accuracy levels and different flow rates. Meanwhile, automatic backwash filtration technology achieves simultaneous and continuous filtered water supply while discharging.

DISC FILTER



SCREEN FILTER



FILTRATION SYSTEM





Y TYPE DISC FILTERS



ST TYPE DISC FILTERS



T TYPE DISC FILTERS

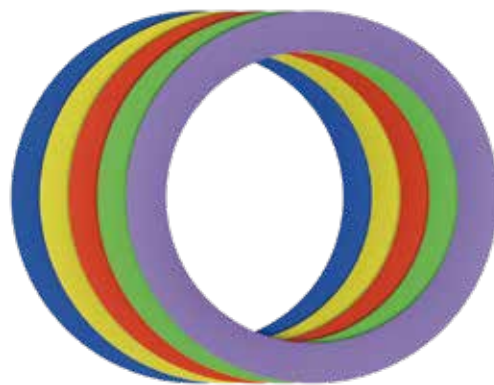


H TYPE DISC FILTERS

DISC FILTER

Maximum quality and safety in filtration in the multiple filtration grades in discs.
Manufacture in plastic which ensures easy maintenance, high resistance and durability.
Interchangeable filter elements for a wide range of flow rates.

With excellent technology, BALDR's disc filters focus on multiple filtration grades, high efficiency and large volume filtration advantage. Additionally, we provide various filters with different pipe sizes and flow rates & grades (20~400 micron) to satisfy different application needs. They are simple cleaning with the well-designed structure. Nowadays, BALDR disc filters are widely used in agriculture irrigation, landscape irrigation and industrial applications etc.



THE FILTRATION GRADE

Six colors are used to identify the six filtration grade levels of the discs.

400 micron
(40 mesh)

200 micron
(75 mesh)

130 micron
(120 mesh)

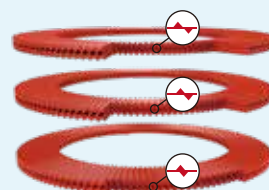
100 micron
(150 mesh)

50 micron
(300 mesh)

20 micron
(750 mesh)

THE UNIQUE DISC TECHNOLOGY

BALDR chooses colorful & thin polypropylene discs with multiple filtration grades. The discs are diagonally grooved on both sides in opposite directions. A series of discs are stacked and compressed, locking on a specially designed filter spine. The opposite directed grooves between any adjacent discs will be pressed together, and create many crossing small spaces, formed as a series of unique filtration pass to contain impurities. In the filtration process, the force of the spring along with the differential pressure firmly compresses these discs together and through multiple crossing spaces, it can provide distinctive in-depth filtration.



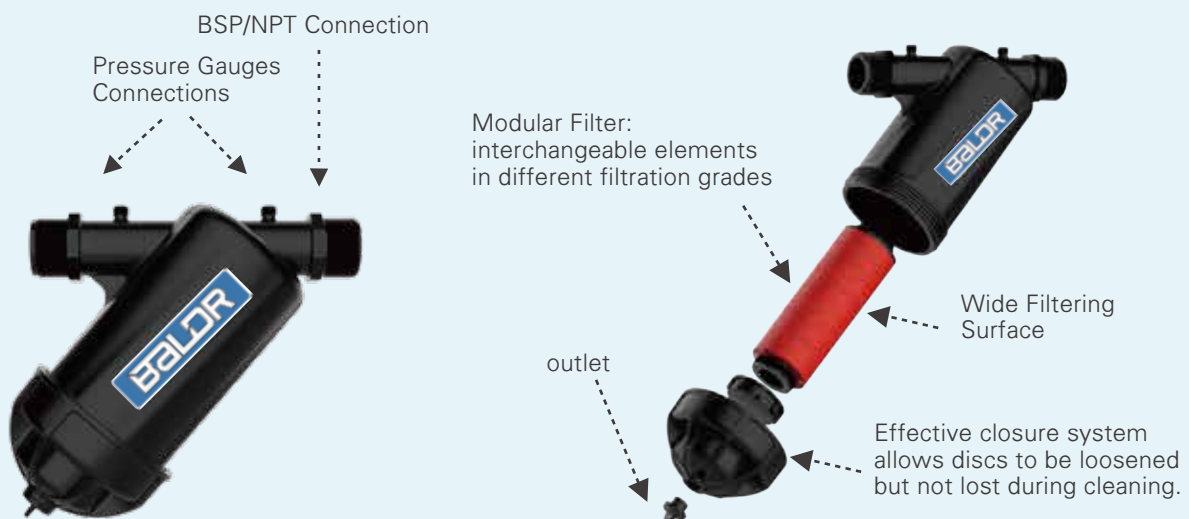
Y TYPE DISC FILTERS

With excellent technology, BALDR's disc filters focus on multiple filtration grades, high efficiency and water saving advantage. They are simple cleaning with the well-designed structure.











TYPICAL APPLICATION

Y type disc filters are applicable to low flow rate water filtering for agriculture irrigation and landscape irrigation. With built-in pressure pipeline, Y type disc filter can efficiently filter out particles.

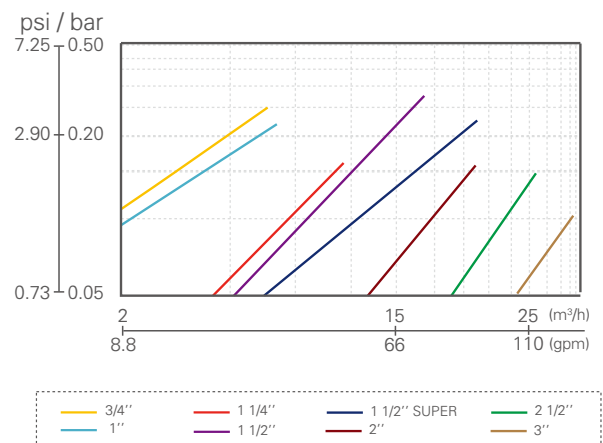


FEATURE & ADVANTAGE

-  Compact structure available in narrow space;
-  Gasket set in the lid;
-  Innovative grooved discs design retains large amounts of solids;
-  Threaded closure system, easy and safe; Low pressure loss;
-  Resistant to chemical products;
-  Easy installation, easy maintenance;
-  Equipped with auxiliary connections;
-  Preset 2 ports for connecting pressure gauge.

HEAD LOSS

Y TYPE FILTER HEAD LOSS(130 micron/ 120 mesh)



Note: The flow rate will fluctuate with different water quality.

MODEL & SPECIFICATION



BDF020Y



BDF025Y



BDF032Y



BDF040Y



BDF040YS



BDF050Y



BDF065Y

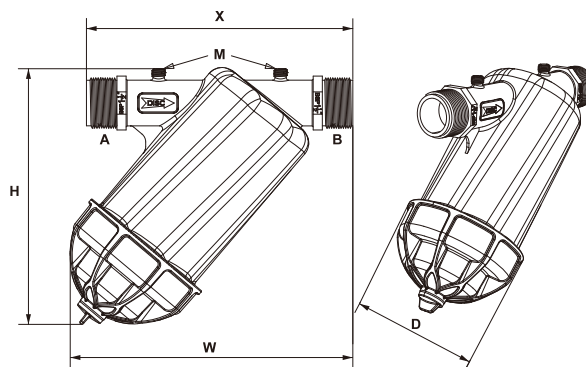


BDF080Y

MODEL	CONNECTIONS BSP/NPT	FILTRATION GRADES (mesh)	MAX FLOW (m ³ /h) (gpm)		FILTERING SURFACE (cm ²) (in ²)		WEIGHTS (kg)
BDF020Y	DN20 3/4"	120	5	22	195	30	0.39
BDF025Y	DN25 1"	120	6	26	195	30	0.39
BDF032Y	DN32 1-1/4"	40/75/120/150	10	44	300	47	0.96
BDF040Y	DN40 1-1/2"	40/75/120/150	14	62	300	47	0.96
BDF040YS	DN40 1-1/2"	40/75/120/150	20	88	525	82	0.99
BDF050Y	DN50 2"	40/75/120/150	25	110	525	82	1.36
BDF065Y	DN65 2-1/2"	75/120	30	132	600	93	2.60
BDF080Y	DN80 3"	75/120	35	154	600	93	2.70

DIMENSION

MODEL	H (mm) (in)		W (mm) (in)		D (mm) (in)	
BDF020Y	173	6.8	186	7.3	83	3.3
BDF025Y	173	6.8	186	7.3	83	3.3
BDF032Y	230	9.0	250	9.8	120	4.7
BDF040Y	230	9.0	250	9.8	120	4.7
BDF040YS	260	10.2	290	11.4	140	5.5
BDF050Y	260	10.2	290	11.4	140	5.5
BDF065Y	330	13.0	360	14.1	168	6.6
BDF080Y	330	13.0	360	14.1	168	6.6



MATERIAL

HOUSING	FILTERING ELEMENTS
Reinforced Polypropylene	PP Grooved Discs

Maximum Pressure 8 Bar / 116 Psi
Maximum Temperature 60 °C / 140 °F

Available In BSP & NPT Connection

ST TYPE DISC FILTERS









With excellent technology, BALDR's ST type disc filters focus on multiple filtration grades, high efficiency and water saving advantage. They are simple cleaning with the well-designed structure, which offers a good quality filter for low flow filtration.

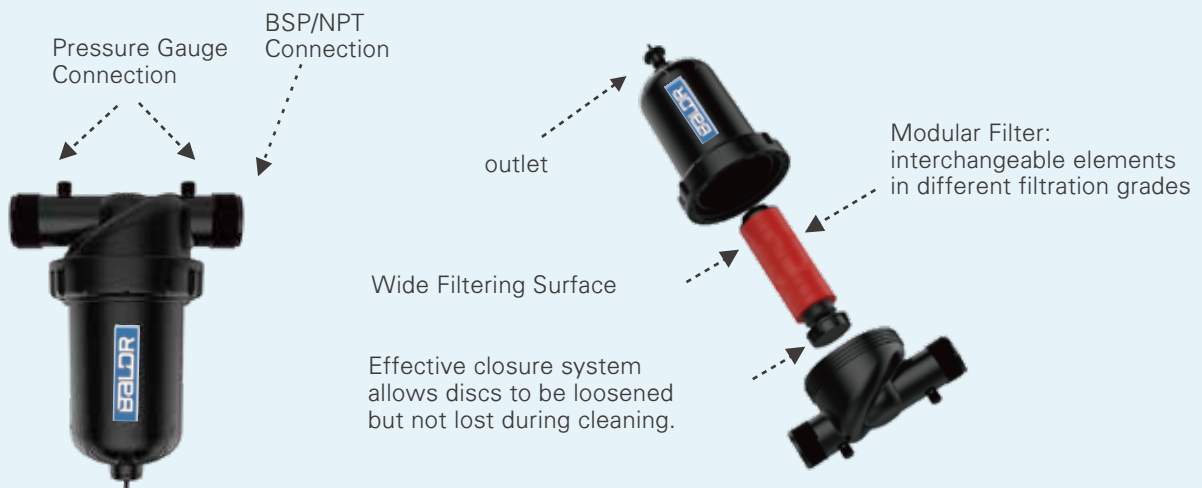


TYPICAL APPLICATION

ST type disc filters are applicable to low flow rate water filtering for agriculture irrigation and landscape irrigation. With built-in pressure pipeline, ST type disc filter can efficiently filter out particles.

FEATURE & ADVANTAGE

-  Compact structure available in narrow space;
-  Gasket set in the lid;
-  Innovative grooved discs design retains large amounts of solids;
-  Threaded closure system, easy and safe; Low pressure loss;
-  Resistant to chemical products;
-  Easy installation, easy maintenance;
-  Equipped with auxiliary connections;
-  Preset 2 ports for connecting pressure gauge.



MODEL & SPECIFICATION



BDF032ST



BDF040ST

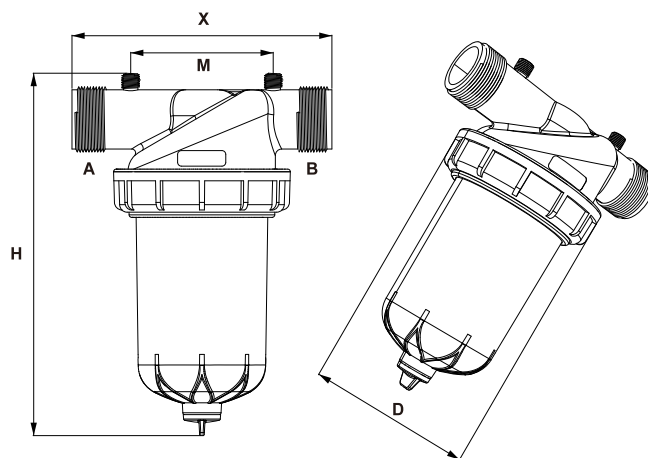


BDF050ST

MODEL	CONNECTIONS BSP/NPT	FILTRATION (mesh)	MAX FLOW (m ³ /h) (gpm)	FILTERING SURFACE (cm ²) (in ²)	WEIGHTS (kg)
BDF032ST	DN32 1-1/4"	40/75/120/150	10 44	300 47	1.01
BDF040ST	DN40 1-1/2"	40/75/120/150	14 62	300 47	1.01
BDF050ST	DN50 2"	40/75/120/150	20 88	300 47	1.03

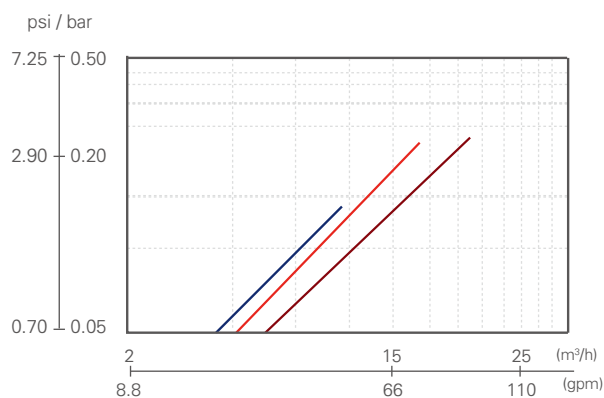
DIMENSION

MODEL	H (mm) (in)	X (mm) (in)	D (mm) (in)
BDF032ST	280 11	205 8.1	139 5.5
BDF040ST	280 11	205 8.1	139 5.5
BDF050ST	280 11	205 8.1	139 5.5



HEAD LOSS

ST TYPE FILTER HEAD LOSS(130 micron/ 120mesh)



Note: The flow rate will fluctuate with different water quality.

MATERIAL

HOUSING	FILTERING ELEMENTS
Reinforced Polypropylene	PP Grooved Disc

Maximum Pressure 8 Bar / 116 Psi
Maximum Temperature 60 °C / 140 °F

Available In BSP & NPT Connection

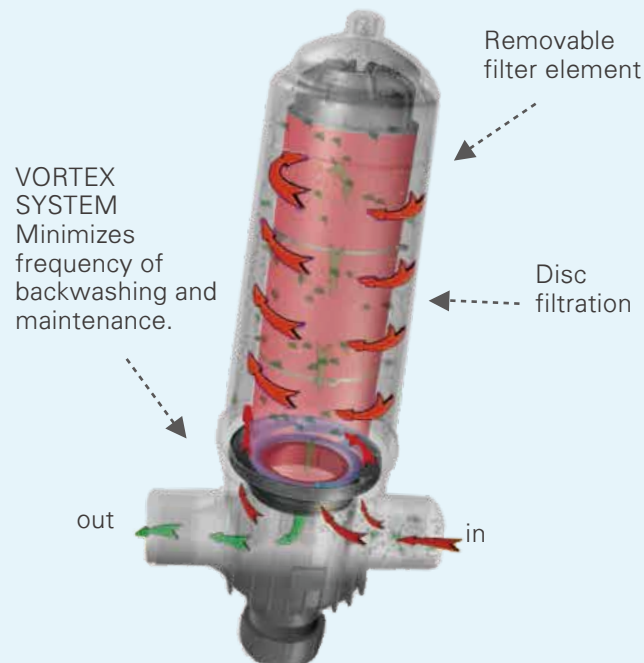
T TYPE DISC FILTERS

With excellent technology, BALDR's T type disc filters focus on multiple filtration grades, high efficiency and water saving advantage. They are simple cleaning with the well-designed structure, which offers a quality filter for medium flow filtration. The T type design especially suit for the medium flow filtration.











TYPICAL APPLICATION

T type disc filters are applicable to medium flow rate water filtering for agriculture irrigation and landscape irrigation. With built-in pressure pipeline, T type disc filter can efficiently filter out particles.



FEATURE & ADVANTAGE

-  Fullfilment of any filtration needs;
-  Maximum quality and safety in filtration;
-  Resistant to chemical products and durable;
-  Multiple filtration grades;
-  Easy installation, handling and maintenance;
-  Water and energy saving;
-  3 mouth housing with different connection possibilities;
-  BSP, NPT or grooved connection. The filter can be installed in any position.

SPECIFICATION & MODEL

MODEL	CONNECTIONS BSP/NPT/GRV	MAX FLOW (m ³ /h) (gpm)		FILTERING SURFACE (cm ²) (in ²)		WEIGHTS (kg)
BDF050TB	DN50 2"	30	132	1200	187	6.29
BDF050TSB	DN50 2"	30	132	1700	266	7.79
BDF080TCB	DN80 3"	50	220	1200	187	6.90
BDF080TB	DN80 3"	50	220	1700	266	8.54



BDF050TB/BDF080TCB



BDF050TSB



BDF080TB

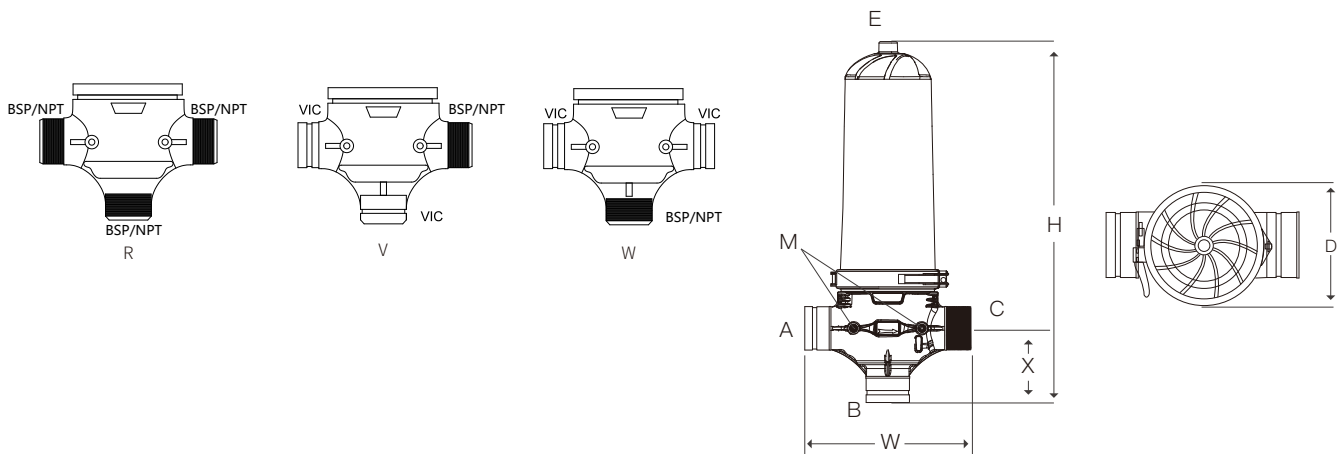
STANDARD FILTRATION GRADES

400 micron (40 mesh) **200** micron (75 mesh) **130** micron (120 mesh) **100** micron (150 mesh) **50** micron (300 mesh) **20** micron (750 mesh)

DIMENSION

MODEL	H (mm) (in)	W (mm) (in)	X (mm) (in)	D (mm) (in)
BDF050TB	620 24.4	320 12.6	140 5.5	220 8.7
BDF050TSB	740 29.1	320 12.6	140 5.5	220 8.7
BDF080TCB	630 24.8	340 13.4	153 6.0	220 8.7
BDF080TB	740 29.1	340 13.4	153 6.0	220 8.7

CONNECTIONS



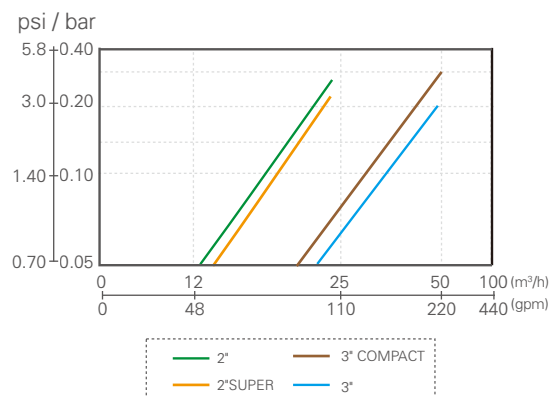
MATERIAL

HOUSING	Reinforced Polypropylene
FILTERING ELEMENTS	PP Grooved Discs
CLAMP	Stainless Steel
SEALING ELEMENT	NBR

Maximum Pressure 10 Bar / 145 Psi
Maximum Temperature 60 °C / 140 °F

HEAD LOSS

T TYPE FILTER HEAD LOSS(130 micron / 120 mesh)



Note: The flow rate will fluctuate with different water quality.

PT FILTER

PT Filter is the range of manual filters manufactured in technical plastic. It is resistant to most of the products normally used in agriculture. The hydraulic design of the filter minimizes the head loss, saving energy and optimizing its performance.

TECHNOLOGY

During the filtration process, the water flows inside the filtration discs where the particles are retained. Thanks to its simple and safe structure, the maintenance labours are dramatically reduced. It is unnecessary to use tools for the maintenance of the filter. The optimized lock system of the thread makes the filter very resistant to the sharp changes of pressure and temperature, avoiding deformations in the set housing-thread.

MODEL & SPECIFICATION



BDF050PT



BDF050PTS



BDF080PT



BDF080PTS

400 micron
(40 mesh)

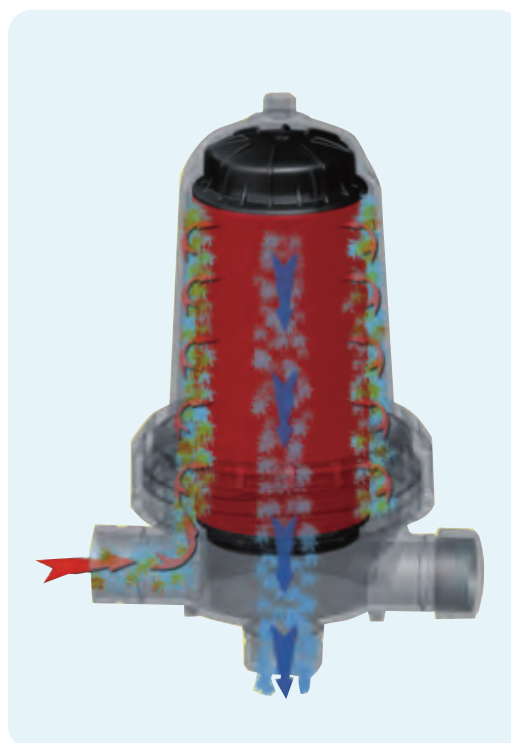
200 micron
(75 mesh)

130 micron
(120 mesh)

100 micron
(150 mesh)

50 micron
(300 mesh)

20 micron
(750 mesh)



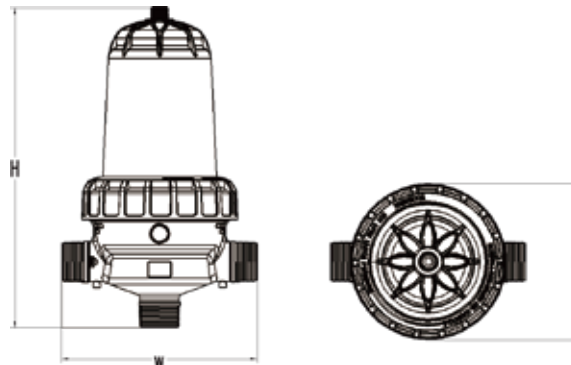
MODEL	CONNECTIONS BSP	MAX FLOW (m ³ /h) (gpm)		FILTERING SURFACE (cm ²) (in ²)		WEIGHTS (kg)
BDF050PT	DN50 2"	30	132	1050	163	4.20
BDF050PTS	DN50 2"	30	132	1660	259	5.40
BDF080PT	DN80 3"	50	220	1050	163	4.60
BDF080PTS	DN80 3"	50	220	1660	259	5.90

FEATURES & ADVANTAGES

- Maximum quality and safety in filtration.
- Easy installation, handling and maintenance.
- Resistant to chemical products and durable;
- Water and energy saving.
- 3 mouth housing with different connection possibilities.
- BSP connection; the filter can be installed in any position.
- Threaded tightening nut.

DIMENSION

MODEL	H (mm) (in)	W (mm) (in)	D (mm) (in)
BDF050PT	480 18.9	292 11.5	233 9.2
BDF050PTS	630 24.8	292 11.5	233 9.2
BDF080PT	528 20.8	355 14	233 9.2
BDF080PTS	678 26.7	355 14	233 9.2

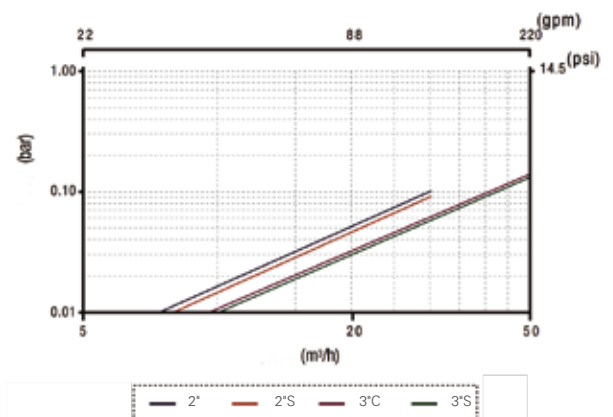


MATERIAL

HOUSING	Reinforced Polypropylene
FILTERING ELEMENTS	PP Grooved Discs
CLAMP	Plastic
SEALING ELEMENT	NBR

Maximum Pressure 10 Bar / 145 Psi
Maximum Temperature 60 °C / 140 °F

HEAD LOSS



Note: The flow rate will fluctuate with different water quality.

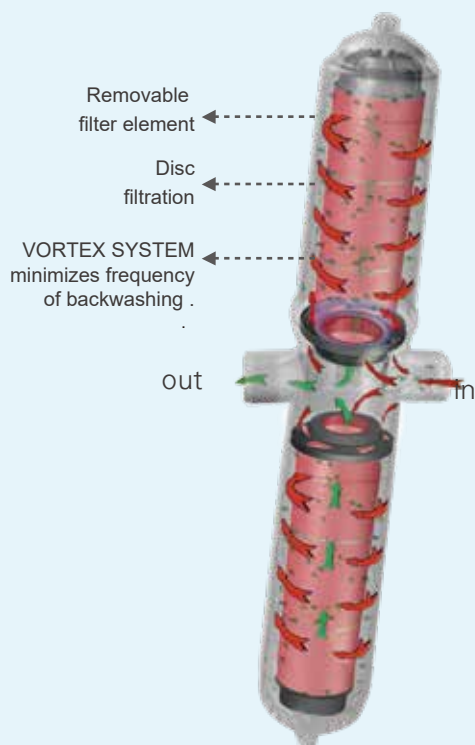
H TYPE DISC FILTERS

With excellent technology, BALDR's H type disc filters focus on multiple filtration grades, high efficiency and large volume filtration advantage. They are simple cleaning with the well-designed structure. The filter design of double-bucket H type is especially fit for the high flow filtration.



TYPICAL APPLICATION

H type disc filters are applicable to large flow rate water filtering for agriculture irrigation and landscape irrigation. With built-in pressure pipeline, H type disc filter can efficiently filter out particles.



FEATURE & ADVANTAGE

- Fullfilment of any filtration needs;
- Maximum quality and safety in filtration;
- Resistant to chemical products and durable;
- Multiple filtration grades;
- Easy installation, handling and maintenance.
- Water and energy saving.
- Modularity: possible of changing the filtering element model at any moment.

SPECIFICATION & MODEL

MODEL	CONNECTIONS BSP/GRV	MAX FLOW		FILTERING SURFACE		WEIGHTS (kg)
		(m³/h)	(gpm)	(cm²)	(in²)	
BDF080HB	DN80 3"	60	264	2400	373	10.95
BDF080HSB	DN80 3"	60	264	3400	527	11.50
BDF100HB	DN100 4"	70	308	2400	373	11.19
BDF100HSB	DN100 4"	100	440	3400	527	12.24



BDF080HB



BDF080HSB



BDF100HB



BDF100HSB

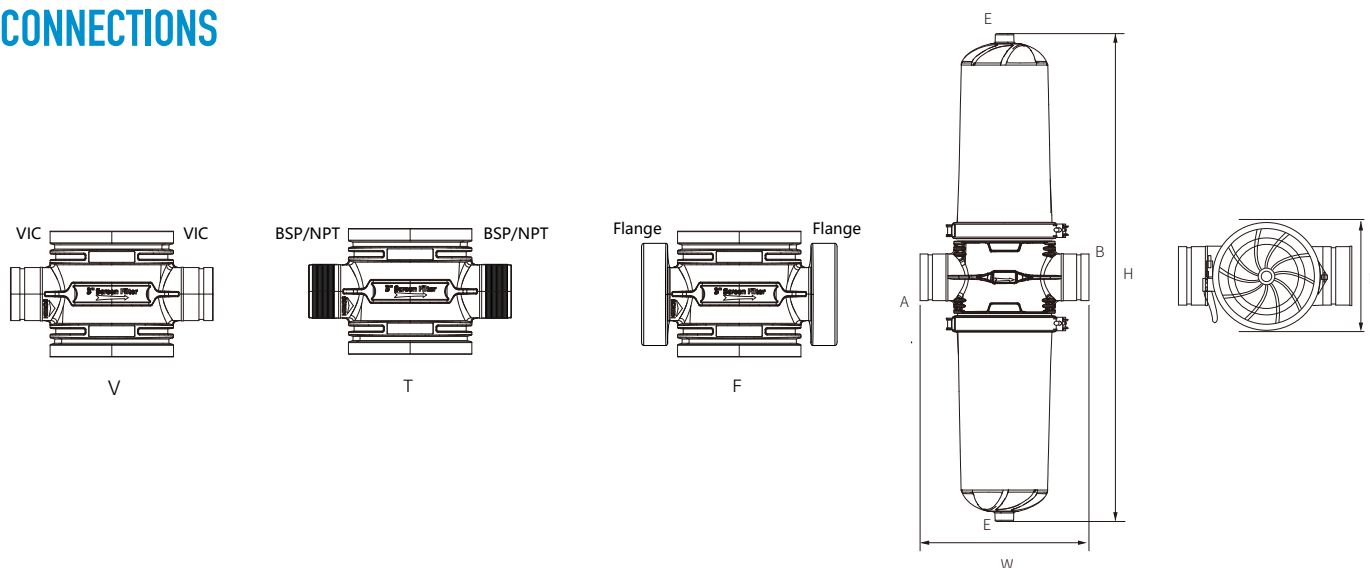
STANDARD FILTRATION GRADES

400 micron (40 mesh) **200** micron (75 mesh) **130** micron (120 mesh) **100** micron (150 mesh) **50** micron (300 mesh) **20** micron (750 mesh)

DIMENSION

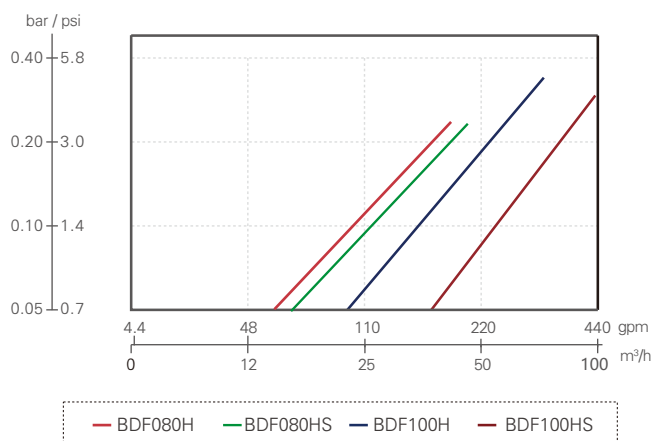
MODEL	H (mm) (in)		W (mm) (in)		D (mm) (in)	
BDF080HB	940	37	340	13	220	8.7
BDF080HSB	1220	48	340	13	220	8.7
BDF100HB	960	38	340	13	220	8.7
BDF100HSB	1220	48	340	13	220	8.7

CONNECTIONS



HEAD LOSS

H TYPE FILTER HEAD LOSS(130 micron/ 120 mesh)



Note: The flow rate will fluctuate with different water quality.

MATERIAL

HOUSING	Reinforced Polypropylene
FILTERING ELEMENTS	PP Grooved Discs
CLAMP	Stainless Steel
SEALING ELEMENT	NBR






Maximum Pressure 10 Bar / 145 Psi
Maximum Temperature 60 °C / 140 °F

AUTO DISC FILTERS

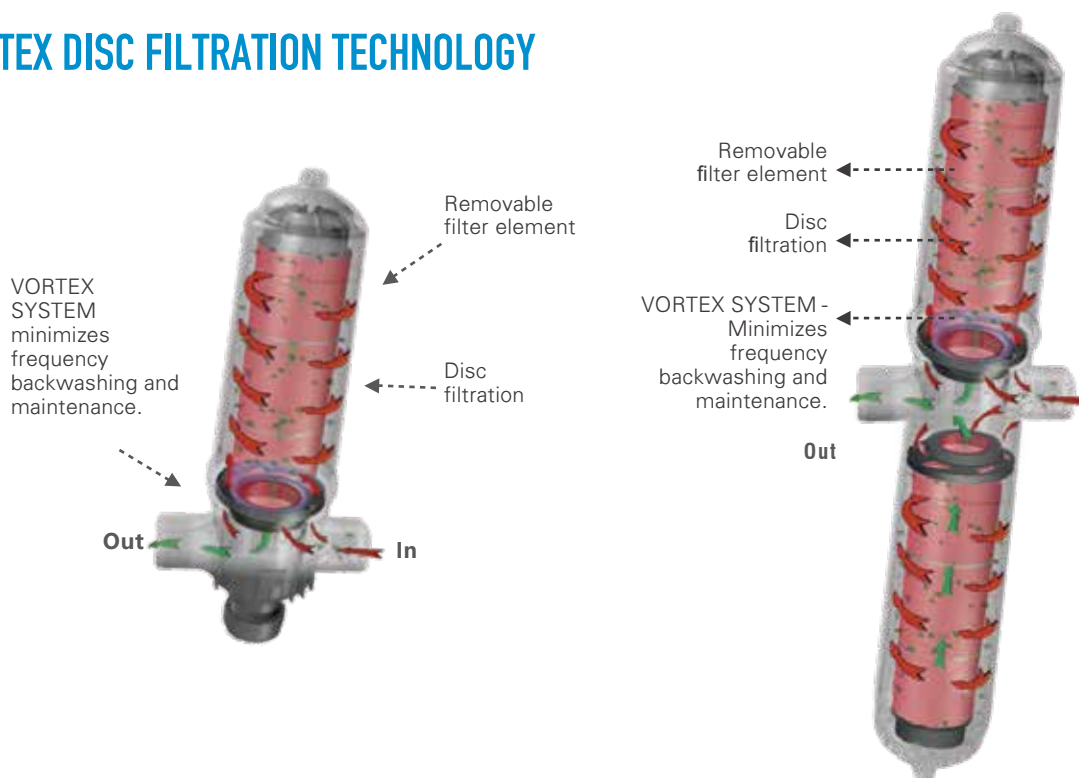
Baldr automatic disc filter is adapted to low-pressure working conditions, reducing the pressure and water consumed in backwashing. It well meets various market demands of different flow volume by providing T-type or H-type models. Going with 2", 3" or 4" hydraulic backwash valve as well as built-in computer chip for automatic scheduling work, it works as an automatic unattended water filtration system, which ensures continuous water supply while discharging the sewage.



FEATURE & ADVANTAGE

-  Manufactured in Polyamide, resistance to chemical products, wear-resistant;
-  Maximum reliability and efficiency in filtration;
-  Easy operation and low maintenance costs;
-  Compatible with different control units;
-  Efficient water saving in auto backwashing with minimum pressure 1.5 bar and flow rate 2.5 L/s minimum.

VORTEX DISC FILTRATION TECHNOLOGY



With the unique disc and vortex structure design, the filter will generate centrifuge spiral flow of water, which moves away the solid particles in the water. The solid particles will be collected to the top of disc element with rotational flow. The vortex disc filter system ensure high efficient filtering and water-saving for the low frequency of backwashing.

SPECIFICATION & MODEL

MODEL	CONNECTIONS BSP/NPT/GRV	MAX FLOW (m ³ /h) (gpm)		BACKWASH PRESSURE (bar)	FILTERING SURFACE (cm ²) (in ²)		WEIGHTS (kg)
BAF050TB	DN50 2"	25	110	1.5	1020	158	7.6
BAF050TSB	DN50 2"	30	132	1.5	1492	231	9.4
BAF080TB	DN80 3"	32	148	1.5	1492	231	9.6
BAF080HB	DN80 3"	50	220	1.5	2040	316	12.5
BAF100HB	DN100 4"	55	242	1.5	2040	316	12.9
BAF100HSB	DN100 4"	64	297	1.5	2984	462	16.1



BAF050TB



BAF080HB/BAF100HB/BAF100HSB



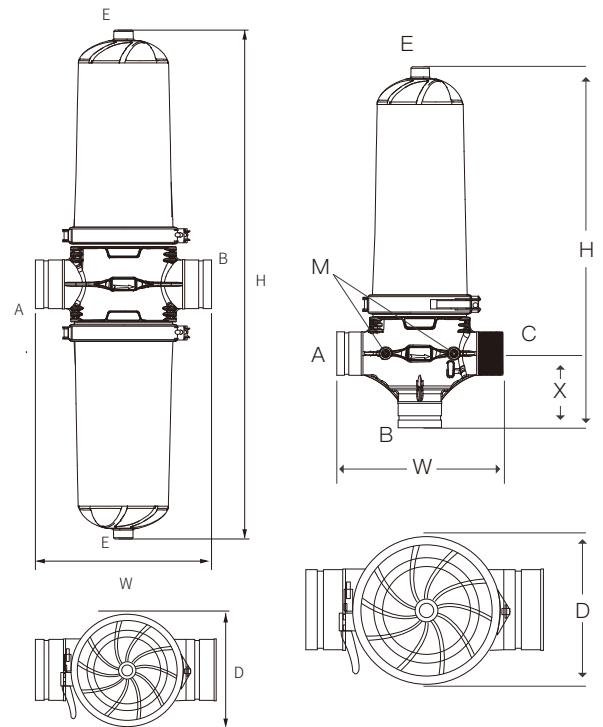
BAF050TSB/BAF080TB

400 micron (40 mesh) **200** micron (75 mesh) **130** micron (120 mesh)

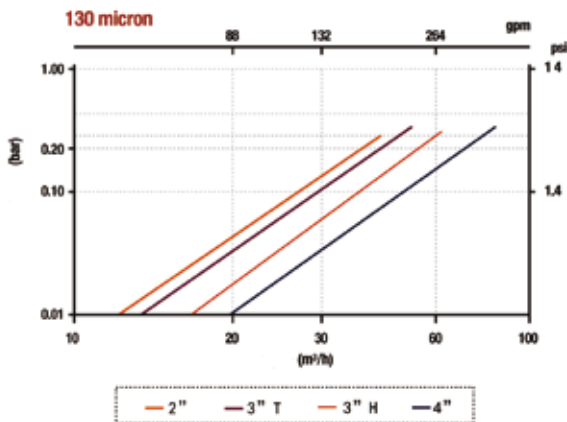
100 micron (150 mesh) **50** micron (300 mesh) **20** micron (750 mesh)

DIMENSION

MODEL	H (mm) (in)		W (mm) (in)		D (mm) (in)	
BAF050TB	620	24.4	320	12.6	220	8.7
BAF050TSB	740	29.1	320	12.6	220	8.7
BAF080TB	750	29.5	340	13.4	220	8.7
BAF080HB	975	38.4	340	13.4	220	8.7
BAF100HB	975	38.4	340	13.4	220	8.7
BAF100HSB	1220	48	340	13.4	220	8.7



HEAD LOSS



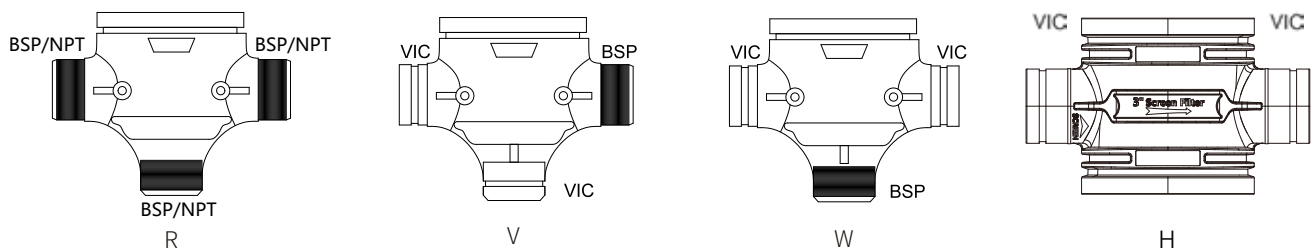
Note: The flow rate will fluctuate with different water quality

MATERIAL

HOUSING	Reinforced Polyamide
FILTERING ELEMENTS	PP Grooved Discs
CLAMP	Stainless Steel
SEALING ELEMENT	NBR

Maximum Pressure 10 Bar / 145 Psi
Maximum Temperature 60 °C / 140 °F

CONNECTIONS



SCREEN FILTERS

Baldr screen filter range is based on low maintenance and optimum safety in filtration. Optimization of the performance and water and energy saving.



Y TYPE SCREEN FILTERS



ST TYPE SCREEN FILTERS



T TYPE SCREEN FILTERS



H TYPE SCREEN FILTERS

With the application of delicate weaving craftsmanship of stainless steel screen, Baldr's screen filter adopt micron-grade filter screen which enjoying highly flexible, corrosion, acid and alkaline resistant features. We provide various screen filters with different connection sizes, flow rates & filtration grades. The helical locking design is easy to disassemble and clean.



THE FILTRATION GRADE

Screen filter can be replaced by different filtering element. The customer could choose the different filtering element according to the water quality and required filtration grade. The filtration grade is distinguished by different colors as below.

400 micron
(40 mesh)

200 micron
(75 mesh)

130 micron
(120 mesh)

100 micron
(150 mesh)

50 micron
(300 mesh)

20 micron
(750 mesh)

VARIOUS FILTER SIZES

BALDR designs different types and different sizes of filters for multiple applications, we provide Y type, ST type, T type and H type screen filter with different connection outlets sizes.



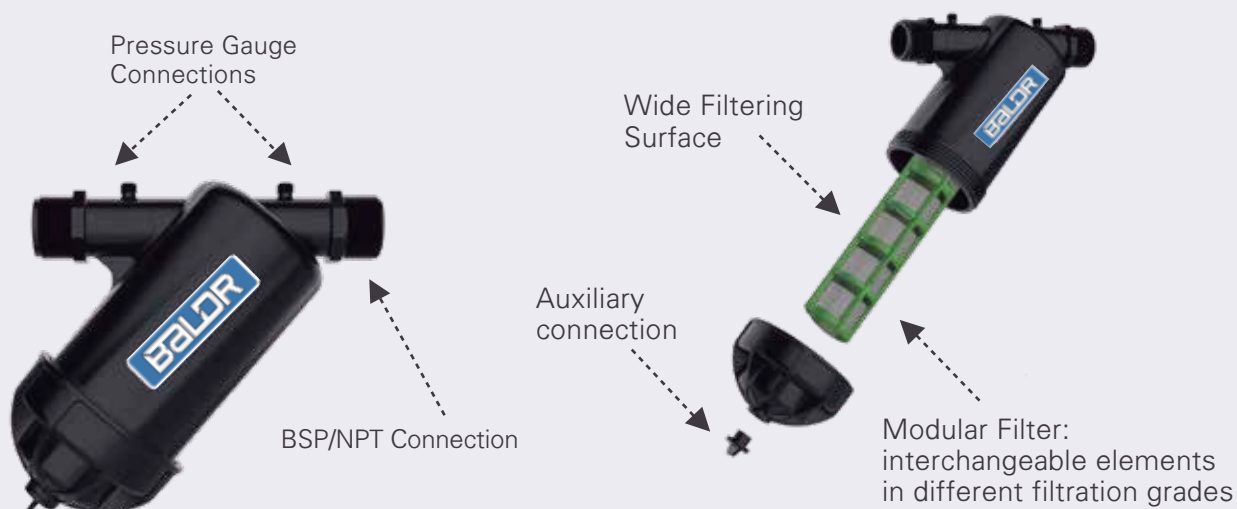
Y TYPE SCREEN FILTERS

With the application of delicate weaving craftsmanship of stainless steel screen, BALDR Y series screen filter is woven into micron-grade filter screen with high strength, corrosion, acid and alkaline resistant features. The screw locking design is easy to disassemble and clean. Y type screen filter has the advantage of easy installation especially in the narrow space application.










TYPICAL APPLICATION

Y type screen filters are applicable to small-scale and low flow water filtering for agriculture irrigation and landscape irrigation. Built-in pressured pipeline, Y type screen filter will effectively filter out particles.

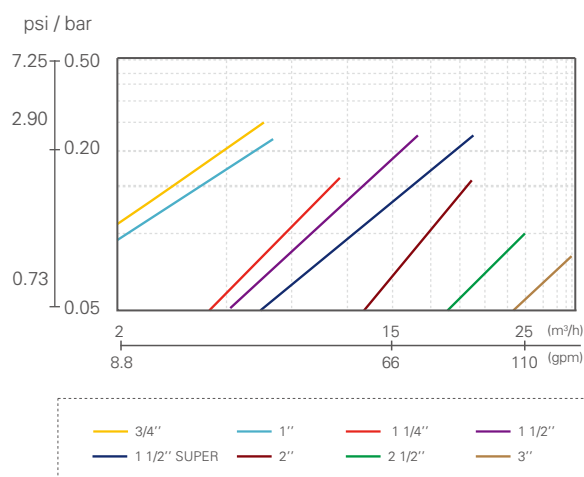


FEATURE & ADVANTAGE

-  Compact structure available in narrow space;
-  Durable & stainless steel filter screen with corrosion, acid and alkaline resistant features;
-  Threaded closure system, easy and safe;
-  Easy installation, easy maintenance;
-  Low cost with excellent performance;
-  Equipped with auxiliary connections;
-  Preset 2 ports for connecting pressure gauge.

HEAD LOSS

Y TYPE FILTER HEAD LOSS(130 Micron/ 120 Mesh)



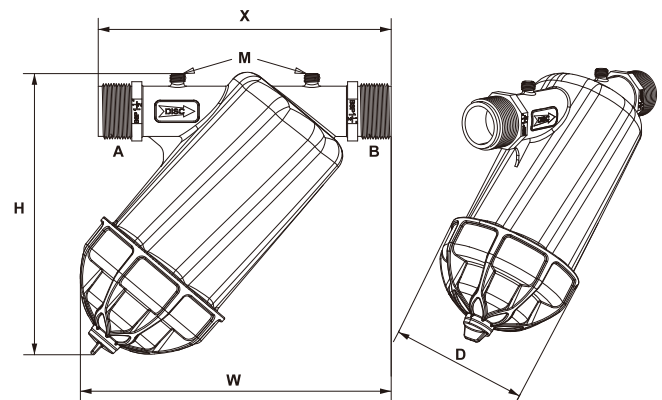
MODEL & SPECIFICATION



MODEL	CONNECTIONS BSP/NPT	FILTRATION GRADES (mesh)	MAX FLOW (m³/h) (gpm)		FILTERING SURFACE (cm²) (in²)		WEIGHTS (kg)
BSF020Y	DN20 3/4"	120	5	22	190	30	0.30
BSF025Y	DN25 1"	120	6	26	190	30	0.30
BSF032Y	DN32 1-1/4"	120	10	44	265	41	0.71
BSF040Y	DN40 1-1/2"	120	14	62	265	41	0.71
BSF040YS	DN40 1-1/2"	75/120	20	88	485	75	0.72
BSF050Y	DN50 2"	75/120	25	110	485	75	0.99
BSF065Y	DN65 2-1/2"	120	30	132	565	88	2.05
BSF080Y	DN80 3"	120	35	154	565	88	2.10

DIMENSION

MODEL	H (mm) (in)	W (mm) (in)	D (mm) (in)
BSF020Y	173 6.8	186 7.3	83 3.3
BSF025Y	173 6.8	186 7.3	83 3.3
BSF032Y	230 9.0	250 9.8	120 4.7
BSF040Y	230 9.0	250 9.8	120 4.7
BSF040YS	260 10.2	290 11.4	140 5.5
BSF050Y	260 10.2	290 11.4	140 5.5
BSF065Y	330 13.0	360 14.1	168 6.6
BSF080Y	330 13.0	360 14.1	168 6.6



MATERIAL

HOUSING	Filtering Elements
Reinforced Polypropylene	304 Stainless Steel

Maximum Pressure 8 Bar / 116 Psi
Maximum Temperature 60 °C / 140 °F

Available In BSP & NPT Connection

ST TYPE SCREEN FILTERS








With the application of delicate weaving craftsmanship of stainless steel screen, Baldr ST type screen filter is woven into micron-grade filter screen with high strength, corrosion, acid and alkaline resistant features. The screw locking design is easy to disassemble and clean. ST type screen filter has the advantage of easy installation especially in the narrow space application and it suits for low flow filtration.



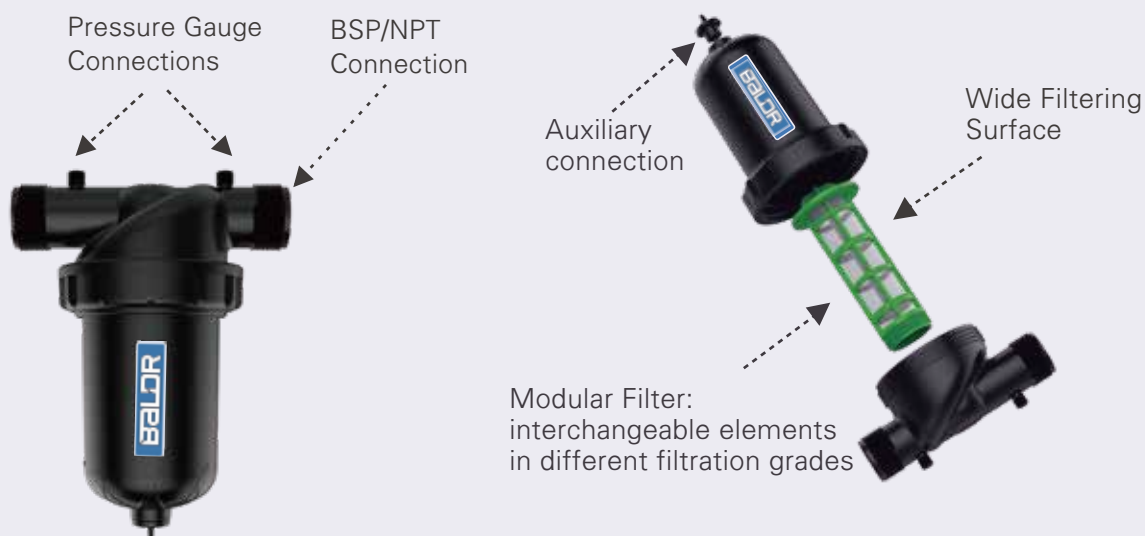
TYPICAL APPLICATION

ST type screen filters are applied for small and low flow requirement such as agriculture irrigation and landscape irrigation. Built-in pressured pipeline, ST type screen filter will effectively filter out particles.

FEATURE & ADVANTAGE

-  Compact structure available in narrow space;
-  Low cost with excellent performance;
-  Durable & stainless steel filter screen with corrosion, acid and alkali resistant features;
-  Equipped with auxiliary connections;
-  Threaded closure system, easy and safe;
-  Preset 2 ports for connecting pressure gauge.
-  Easy installation, easy maintenance;

TECHNOLOGY



MODEL & SPECIFICATION



BSF032ST



BSF040ST

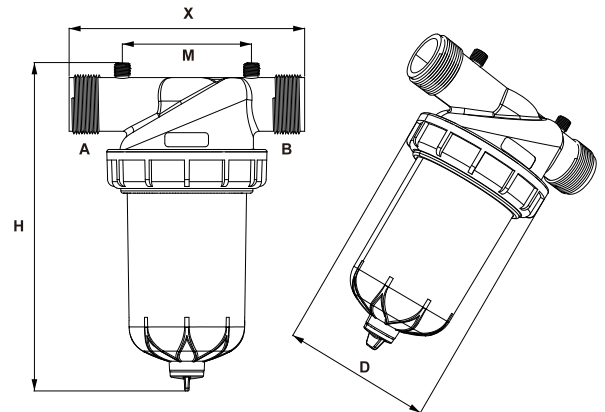


BSF050ST

MODEL	CONNECTIONS BSP/NPT	FILTRATION GRADES (mesh)	MAX FLOW (m ³ /h) (gpm)		FILTERING SURFACE (cm ²) (in ²)		WEIGHTS (kg)
BSF032ST	DN32 1-1/4"	75/120	10	44	265	41	0.75
BSF040ST	DN40 1-1/2"	120	14	62	265	41	0.75
BSF050ST	DN50 2"	120	20	88	265	41	0.75

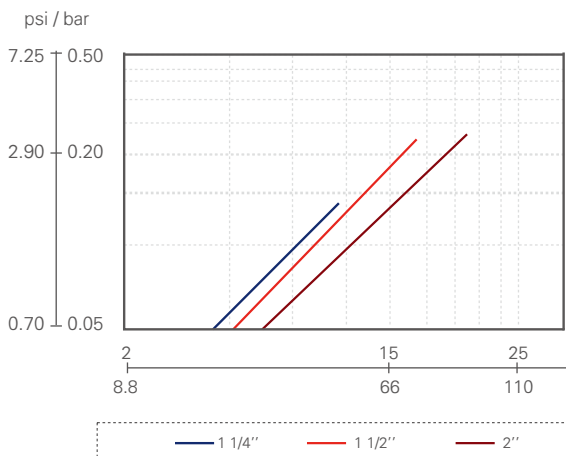
DIMENSION

MODEL	H (mm) (in)		X (mm) (in)		D (mm) (in)	
BSF032ST	280	11	205	8.1	139	5.5
BSF040ST	280	11	205	8.1	139	5.5
BSF050ST	280	11	205	8.1	139	5.5



HEAD LOSS

ST TYPE FILTER HEAD LOSS(130 Micron/ 120 Mesh)



Note: The flow rate will fluctuate with different water quality.

MATERIAL

HOUSING	Filtering Elements
Reinforced Polypropylene	304 Stainless Steel

Maximum Pressure 8 Bar / 116 Psi
Maximum Temperature 60 °C / 140 °F

Available In BSP & NPT Connection

T TYPE SCREEN FILTERS







With the application of delicate weaving craftsmanship of stainless steel screen, BALDR T type screen filter is woven into micron-grade filter screen with high strength, corrosion, acid and alkaline resistant features. The well-designed structure make it easy to clean. And the T type especially suits the medium flow filtration.

TYPICAL APPLICATION

T type screen filters are applicable to medium-scale and medium flow water filtering for agriculture irrigation and landscape irrigation.

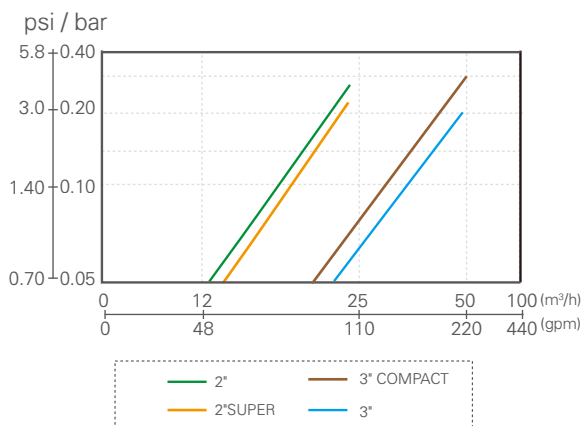


FEATURE & ADVANTAGE

-  Fulfillment of any filtration needs;
-  Maximum quality and safety in filtration;
-  Durable & stainless steel filter screen with corrosion, acid and alkali resistant features;
-  Stainless steel clamp for easy installation, handling and maintenance;
-  Water and energy saving;
-  3 mouth housing with different connection possibilities.

HEAD LOSS

T TYPE FILTER HEAD LOSS(130 Micron/ 120 Mesh)



TECHNOLOGY

Modular Filter:
interchangeable elements
in different filtration grades.



MODEL & SPECIFICATION



BSF050TB/BSF080TCB



BSF050TSB

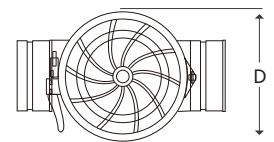
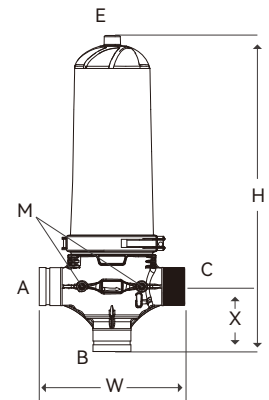


BSF080TB

MODEL	CONNECTIONS BSP/NPT/GRV	FILTRATION GRADES (mesh)	MAX FLOW (m³/h) (gpm)		FILTERING SURFACE (cm²) (in²)		WEIGHTS (kg)
BSF050TB	DN50 2"	40/75/120/150	30	132	815	126.3	6.21
BSF050TSB	DN50 2"	40/75/120/150	30	132	1087	168.5	7.71
BSF080TCB	DN80 3"	40/75/120/150	50	220	815	126.3	6.41
BSF080TB	DN80 3"	40/75/120/150	50	220	1087	168.5	8.46

DIMENSION

MODEL	H (mm) (in)		W (mm) (in)		X (mm) (in)		D (mm) (in)	
BSF050TB	620	24.4	320	12.6	140	5.5	220	8.7
BSF050TSB	740	29.1	320	12.6	140	5.5	220	8.7
BSF080TCB	630	24.8	340	13.4	153	6.0	220	8.7
BSF080TB	740	29.1	340	13.4	153	6.0	220	8.7



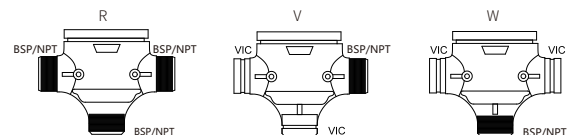
MATERIAL

HOUSING	Reinforced Polypropylene
Filtering Elements	304 Stainless Steel Screen
Clamp	Stainless Steel
Sealing element	NBR

Maximum Pressure 10 Bar / 145 Psi; Maximum Temperature 60 °C / 140 °F

Available In Grooved & BSP & NPT

CONNECTIONS



H TYPE SCREEN FILTERS







With the application of delicate weaving craftsmanship of stainless steel screen, BALDR H series screen filter is woven into micron-grade filter screen with high strength, corrosion, acid and alkaline resistant features. And the double-bucket H type especially suits the high flow filtration.



TYPICAL APPLICATION

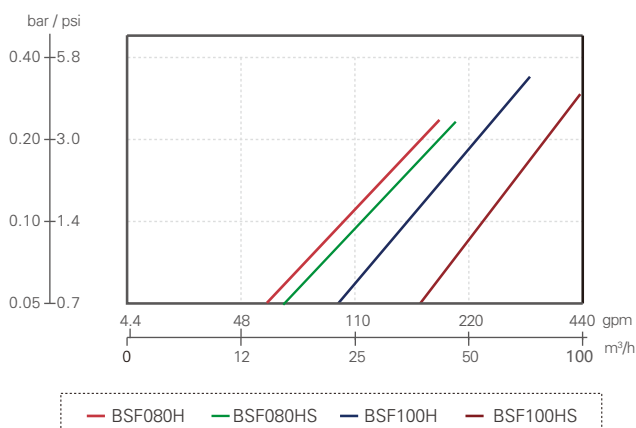
H type screen filters are applicable to large-scale and high flow water filtering for agriculture irrigation and landscape irrigation.

FEATURE & ADVANTAGE

-  Fulfillment of any filtration needs;
-  Maximum quality and safety in filtration;
-  Durable & stainless steel filter screen with corrosion, acid and alkali resistant features;
-  Stainless steel clamp for easy installation, handling and maintenance;
-  Water and energy saving;
-  BSP, NPT or grooved connection, The filter can be installed in any position.

HEAD LOSS

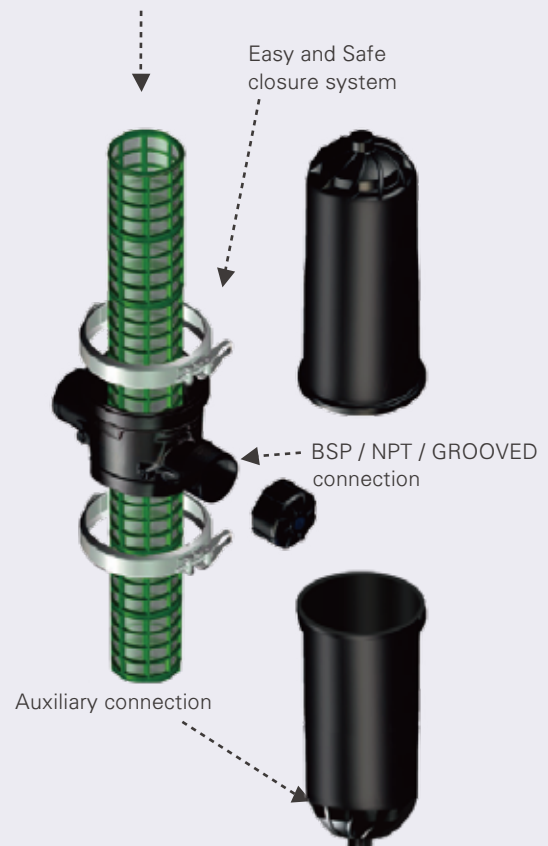
H TYPE FILTER HEAD LOSS(130 Micron/ 120 Mesh)



Note: The flow rate will fluctuate with different water quality.

TECHNOLOGY

Modular Filter: interchangeable elements in different filtration grades.



MODEL & SPECIFICATION



BSF080HB/BSF100HB

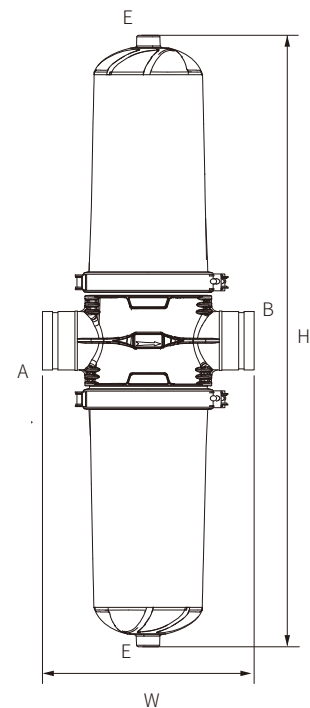


BSF080HSB/BSF100HSB

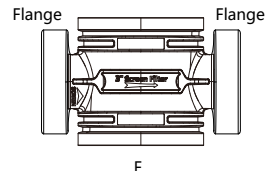
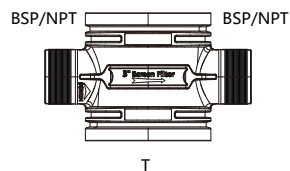
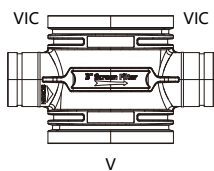
MODEL	CONNECTIONS BSP/NPT	FILTRATION GRADES (mesh)	MAX FLOW (m³/h) (gpm)	FILTERING SURFACE (cm²) (in²)	WEIGHTS (kg)
BSF080HB	DN80 3"	40/75/120	50 220	1630 253	8.13
BSF080HSB	DN80 3"	40/75/120	60 264	2174 337	8.19
BSF100HB	DN100 4"	40/75/120	70 308	1630 253	8.20
BSF100HSB	DN100 4"	40/75/120	100 440	2174 337	8.26

DIMENSION

MODEL	H (mm) (in)	W (mm) (in)	D (mm) (in)
BSF080HB	940 37	340 13	220 8.7
BSF080HSB	1220 48	340 13	220 8.7
BSF100HB	960 38	340 13	220 8.7
BSF100HSB	1220 48	340 13	220 8.7



CONNECTIONS

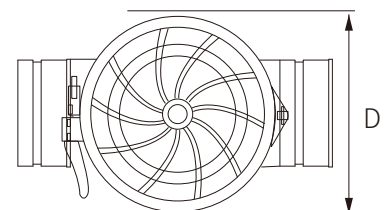


MATERIAL

HOUSING	Reinforced Polypropylene
Filtering Elements	304 Stainless Steel Screen
Clamp	Stainless Steel
Sealing element	NBR

Maximum Pressure 10 Bar / 145 Psi; Maximum Temperature 60 °C / 140 °F

Available In Grooved & BSP & NPT



SEMI-AUTOMATIC SCREEN FILTERS

Baldr semi-automatic screen filter is based on low maintenance and on its wide filtering surface. Its special design allows an easy and quick cleaning, without disassembling the filter or stopping the installation.







TECHNOLOGY

Baldr Spiral clean filter has a wide surface screen filtering element, and nozzles specially designed to remove the particles retained during the filtration process.

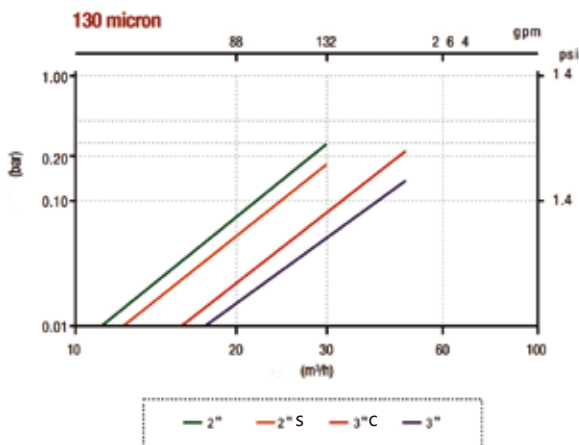
The rotatory movement of the handle allows the nozzles, with a spiral movement, scan the 100% screen, sucking the particles and expelling it through the drainage, with little water consumption.



FEATURE & ADVANTAGE

-  Maximum filtering surface;
-  High effective and easy cleaning;
-  The filter is cleaned without disassembling it;
-  Non-stop working. It is not necessary to stop the supply of water;
-  Low maintenance, without tooling;
-  Water and energy saving.

HEAD LOSS



MODEL & SPECIFICATION



BSF050A



BSF050AS



BSF080AC



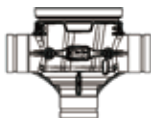
BSF080A

MODEL	CONNECTIONS BSP/NPT/GRV	FILTRATION GRADES (mesh)	MAX FLOW (m³/h) (gpm)		FILTERING SURFACE (cm²) (in²)		WEIGHTS (kg)
BSF050A	DN50 2"	120	30	132	890	138	8.30
BSF050AS	DN50 2"	120	30	132	1190	184	10.10
BSF080AC	DN80 3"	120	50	220	890	138	8.50
BSF080A	DN80 3"	120	50	220	1190	184	10.50

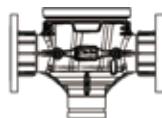
CONNECTIONS



BSP/NPT



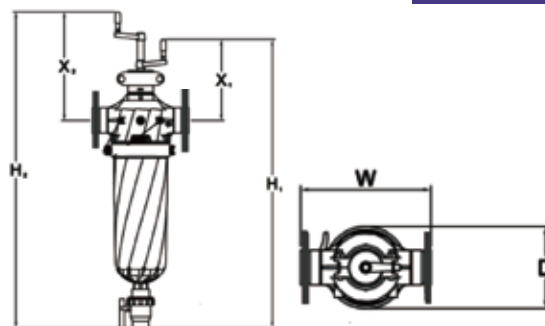
VIC



FLANGE

MATERIAL

HOUSING	Reinforced Polyamide
Filtering Elements	304 Stainless Steel Screen
Clamp	Stainless Steel
Sealing element	NBR



Maximum Pressure 10 Bar / 145 Psi
Maximum Temperature 60 °C / 140 °F

DIMENSION

MODEL	H1 (mm) (in)		H2 (mm) (in)		W (mm) (in)		X1 (mm) (in)		X2 (mm) (in)		D (mm) (in)	
BSF050A	960	38	905	36	345	14	335	13	280	11	220	9
BSF050AS	1085	43	1030	41	345	14	355	14	300	12	220	9
BSF080AC	975	38	920	36	360	14	335	13	280	11	220	9
BSF080A	1100	43	1045	41	360	14	355	14	300	12	220	9

CENTRIFUGAL SEPARATOR

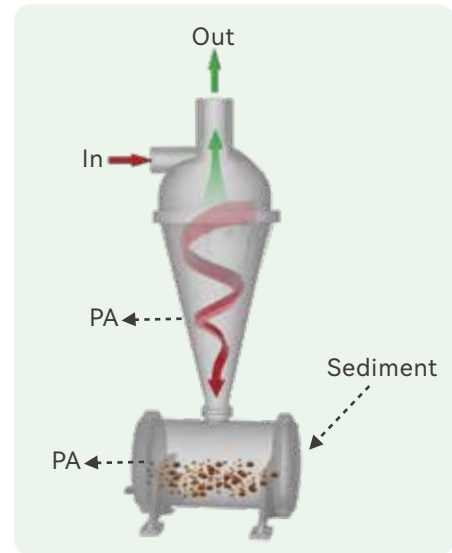
BALDR centrifugal separator separates particles of different densities by gravity & centrifugal force principles. The filter has outstanding performance for large particles filtration. It is disassembled easily and convenient for maintenance and cleaning.



CENTRIFUGAL SEPARATOR

BALDR centrifugal separator separates particles of different densities by gravity & centrifugal force principles. The filter has outstanding performance for large particles filtration. It's made of PA material to resistant corrosion, acid, rust and alkaline, which greatly extends its lifetime. It is disassembled easily and convenient for maintenance and cleaning.

As a filter for large particles, it can achieve excellent filtering performance working with disc filter or screen filter. The centrifugal filter is applied in agricultural irrigation, municipal garden irrigation and industrial water recycled filtration.



TYPICAL APPLICATION

Well Water Filtration: The filter can quickly filter the sand and gravels when the water is drawn from deep well by the pump at the beginning.



Industrial filtration: For the recycled water, the centrifugal filter operates as primary filtration, it can work with disc filter or screen filter for more exquisite filtration.



Irrigation System: If water source comes from rivers and lakes, it is necessary to firstly use centrifugal filter to shake out the sand and gravels as a first-stage filtration process.



HOW IT WORKS

With unique flow structure design, it creates centrifugal force which will sink the sand or sewage into the bottom collector. The clean water will flow out from outlet. The sand and gravel collector can be cleaned and maintained if necessary.

FEATURE & ADVANTAGE



Realize the automation of centrifugal filtration by utilizing the gravity of sand and gravel;



Durable PA material against chemical products and sand impact;



Disassembling easily and convenient for maintenance and cleaning;



3 connection sizes for various requirements;



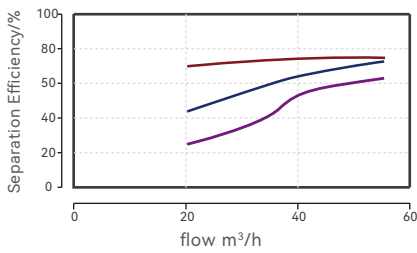
Low cost & good performance.

MODEL & SPECIFICATION

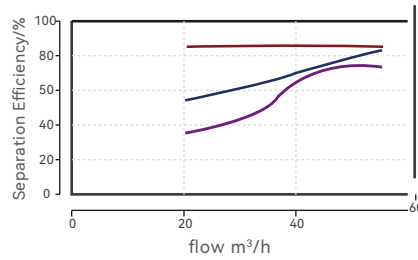


MODEL	CONNECTIONS BSP/Grooved/Flange	MAX FLOW (m ³ /h) (gpm)		TANK CAPACITY (L)	WEIGHT (kg)
BCF050	DN50 2"	30	132	16	13.5
BCF080	DN80 3"	50	220	16	17.5
BCF100	DN100 4"	100	440	27	28.0

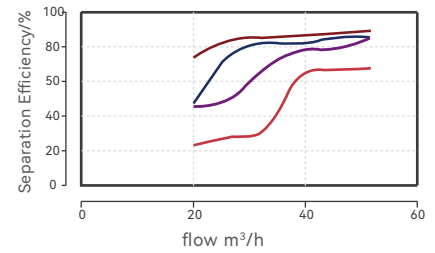
FILTERING CHART



2"centrifugal separation efficiency diagram



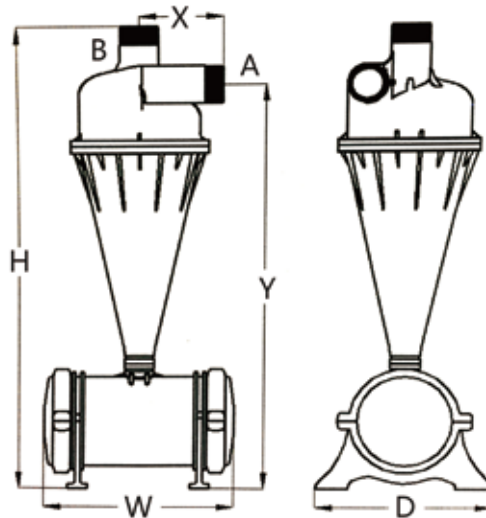
3"centrifugal separation efficiency diagram



4"centrifugal separation efficiency diagram

DIMENSION

MODEL	H		W		D		X		Y	
	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
BCF050	1100	43	490	19	430	17	180	7	963	38
BCF080	1220	48	490	19	430	17	205	8	1070	42
BCF100	1440	57	520	20	524	21	250	10	1260	50



MATERIAL

Separator Body	Reinforced Polyamide
Sediment Tank	Reinforced Polyamide

Maximum Pressure 8 Bar / 116 Psi
Maximum Temperature 60 °C / 140 °F

Available In BSP / Grooved / Flange Connection

HYDRAULIC CONTROL VALVES

BIV series hydraulic control valve is hydraulically operated, diaphragm-actuated control valve with movement smooth, pressure adjustment accuracy and sensitive reaction, and it can protect filtration system and irrigation system. The control valve is designed with Y structure, through hydraulic pressure, switch and pilot valve different connection ways, it can be divided into pressure reducing valve, pressure sustaining valve, pressure relief valve, electric switch valve. The unique shape chambered design ensures it flow through super large flow.



BIV SERIES SWITCH VALVES WITH SOLENOID CONTROL

This type electric switch valve is hydraulically operated, diaphragm-actuated control valve, which opens in response to a remote pressure rise command and shuts in the absence of that command.








TYPICAL APPLICATIONS

Computerized Irrigation Systems; Remote Elevated Systems; Turf Irrigation or Buried Pipeline Irrigation; Greenhouse Irrigation; Low Supplied Pressure Irrigation Systems; Energy Saving Irrigation Systems;



FEATURES

-  Hydraulically Controlled, Normally Closed Valve
 - Line pressure driven
 - Closes upon control failure
 - Amplifies and relays weak remote command
-  Engineered Plastic Valve with Industrial Grade Design
 - Highly durable, chemical and cavitation resistant
 - No internal bolts and nuts
-  Simple In-Line Inspection and Service
-  Unitized Flexible Super Travel (FST) Diaphragm and Guided Plug
 - Smooth closing
 - Requires low opening and actuation pressure
 - Prevents diaphragm erosion and distortion
-  High Flow "Y" Valve Body with "Look Through" Design
 - Ultra-high flow capacity, Low pressure loss

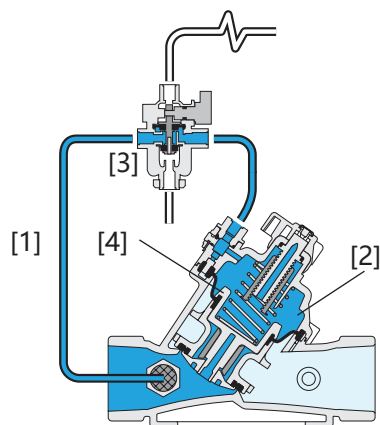
MATERIALS

BODY, COVER AND PLUG	Glass-Filled Nylon
DIAPHRAGM	NR
SEALS	NR
SPRING	Stainless Steel

COVER BOLTS	Stainless Steel
CONTROL ACCESSORIES	Nylon
TUBING AND FITTINGS	PE
MAX WORKING TEMPERATURE	60°C, 140°F

HOW IT WORKS

Line pressure [1] is applied to the Control Chamber [2] through the held open, 3-Way Hydraulic Relay Valve (3W-HRV). This creates superior closing force that moves the Diaphragm Assembly [4] to a closed position. Upon pressure rise command, the 3W-HRV switches, releasing pressure from the control chamber and thereby opening the Main Valve. The 3W-HRV also features local manual opening and closing.



TECHNICAL DATA

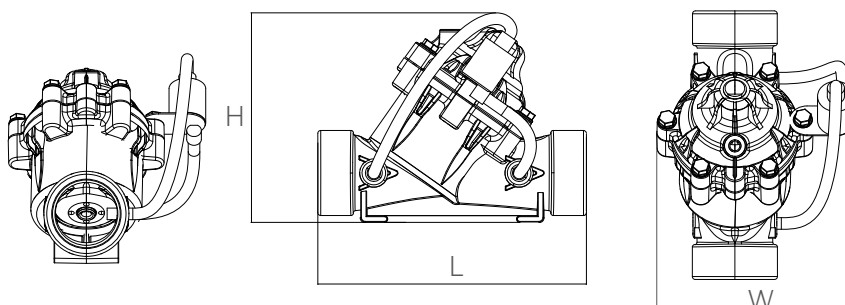
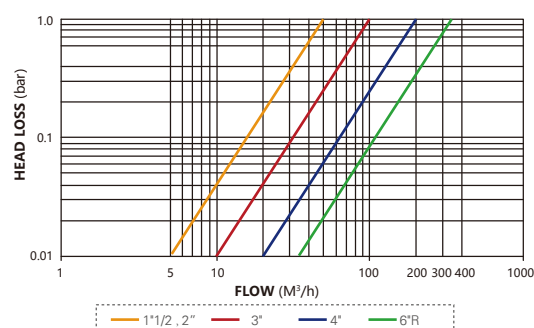
MODEL	CONNECTION SIZES	CONNECTIONS	VOLTAGE (V)	FLOW RATES (m³/h)	WORKIN PRESSURE (bar)	WEIGHTS (kg)
BIV040SC	1.5"×1.5"	BSP/NPT	AC24V/DC24V/DC12V(Latch)	50	0.35 ~ 10	1.30
BIV050SC	2"×2"	BSP/NPT	AC24V/DC24V/DC12V(Latch)	50	0.35 ~ 10	1.70
BIV080SC	3"×3"	BSP/NPT/ Flanges	AC24V/DC24V/DC12V(Latch)	100	0.35 ~ 10	1.78 (Flanges:3.16)
BIV100SC	4"×4"	Flanges	AC24V/DC24V/DC12V(Latch)	200	0.35 ~ 10	5.74
BIV150SC	6"×6"	Flanges	AC24V/DC24V/DC12V(Latch)	340	0.35 ~ 10	11.74

DIMENSION

MODEL	L (mm)	W (mm)	H (mm)
BIV040SC	226	120	150
BIV050SC	230	150	200
BIV080SC	320	160	250
BIV100SC	350	170	300
BIV150SC	436	240	430

FLOW CHART






Relationship Between Flow Rate and Head Loss(Flow Rate < 2m/s)



BIV SERIES MANUAL PRESSURE REDUCING VALVES

This type Pressure Reducing Valve is hydraulically operated, diaphragm actuated control valve that reduces higher upstream pressure to lower constant downstream pressure and opens fully upon line pressure drop.

FEATURES

-  Line Pressure Driven, Hydraulically Controlled
 - Protects downstream systems
 - Opens fully upon line pressure drop
-  Engineered Plastic Valve with Industrial Grade Design
 - Highly durable, chemical and cavitation resistant
 - No internal bolts and nuts
-  High Flow “Y” Valve Body with “Look Through” Design
 - Ultra-high flow capacity, Low pressure loss
-  Unitized Flexible Super Travel (FST) Diaphragm and Guided Plug
 - Accurate and stable regulation with smooth closing
 - Requires low opening and actuation pressure
 - Prevents diaphragm erosion and distortion
-  Simple In-Line Inspection and Service



Control Valves

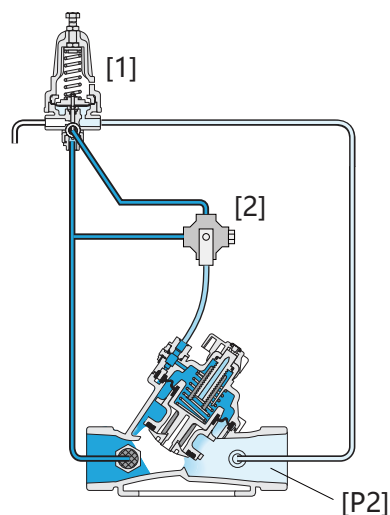
TYPICAL APPLICATIONS

Pressure Reducing Stations; Systems Subject to Varying Supply Pressure;



HOW IT WORKS

The Pressure Reducing Pilot [1] commands the Valve to throttle closed should Downstream Pressure [P2] rise above setting and modulate to open when it drops below setting. The downstream Cock Valve [2] enables manual closing.



TECHNICAL DATA

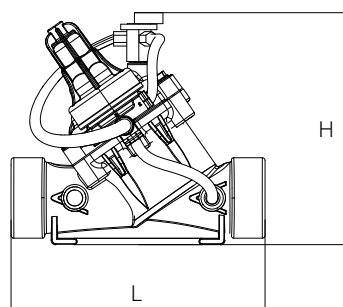
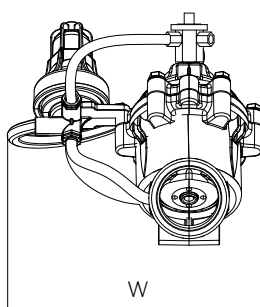
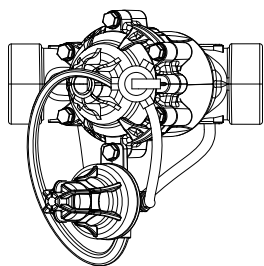
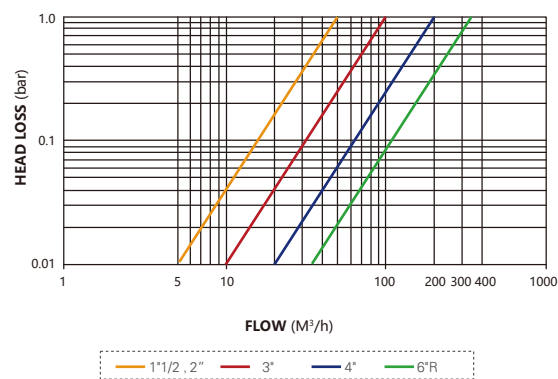
MODEL	CONNECTION SIZES	CONNECTIONS	KV FLOW RATES (m³/h)	WORKIN PRESSURE (bar)	WEIGHTS (kg)
BIV040PR	1.5"×1.5"	BSP/NPT	50	0.35 ~ 10	1.56
BIV050PR	2"×2"	BSP/NPT	50	0.35 ~ 10	1.96
BIV080PR	3"×3"	BSP/NPT/ Flanges	100	0.35 ~ 10	2.04 (Flanges:3.42)
BIV100PR	4"×4"	Flanges	200	0.35 ~ 10	6
BIV150PR	6"×6"	Flanges	340	0.35 ~ 10	12

DIMENSION

MODEL	L (mm)	W (mm)	H (mm)
BIV040PR	226	120	192
BIV050PR	230	150	230
BIV080PR	320	160	280
BIV100PR	350	170	330
BIV150PR	436	240	430

FLOW CHART






Relationship Between Flow Rate and Head Loss(Flow Rate < 2m/s)



BIV SERIES PRESSURE REDUCING VALVES WITH SOLENOID CONTROL

This type pressure reducing valve with solenoid control is a hydraulically operated, diaphragm-actuated control valve that reduces higher upstream pressure to lower constant downstream pressure regardless of fluctuating demand, and opens fully upon line pressure drop. This model valve either opens or shuts in response to an electric signal.

FEATURES

-  Hydraulic Pressure Control with Solenoid Control Line pressure driven
 - Protects downstream systems
 - Opens fully upon line pressure drop
 - Electrically controlled On/Off
-  Engineered Plastic Valve with Industrial Grade Design
 - Highly durable, chemical and cavitation resistant
 - No internal bolts and nuts
-  Unitized Flexible Super Travel(FST) Diaphragm and Guided Plug
 - Accurate and stable regulation with smooth closing
 - Requires low opening and actuation pressure
 - Prevents diaphragm erosion and distortion
-  High Flow “Y” Valve Body with “Look Through” Design
 - Ultra-high flow capacity, Low pressure loss
-  Simple In-Line Inspection and Service



Control Valves

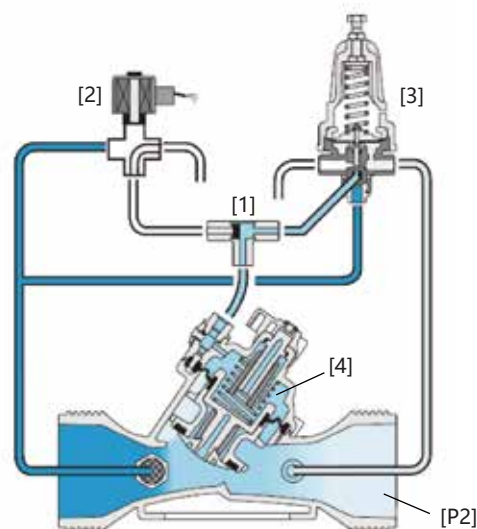
TYPICAL APPLICATIONS

Computerized Irrigation Systems; Pressure Reducing Stations; System Subject to Varying Supply Pressure; Distribution Centers; Energy Saving Irrigation Systems; Remote and/or Elevated Plots;



HOW IT WORKS

The Shuttle Valve [1] connects the Solenoid Valve [2] or the Pressure Reducing Pilot [3] to the Control Chamber [4]. When the Solenoid Valve is closed, the Pressure Reducing Pilot commands the Valve to throttle closed should Downstream Pressure [P2] rise above setting and modulate to open when it drops below setting. The solenoid valve is switched by electric signal control, the pipe pressure is guided into the control chamber through the shuttle valve, and the pressure in the control chamber increases, prompting the valve to close. The Solenoid Valve enables manual closing.



TECHNICAL DATA

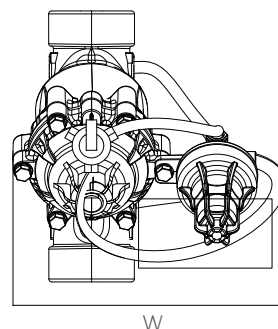
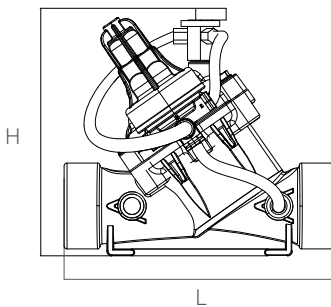
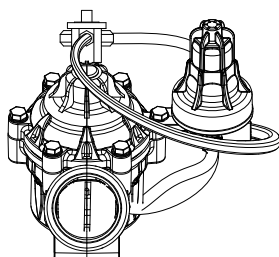
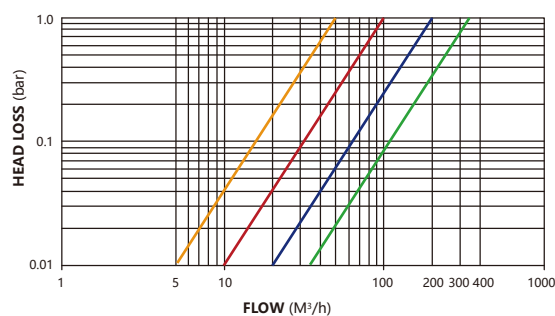
MODEL	CONNECTION SIZES	CONNECTIONS	VOLTAGE (V)	FLOW RATES (m³/h)	WORKING PRESSURE (bar)	WEIGHTS (kg)
BIV040EPR	1.5"×1.5"	BSP/NPT	AC24V/DC24V/DC12V(Latch)	50	0.35 ~ 10	1.90
BIV050EPR	2"×2"	BSP/NPT	AC24V/DC24V/DC12V(Latch)	50	0.35 ~ 10	2.2
BIV080EPR	3"×3"	BSP/NPT/Flanges	AC24V/DC24V/DC12V(Latch)	100	0.35 ~ 10	2.04 (Flanges:3.42)
BIV100EPR	4"×4"	Flanges	AC24V/DC24V/DC12V(Latch)	200	0.35 ~ 10	6
BIV150EPR	6"×6"	Flanges	AC24V/DC24V/DC12V(Latch)	340	0.35 ~ 10	12

DIMENSION

MODEL	L (mm)	W (mm)	H (mm)
BIV040EPR	226	120	192
BIV050EPR	230	150	230
BIV080EPR	320	160	280
BIV100EPR	350	170	330
BIV150EPR	436	240	430

FLOW CHART






Relationship Between Flow Rate and Head Loss(Flow Rate < 2m/s)



BIV SERIES MANUAL PRESSURE SUSTAINING VALVES

This type sustaining valve is hydraulically operated, diaphragm-actuated control valve that sustains minimum preset upstream (back) pressure and opens fully when line pressure is in excess of setting.

FEATURES

-  Line Pressure Driven, Hydraulically Controlled
 - Prioritizes pressure zones
 - Controls system fill-up
 - Opens fully upon line pressure rise
-  Engineered Plastic Valve with Industrial Grade Design
 - Highly durable, chemical and cavitation resistant
 - No internal bolts and nuts
-  High Flow “Y” Valve Body with “Look Through” Design
 - Ultra-high flow capacity, Low pressure loss
-  Unitized Flexible Super Travel (FST) Diaphragm and Guided Plug
 - Accurate and stable regulation with smooth closing
 - Requires low opening and actuation pressure
 - Prevents diaphragm erosion and distortion
-  Simple In-Line Inspection and Service



Control Valves

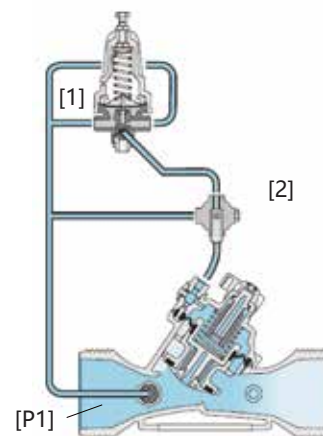
TYPICAL APPLICATIONS

Line Fill-Up Control Solutions; Line Emptying Prevention; Systems Subject to Varying Supply Pressure; Infield Filters Backwash Pressure Sustaining; Energy Saving Irrigation Systems;



HOW IT WORKS

The pressure sustaining pilot valve [1] causes the main valve to be slowly closed when the upstream pressure [P1] is lower than the minimum preset pressure, and fully opens when [P1] is in excess of setting. Local manual shut-off of the valve can be performed with the manual selection device [2].



TECHNICAL DATA

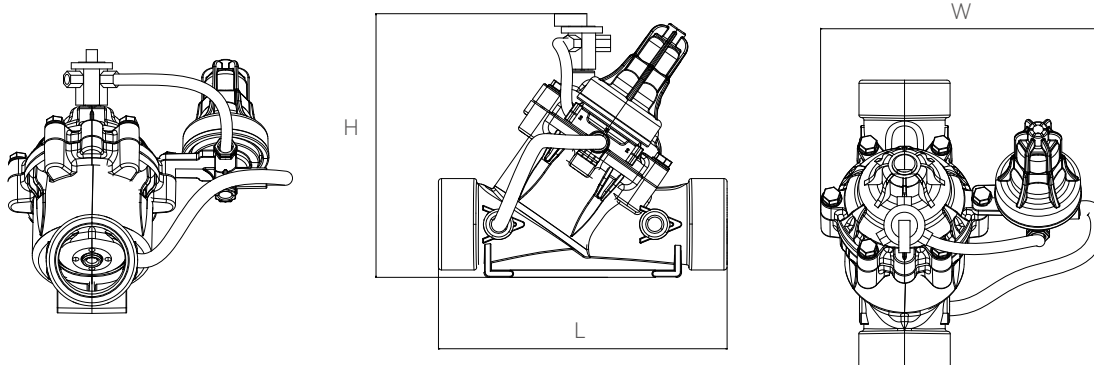
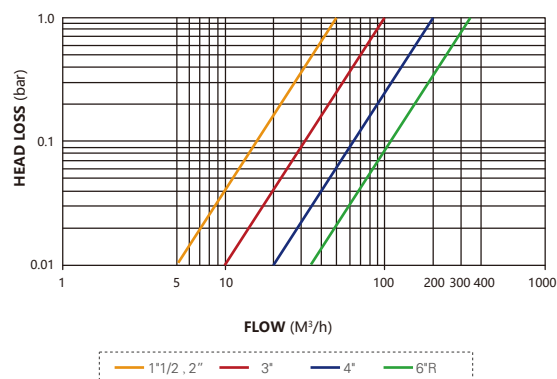
MODEL	CONNECTION SIZES	CONNECTIONS	KV FLOW RATES (m³/h)	WORKIN PRESSURE (bar)	WEIGHTS (kg)
BIV040PS	1.5"×1.5"	BSP/NPT	50	0.35 ~ 10	1.56
BIV050PS	2"×2"	BSP/NPT	50	0.35 ~ 10	1.96
BIV080PS	3"×3"	BSP/NPT/ Flanges	100	0.35 ~ 10	2.04 (Flanges:3.42)
BIV100PS	4"×4"	Flanges	200	0.35 ~ 10	6
BIV150PS	6"×6"	Flanges	340	0.35 ~ 10	12

DIMENSION

MODEL	L (mm)	W (mm)	H (mm)
BIV040PS	226	120	192
BIV050PS	230	150	230
BIV080PS	320	160	280
BIV100PS	350	170	330
BIV150PS	436	240	430

FLOW CHART

Relationship Between Flow Rate and Head Loss(Flow Rate < 2m/s)



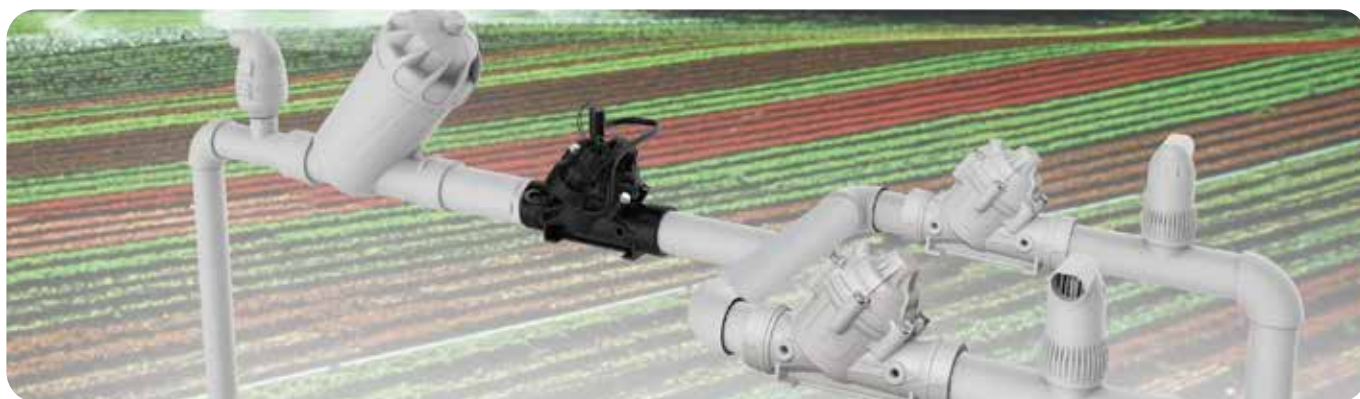
BIV SERIES PRESSURE SUSTAINING VALVES WITH SOLENOID CONTROL

This valve is a hydraulically operated, diaphragm-actuated control valve that sustains minimum preset upstream (back) pressure and opens fully when line pressure is in excess of setting. It either opens or shuts in response to an electric signal.








TYPICAL APPLICATIONS

Computerize Irrigation System; Line Fill-up Control Solution; Line Emptying Prevention; Remote And Elevated Plots; Infield Filters Backwash Pressure Sustaining; Energy Saving Irrigation Systems;

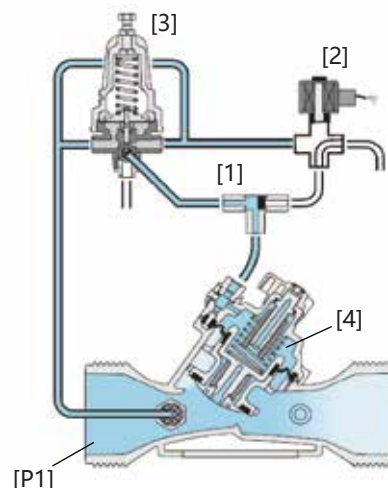


FEATURES

-  Line Pressure Driven, Electrically Controlled On/Off
 - Prioritizes pressure zones & controls system fill-up
 - Sustains upstream line pressure
 - Opens fully upon line pressure rise
-  Engineered Plastic Valve with Industrial Grade Design
 - Highly durable, chemical and cavitation resistant
 - No internal bolts and nuts
-  'Y' shape Valve Body with "Look Through" Design
 - Ultra-high flow capacity – Low pressure loss
-  Unitized Flexible Super Travel (FST) Diaphragm and Guided Plug
 - Accurate and stable regulation with smooth closing
 - Requires low actuation pressure
 - Prevents diaphragm erosion and distortion
-  Simple In-Line Inspection and Service

HOW IT WORKS

The shuttle valve [1] connects the solenoid valve [2] or the pressure sustaining pilot valve [3] to the valve control chamber [4]. When the solenoid valve is closed, the pressure sustaining pilot valve causes the valve to be slowly closed when the upstream pressure [P1] is lower than the setting, and fully opens when [P1] rises above the setting. The solenoid valve is switched under the control of the electric signal, and the pipeline pressure is guided into the control chamber through the shuttle valve, and the pressure in the control chamber is increased to cause the valve to close. The solenoid valve also enables local manual shut-off of the valve.



TECHNICAL DATA

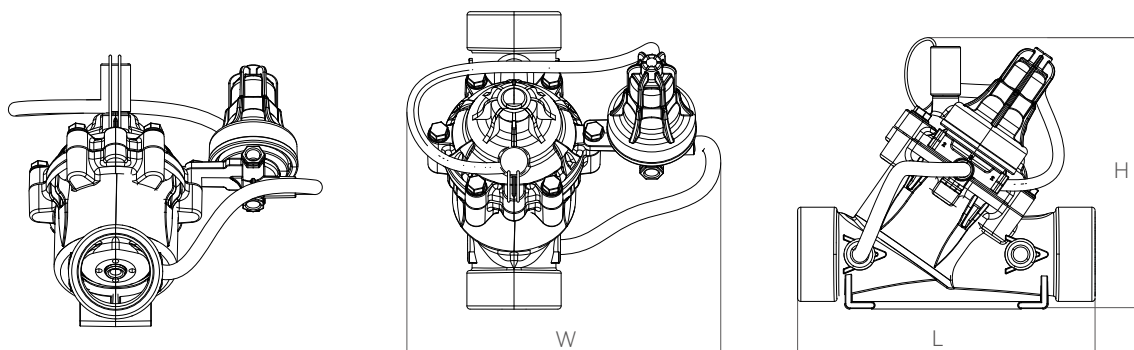
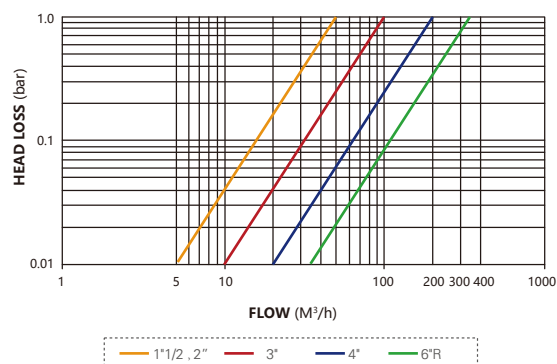
MODEL	CONNECTION SIZES	CONNECTIONS	VOLTAGE (V)	KV FLOW RATES (m³/h)	WORKING PRESSURE (bar)	WEIGHTS (kg)
BIV040EPS	1.5"×1.5"	BSP/NPT	AC24V/DC24V/DC12V(Latch)	50	0.35 ~ 10	1.9
BIV050EPS	2"×2"	BSP/NPT	AC24V/DC24V/DC12V(Latch)	50	0.35 ~ 10	2.2
BIV080EPS	3"×3"	BSP/NPT /Flanges	AC24V/DC24V/DC12V(Latch)	100	0.35 ~ 10	2.04 (Flanges:3.42)
BIV100EPS	4"×4"	Flanges	AC24V/DC24V/DC12V(Latch)	200	0.35 ~ 10	6
BIV150EPS	6"×6"	Flanges	AC24V/DC24V/DC12V(Latch)	340	0.35 ~ 10	12

DIMENSION

MODEL	L (mm)	W (mm)	H (mm)
BIV040EPS	226	195	192
BIV050EPS	230	220	230
BIV080EPS	300	220	240
BIV100EPS	320	280	320
BIV150EPS	436	360	430

FLOW CHART

Relationship Between Flow Rate and Head Loss(Flow Rate < 2m/s)



BIV SERIES PRESSURE REDUCING AND SUSTAINING VALVES

The valve is a hydraulically operated, diaphragm- actuated control valve that sustains minimum preset upstream (back) pressure and reduces downstream pressure to a constant preset maximum.



TYPICAL APPLICATIONS

Line Fill-Up Control Solutions; Line Emptying Prevention; Pressure Reducing Systems; Infield Filter Backwash Pressure Sustaining; Energy Saving Irrigation Systems;



FEATURES



Line Pressure Driven, Hydraulically Controlled

- Protects downstream system
- Prioritizes pressure zones
- Controls system fill-up



Engineered Plastic Valve with Industrial Grade Design

- Highly durable, chemical and cavitation resistant
- No internal bolts and nuts



'Y' shape Valve Body with "Look Through" Design

- Ultra-high flow capacity – Low pressure loss



Unitized Flexible Super Travel (FST) Diaphragm and Guided Plug

- Accurate and stable regulation with smooth closing
- Requires low opening and actuation pressure
- Prevents diaphragm erosion and distortion

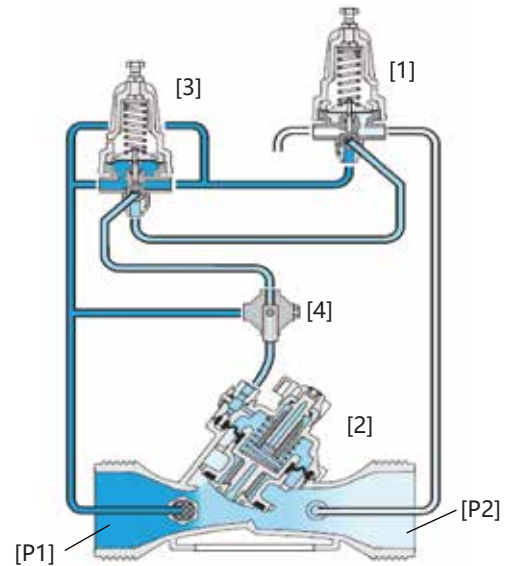


User-Friendly Design

- Easy pressure setting
- Simple in-line inspection and service

HOW IT WORKS

The pressure reducing pilot valve [1] is connected to the valve control chamber [2] via the pressure sustaining pilot valve [3]. The pressure sustaining valve closes the valve when the upstream pressure [P1] is lower than the setting. When the upstream pressure [P1] rises above the setting, the pressure sustaining pilot valve is switched to allow the pressure reducing pilot valve to control the valve to reduce the downstream pressure [P2]. Local manual shut-off of the valve can be achieved by the manual selection device [4].



TECHNICAL DATA

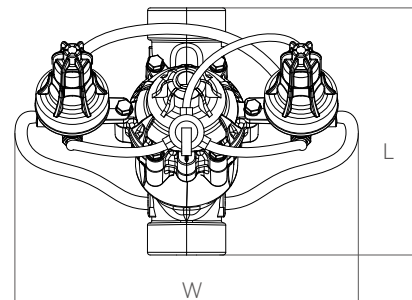
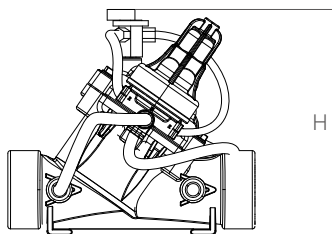
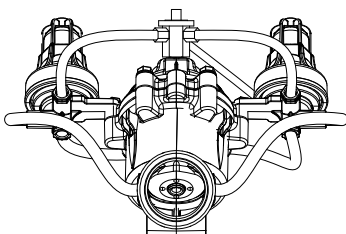
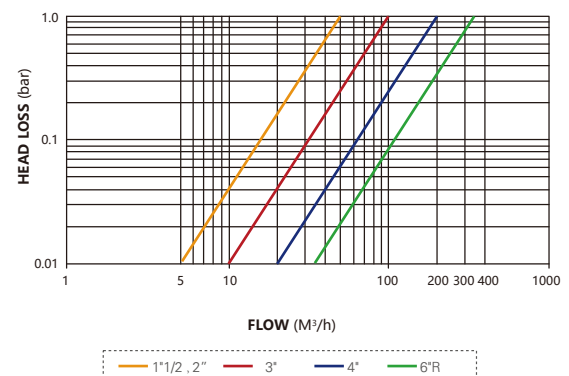
MODEL	CONNECTION SIZES	CONNECTIONS	KV FLOW RATES (m ³ /h)	WORKING PRESSURE (bar)	WEIGHTS (kg)
BIV040RS	1.5"×1.5"	BSP/NPT	50	0.35 ~ 10	1.82
BIV50RS	2"×2"	BSP/NPT	50	0.35 ~ 10	2.22
BIV80RS	3"×3"	BSP/NPT/ Flanges	100	0.35 ~ 10	2.30 (Flanges:3.68)
BIV100RS	4"×4"	Flanges	200	0.35 ~ 10	6.26
BIV150RS	6"×6"	Flanges	340	0.35 ~ 10	12.26

DIMENSION

MODEL	L (mm)	W (mm)	H (mm)
BIV040RS	226	310	192
BIV50RS	230	320	230
BIV80RS	300	320	240
BIV80SRS	320	340	320
BIV100RS	320	340	320
BIV150RS	436	380	430

FLOW CHART

Relationship Between Flow Rate and Head Loss(Flow Rate < 2m/s)



BIV SERIES PRESSURE REDUCING AND SUSTAINING VALVES WITH SOLENOID CONTROL

The valve is a hydraulically operated, diaphragm actuated control valve that sustains minimum preset upstream (back) pressure and reduces downstream pressure to a constant preset maximum. It either opens or shuts in response to an electric signal.



TYPICAL APPLICATIONS

Computerized Irrigation Systems; Line Fill-Up Control Solutions; Pressure Reducing Systems; Remote and/or Elevated Plots; Infield Filter Backwash Pressure Sustaining; Energy Saving Irrigation Systems



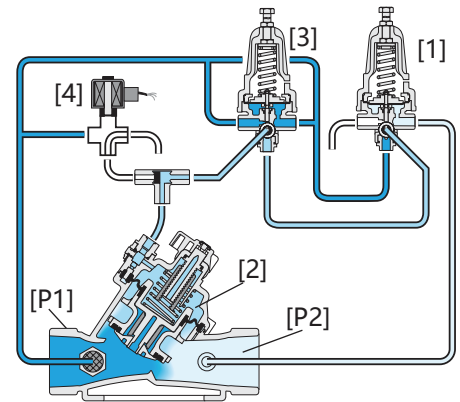
Control Valves

FEATURES

- ⊗ Line Pressure Driven, Electrically Controlled On/Off
 - Protects downstream system
 - Prioritizes pressure zones
 - Controls system fill-up
 - Sustains upstream line pressure
- ⚙️ Engineered Plastic Valve with Industrial Grade Design
 - Highly durable, chemical and cavitation resistant
 - No internal bolts and nuts
- 🔗 'Y' shape Valve Body with "Look Through" Design
 - Ultra-high flow capacity – Low pressure loss
- 📦 Unitized Flexible Super Travel (FST) Diaphragm and Guided Plug
 - Accurate and stable regulation with smooth closing
 - Requires low opening and actuation pressure
 - Prevents diaphragm erosion and distortion
- 🎧 User-Friendly Design
 - Easy pressure setting
 - Simple in-line inspection and service

HOW IT WORKS

The pressure reducing pilot valve [1] is connected to the valve control chamber [2] via the pressure sustaining pilot valve [3] and the shuttle valve. The pressure sustaining pilot valve closes the valve when the upstream pressure [P1] is lower than the set value. When the upstream pressure [P1] rises above the setting, the pressure sustaining pilot valve is switched to make the pressure reducing pilot valve control the valve to reduce the downstream pressure [P2]. The solenoid valve [4] is switched by electrical signal, the pressure is guided into the shuttle valve. The shuttle valve blocks each pilot valves, the line pressure is transferred the control chamber, and the valve closes.



TECHNICAL DATA

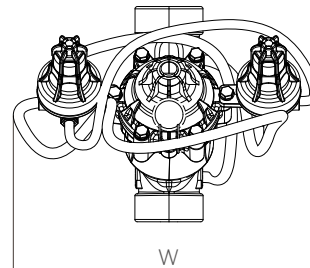
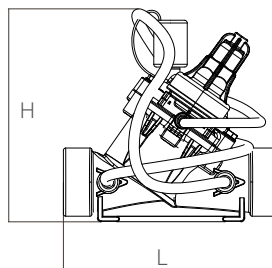
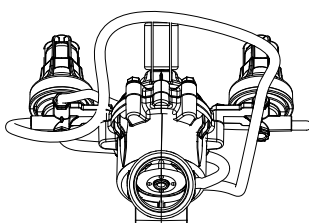
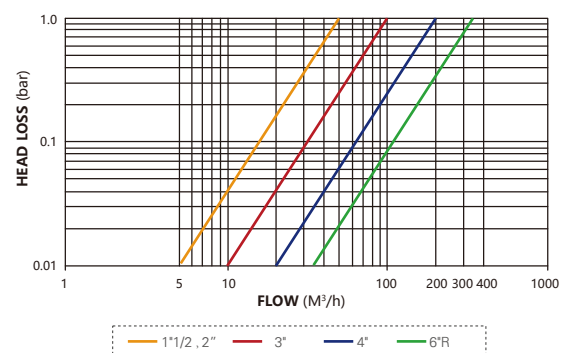
MODEL	CONNECTION SIZES	CONNECTIONS	VOLTAGE (V)	KV FLOW RATES (m³/h)	WORKING PRESSURE (bar)	WEIGHTS (kg)
BIV040ERS	1.5"×1.5"	BSP/NPT	AC24V/DC24V/DC12V(Latch)	50	0.35 ~ 10	1.9
BIV050ERS	2"×2"	BSP/NPT	AC24V/DC24V/DC12V((Latch)	50	0.35 ~ 10	2.2
BIV080ERS	3"×3"	BSP/NPT/ Flanges	AC24V/DC24V/DC12V((Latch)	100	0.35 ~ 10	2.30 (Flanges:3.68)
BIV100ERS	4"×4"	Flanges	AC24V/DC24V/DC12V((Latch)	200	0.35 ~ 10	6.26
BIV150ERS	6"×6"	Flanges	AC24V/DC24V/DC12V((Latch)	340	0.35 ~ 10	12.26

DIMENSION

MODEL	L (mm)	W (mm)	H (mm)
BIV040ERS	226	310	192
BIV050ERS	230	320	230
BIV080ERS	300	320	240
BIV100ERS	320	340	320
BIV150ERS	436	380	430

FLOW CHART

Relationship Between Flow Rate and Head Loss(Flow Rate < 2m/s)



BIV SERIES QUICK PRESSURE RELIEF VALVES

The quick pressure relief valve is a hydraulically operated, diaphragm-actuated control valve that relieves excessive line pressure when it rises above the preset maximum. It responds to rises in system pressure immediately, accurately and with high repeatability, by opening fully. It provides smooth drip tight closing.



TYPICAL APPLICATIONS

System Burst Protection; Momentary Pressure Peak Elimination; System Failure Visual Indication; Filter Burst Protection.

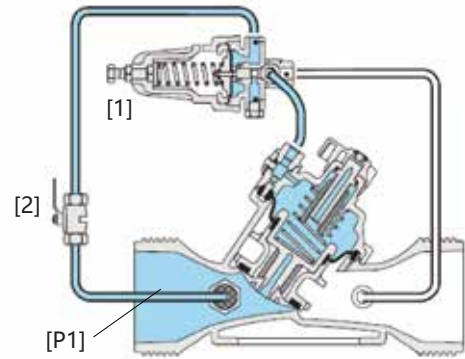


FEATURES

- Hydraulic Pressure Control**
 - Line pressure driven
 - Long term drip tight sealing
 - Long term setting stability
 - Wide setting range
 - Tight setting window with minimal hysteresis
- Engineered Plastic Valve with Industrial Grade Design**
 - Adaptable on-site to a wide range of end connection sizes and types
 - Articulated flange connections eliminate mechanical and hydraulic stresses
 - Highly durable, chemical and cavitation resistant
- 'Y' shape Valve Body with "Look Through" Design**
 - Ultra-high flow capacity - Low pressure loss
- Unitized Flexible Super Travel (FST) Diaphragm and a Guided Plug**
 - Accurate and stable regulation with smooth closing
 - Requires low opening and actuation pressure
 - Prevents diaphragm erosion and distortion
- User-Friendly Design**
 - Easy pressure setting
 - Simple in-line inspection and service

HOW IT WORKS

The pressure relief pilot valve [1] causes the valve to open immediately when the upstream pressure [P1] suddenly rises above the setting of pilot valve, and close slowly when the upstream pressure reduces below the setting of pilot valve. The operation test can be performed manually with the exhaust ball valve [2].

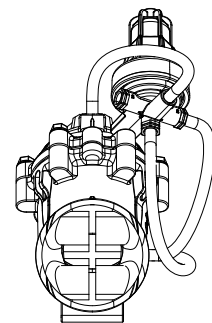
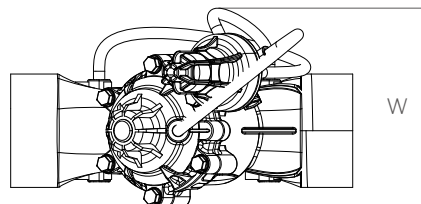
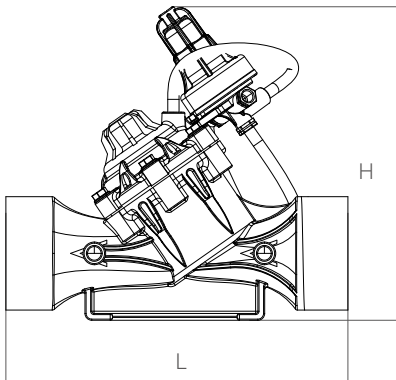


TECHNICAL DATA

MODEL	CONNECTION SIZES	CONNECTIONS	KV FLOW RATES (m³/h)	WORKIN PRESSURE (bar)	WEIGHTS (kg)
BIV040QR	1.5"×1.5"	BSP/NPT	50	0.35 ~ 10	1.56
BIV050QR	2"×2"	BSP/NPT	50	0.35 ~ 10	1.96
BIV080QR	3"×3"	BSP/NPT / Flanges	100	0.35 ~ 10	2.04 (Flanges:3.42)
BIV100QR	4"×4"	Flanges	200	0.35 ~ 10	6
BIV150QR	6"×6"	Flanges	340	0.35 ~ 10	12

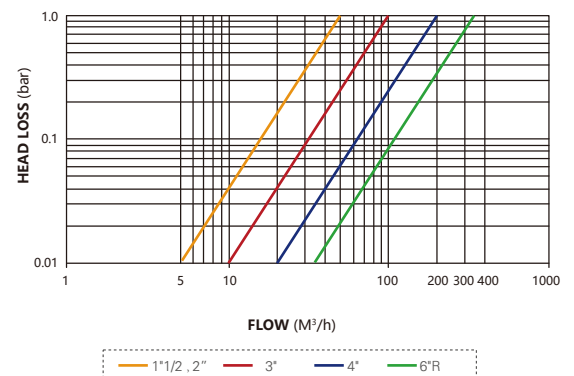
DIMENSION

MODEL	L (mm)	W (mm)	H (mm)
BIV040QR	226	205	192
BIV050QR	230	210	230
BIV080QR	230	210	240
BIV100QR	320	240	320
BIV150QR	436	280	430



FLOW CHART

Relationship Between Flow Rate and Head Loss (Flow Rate < 2m/s)



BDV SERIES BACKFLUSHING CONTROL VALVES

BDV series backflushing control valve are 3-way 2-chamber hydraulic drive diaphragm control valves with low-pressure seal and smooth flow change, it can be connected with sand media filter or disc filter into an automatic backwash filtration system, and it can also change the direction of flow in the water supply.

The control valves have two control chambers, which can achieve the transformation of two directions between angle flow and straight flow by changing the assembly direction of spring, and the unique shape chambered design ensures it flow through super large flow.



TYPICAL APPLICATIONS

Auto backflushing filtration system:

Assembled into a backflushing filtration system with sand media filter or disc filter.

Water supply system:

Being used in the water supply pipelines to reroute the water flow into angle or straight flow direction.



FEATURES



Hydraulic drive diaphragm control valve;



Unique plastic spool assembly design with excellent tight sealing and strong corrosion resistance; Short valve travel, smooth changes of flow direction, eliminating mixing of water supply and wastewater;



PA material's valve body, corrosion, acid and alkali resistance, longer service life;



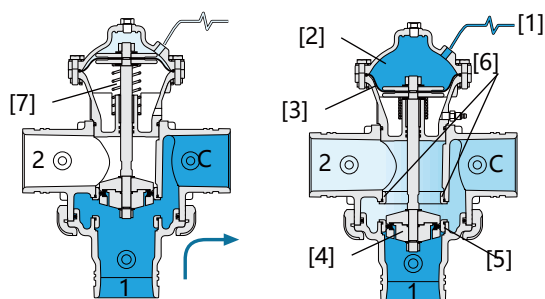
The drive device can be detachable independently, convenient for on line inspection and maintenance;



Double chambered design with low-pressure actuation to effectively protect the diaphragm;

HOW IT WORKS

Angle Flow Valve

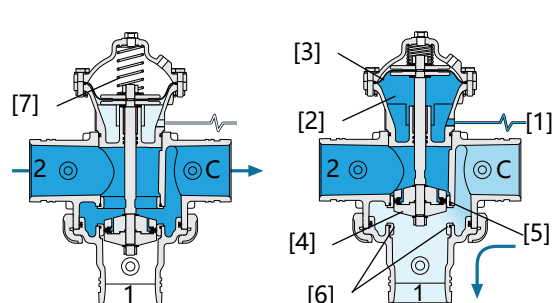


Filtering Stage

Backflushing Stage

A Hydraulic Command [1], which pressurizes the Lower Control Chamber [2], forces the Diaphragm [3] actuated Plug Assembly [4] to move towards the Supply Port Seat [5], eventually sealing it drip tight. This allows flow from the filter through the Drain Port Seat [6]. Venting the upper control chamber causes the line pressure, together with the Spring [7] force, to move the Valve back to filtration mode.

Straight Flow Valve



Filtering Stage

Backflushing Stage

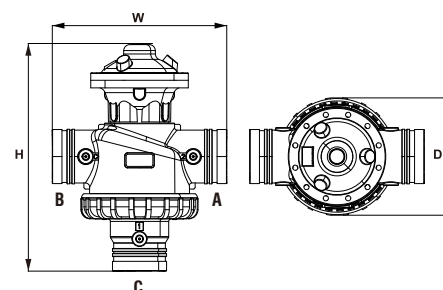
A Hydraulic Command [1], which pressurizes the Lower Control Chamber [2], forces the Diaphragm [3] actuated Plug Assembly [4] to move towards the Supply Port Seat [5], eventually sealing it drip tight. This allows flow from the filter through the Drain Port Seat [6]. Venting the upper control chamber causes the line pressure, together with the Spring [7] force, to move the Valve back to filtration mode.

TECHNICAL DATA

MODEL	FLOW DIRECTION	CONNECTION SIZES	CONNECTIONS	VOLUME IN CHAMBER (L)	WORKING PRESSURE (Bar)	WEIGHTS (kg)
BDV050SB	Straight	2"×2"×2"	Grooved	0.13	0.7-10	2.8
BDV050AB	Angle	2"×2"×2"	Grooved	0.13	0.7-10	2.8
BDV080SB	Straight	3"×3"×3"	Grooved	0.34	0.7-10	5.5
BDV080AB	Angle	3"×3"×3"	Grooved	0.34	0.7-10	5.5
BDV100SB	Straight	4"×4"×4"(3")	Grooved	0.55	0.7-10	9.9
BDV100AB	Angle	4"×4"×4"(3")	Grooved	0.55	0.7-10	9.9

DIMENSION

MODE	H (mm)	W (mm)	D (mm)	NOTE
BDV050SB	258	180	160	Grooved, BSP/NPT, convertible
BDV050AB	258	180	160	Grooved, BSP/NPT, convertible
BDV080SB	378	287	192	Drain: BSP/NPT, 2" Grooved convertible
BDV080AB	378	287	192	Drain: BSP/NPT, 2" Grooved convertible
BDV100SB	464	318	260	Drain: BSP/NPT, 3" Grooved convertible
BDV100AB	464	318	260	Drain: BSP/NPT, 3" Grooved convertible



BSV SERIES BACKFLUSHING CONTROL VALVES

BSV series backflushing control valve are 3-way single-chamber hydraulic drive diaphragm control valves with low-pressure seal and smooth flow change, it can be connected with sand media filter or disc filter into an automatic backwash filtration system, and it can also change the direction of flow in the water supply.



TYPICAL APPLICATIONS

Auto backflushing filtration system:

Assembled into a backflushing filtration system with sand media filter or disc filter.

Water supply system:

Being used in the water supply pipelines to reroute the water flow into angle or direct flow direction.

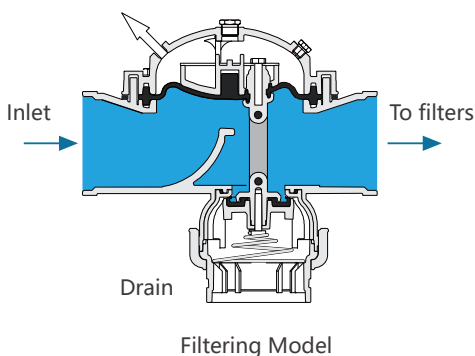


FEATURES

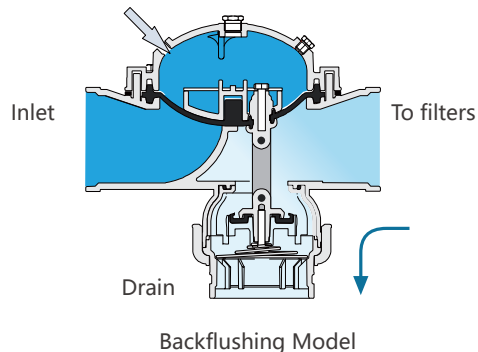
- Unique plastic spool assembly design with excellent tight sealing and strong corrosion resistance;
- Short valve travel, smooth changes of flow direction, eliminating mixing of water supply and waste water;
- PA material's valve body, corrosion, acid and alkali resistance, longer service life;
- The drive device can be detachable independently, convenient for on-line inspection and maintenance;
- Single chambered design with low pressure actuation to effectively protect the diaphragm;

HOW IT WORKS

Ventilation control chamber



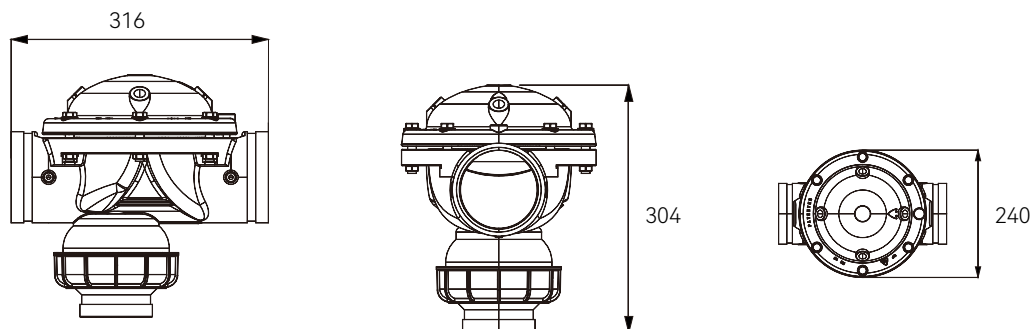
Pressurized control chamber



TECHNICAL DATA

MODEL	FLOW DIRECTION	CONNECTION SIZES	CONNECTIONS	VOLUME IN CHAMBER (L)	WORKING PRESSURE (Bar)	SIZES (mm)	WEIGHTS (kg)
BSV100S4	Straight	4"×4"×4"	Grooved	1.5	0.7-10	316*304*240	5.5
BSV100S3	Straight	4"×4"×3"	Grooved	1.5	0.7-10	316*304*240	5.5

DIMENSION



ACTUATOR VALVE (SOLENOID)

APPLICATIONS

- Agriculture: for all applications
- Landscape: for all applications
- Industry: water supply system

FEATURES AND BENEFITS

1. Actuator valve designed for reliable operation for all irrigation control systems.
2. The built-in actuator makes it easy to convert the electrical signal into water flow control is essential for the hydraulic control valve.
3. Two versions: AC/DC Version and Latch version.
4. Water isolated actuator with waterproof design achieves longer service life.
5. Large water flow design (2.5mm command orifice) makes control valves respond quickly and are anti-blocking solid.
6. Manual override CLOSE-AUTO-OPEN.
7. The 3-way base designed for operating with a two-position three-way control valve.
8. Low energy consumption for maximal wire distance control.

SPECIFICATION

1. AC/DC version:

Working voltage: AC 24V or DC 24V

Inrush current: 70mA

Holding current: 10mA

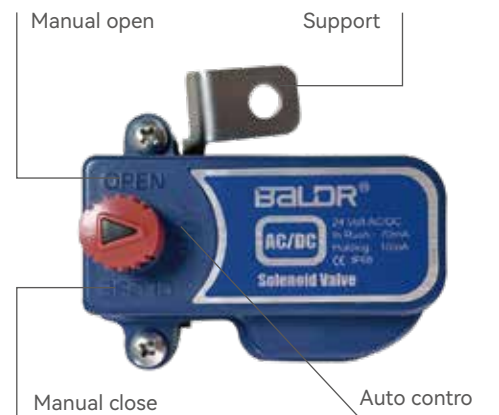
Latch version:

Working voltage: DC 12V

Pulse width: 260ms

Min. capacitor: 4700uF"

2. Working pressure: 0-10bar
3. Environment/Fluid temp. max: 60°C (140°F)
4. Filtration: 80mesh min
5. Hydraulic outlet: 1/8" female thread
6. Leads: 2x 1.5m
7. Red wire is positive and black wire is negative.



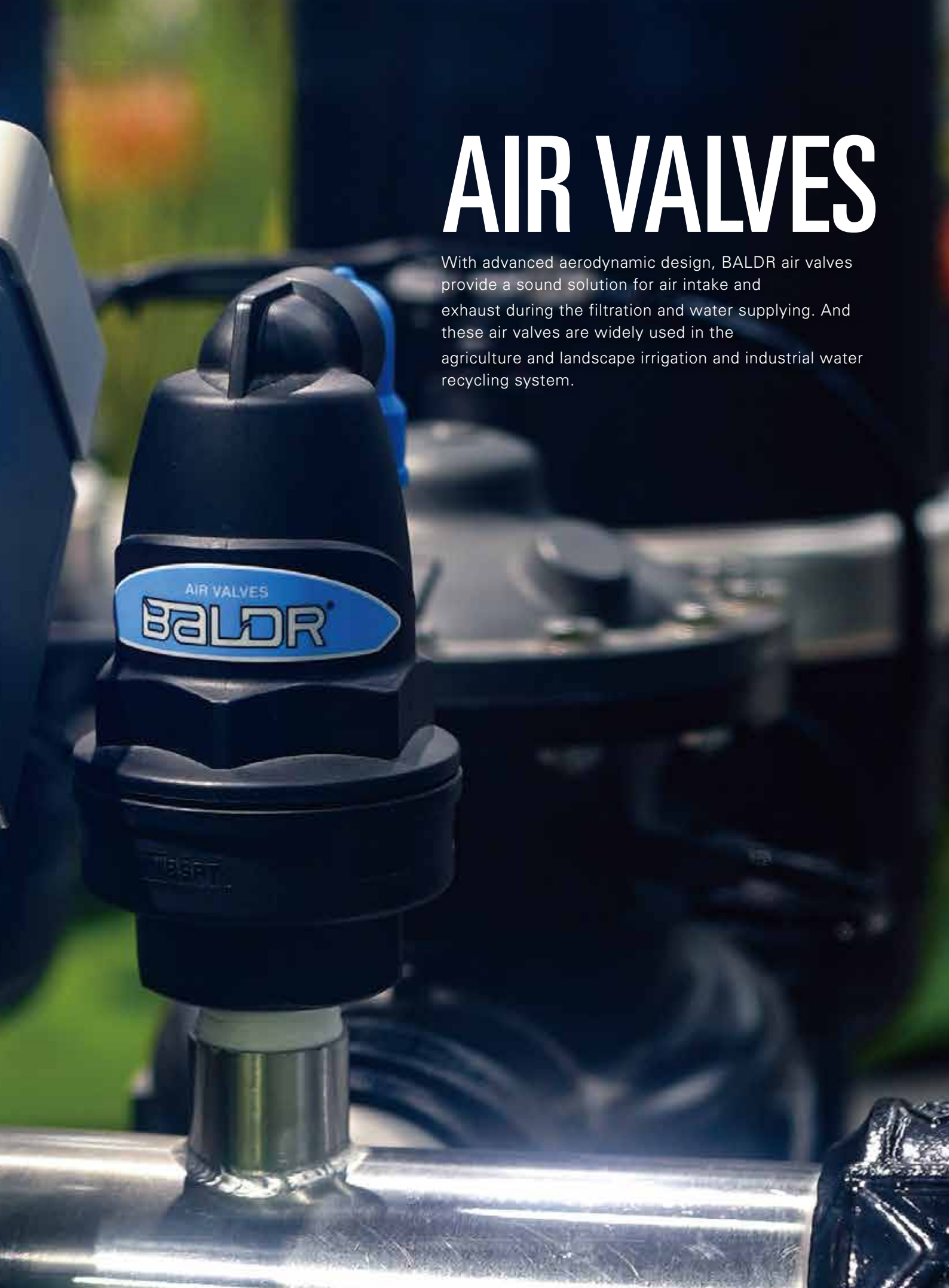
AC/DC Version
-BSV010A24-



Latch Version
-BSV010D12-

AIR VALVES

With advanced aerodynamic design, BALDR air valves provide a sound solution for air intake and exhaust during the filtration and water supplying. And these air valves are widely used in the agriculture and landscape irrigation and industrial water recycling system.



AIR VALVES

With advanced aerodynamic design, BALDR air valves provide a sound solution for air intake and exhaust during the filtration and water supplying. The air valves balance the air intake and exhaust to ensure that the pipes are sealed closely in low pressure. BALDR air valves are widely used in the agriculture and landscape irrigation and industrial water recycling system.



3 types of air valves are available

TECHNICAL SPECIFICATIONS

- Operating pressure: 0.2 to 10 bar / 2.9 to 145 psi
0.2 to 16 bar / 2.9 to 230 psi
- Maximal operating temperature: 60°C / 140°F

V TYPE VACUUM VALVES

V-type vacuum valve can open the inlet valve quickly when a negative vacuum pressure is generated inside the system or pipeline, and a large amount of inlet air destroys the negative vacuum pressure formed inside the system or pipeline, the inlet valve is sealed under water pressure.

TYPICAL APPLICATION

The air valves break the vacuum formation and enhance the efficiency of draining of the filtration system.

FEATURE & ADVANTAGE

- Big size air inlet allowing large flow;
- 🧪 PA and PP material with corrosion, acid and alkaline resistant features;
- 📦 Compact structure & simple design & durability;
- 🚧 Easy installation.



HOW IT WORKS

When filtration system is under pressure:

When the filtration system works under pressure, air will be gathered at the bottom of chamber, then the float will move up to seal the inlet.

When filtration system is in empty status:

When the system or pipe is drained empty, negative pressure will be formed in the air valve. Meanwhile the float moves down to take in air against vacuum formation.

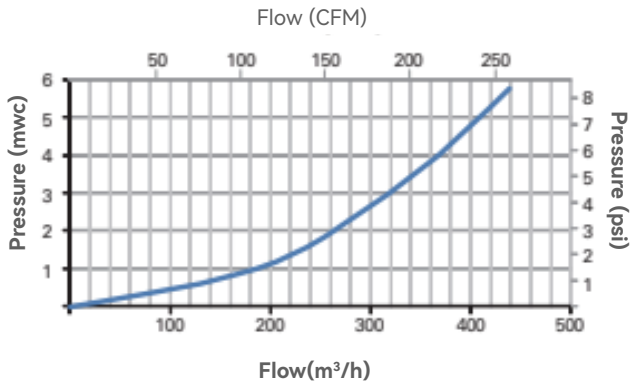


SPECIFICATION

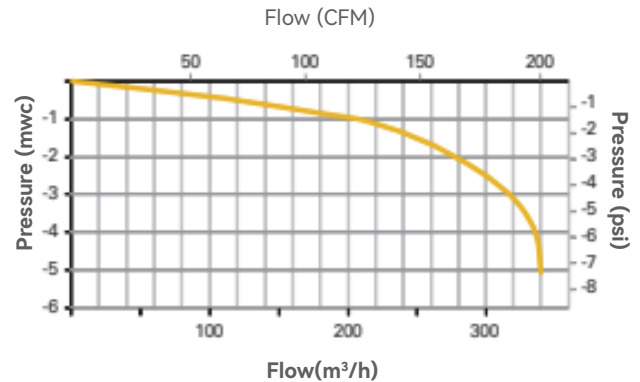
MODEL	CONNECTION SIZES (BSP/NPT)	NOZZLE AREA (mm ²)	OPERATING PRESSURE (bar)	DIMENSIONS (mm)	WEIGHT (g)
BAV130V50	DN50 2"	804	0.2-10	131*72*80	185

PERFORMANCE

Discharge data - free air flow - 2"



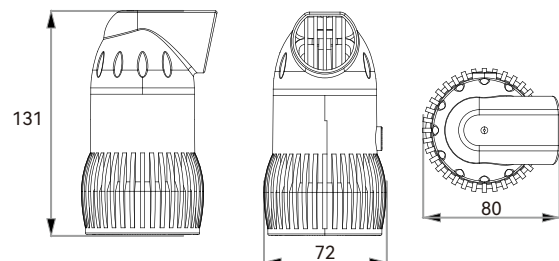
Inflow data - free air flow - 2"



MATERIAL LIST

No	Description	Material
1	Body	PP
2	Float	PP

DIMENSION



K TYPE KINETIC VALVES







K-type kinetic valves are applicable to all kinds of irrigation systems. It evacuates air quickly during pipeline filling and takes in large volume air while draining. Adopted its advanced aerodynamic design and kinetic orifice, this valve provides excellent protection against vacuum formation and large volume air existing, with improved sealing under low pressure conditions.

TYPICAL APPLICATION

K type kinetic valves can prevent the air from accumulating or eliminate negative pressure applying in filtration pipelines, water supply system, nearby water meter & control valve and pipelines for residential area and industrial field.



FEATURE & ADVANTAGE

-  Advanced aerodynamic design;
-  Big inlet size allowing large flow;
-  One-piece floating ball design ensures ontime shutting of outlet while the high speed airflow occurs;
-  Quality sealing prevents leakage under low pressure conditions (0.2 bar/2.9 psi);
-  PA and PP material with corrosion, acid and alkaline resistant features and durable;
-  Multi-installation sizes for various market demands.

HOW IT WORKS

When filtration system is filling:

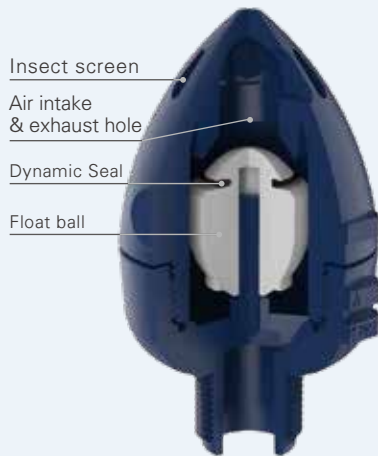
During filling water into the pipeline, massive air will be evacuated from kinetic air intake & exhaust hole. The floating ball moves upwards to close the orifice after water flows into the chamber. With aerodynamic design and the anti-blow design, the floating ball ensures shutting of outlet on the right time while the high speed airflow occurs.

When filtration system is under pressure:

The kinetic valve keeps closing.

When the system or pipe is drained empty:

When negative pressure difference is formed, the air pushes the float downward. The kinetic valve opens and let air enter the air valve to avoid the formation of negative vacuum pressure inside the system.



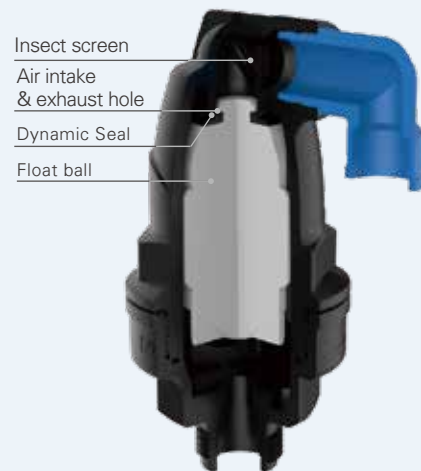
BAV110K20, BAV110K25



BAV120K20, BAV120K25



BAV100K20, BAV100K25



BAV140K25, BAV160K50

MATERIAL LIST

BAV 100		
No	Description	Material
1	Body	PP
2	Float	Foamed PP

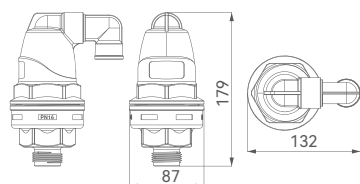
BAV 110, BAV120		
No	Description	Material
1	Body	PA
2	Float	Foamed PP

BAV 140, BAV160		
No	Description	Material
1	Head (Blue)	PP
2	Body	PA
3	Float	Foamed PP

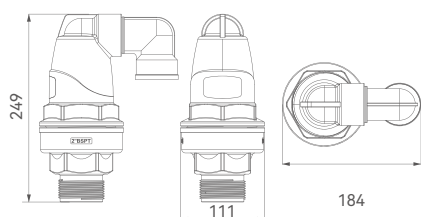
SPECIFICATION

MODEL	CONNECTIONS BSP/NPT	ORIFICE SIZE (mm ²)	WORKING PRESSURE (Bar)	DIMENSIONS (mm)	WEIGHT (g)
BAV100K20	DN20 3/4"	288	0.2-10	122*58*58	95
BAV100K25	DN25 1"	288	0.2-10	122*58*58	95
BAV110K20	DN20 3/4"	288	0.2-10	108*66*63	185
BAV110K25	DN25 1"	288	0.2-10	108*66*63	185
BAV120K20	DN20 3/4"	288	0.2-10	110*80*66	205
BAV120K25	DN25 1"	288	0.2-10	110*80*66	205
BAV140K25	DN25 1"	314	0.2-16	183*134*86	470
BAV160K50	DN50 2"	908	0.2-16	249*187*110	1052

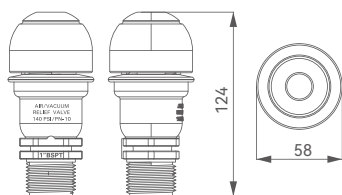
DIMENSION



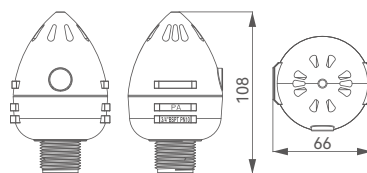
BAV140K25



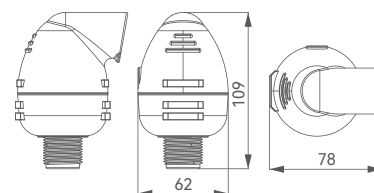
BAV160K50



BAV100K20, BAV100K25

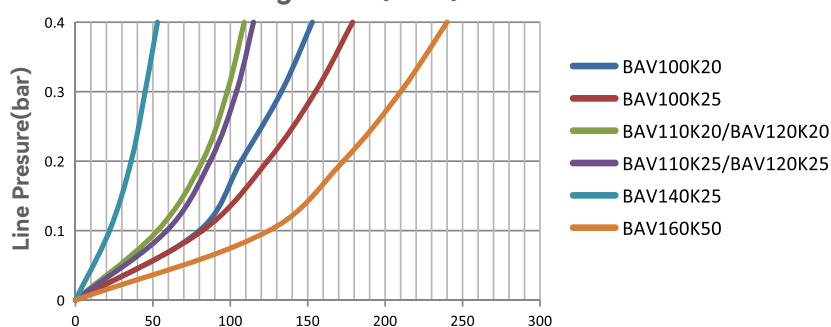
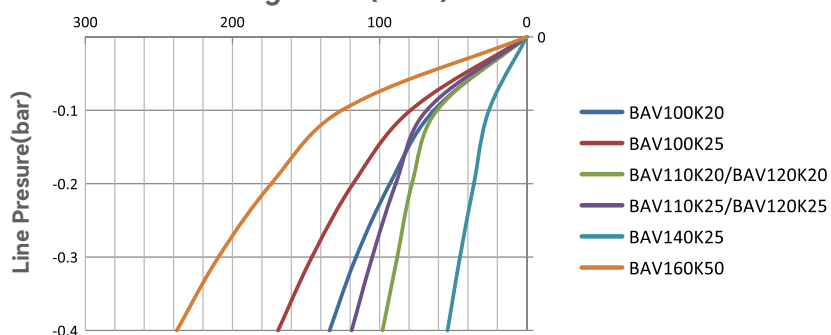


BAV110K20, BAV110K25



BAV120K20, BAV120K25

PERFORMANCE

Discharge Data(m³/h)Discharge Data(m³/h)






C-TYPE COMBINED VALVES

C-type combined valves are of high quality for various irrigation systems and operating conditions. When the system is filled with water, the air valve discharges a large amount of air from the pipe; When the system is under pressure, the air valve effectively discharges a small amount of air from the pipe; When the system is emptied, the air valve draws in a large amount of air. Adopted advanced aerodynamic design, the valve provides excellent protection against air accumulation and vacuum formation, with improved sealing in low pressure conditions.

TYPICAL APPLICATION

C type kinetic valves can prevent the air from accumulating or eliminate negative pressure apply in filtration pipelines, water supply system, nearby water meter & control valve and pipelines for residential area and industrial field.

FEATURES & ADVANTAGE

-  Advanced aerodynamic design ; Prevents premature closing, without disturbing air intake or discharge;
-  One-piece floating ball design ensures ontime shutting of outlet while the high speed airflow occurs;
-  Dynamic sealing prevents leakage under low pressure conditions (0.2 bar/2.9 psi);
-  PA and PP material with corrosion, acid and alkaline resistant ; lower maintenance and increased life span;
-  Multi-installation sizes for various market demands.



HOW IT WORKS

When system is filling with water:

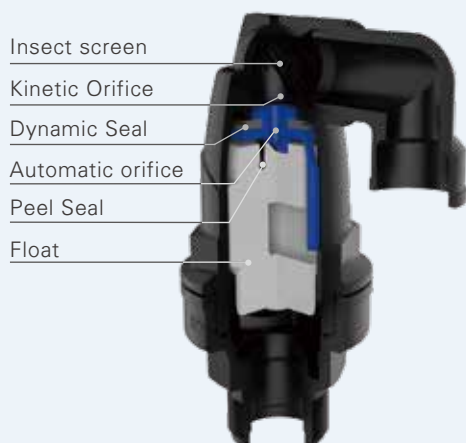
A large amount of air is discharged from the kinetic inlet and exhaust port. After the water entered the chamber, the float rises and closes the inlet and exhaust port. With aerodynamic design and the anti-blow design, the floating ball ensures shutting of outlet on the right time while the high speed airflow occurs.

Under Pressure:

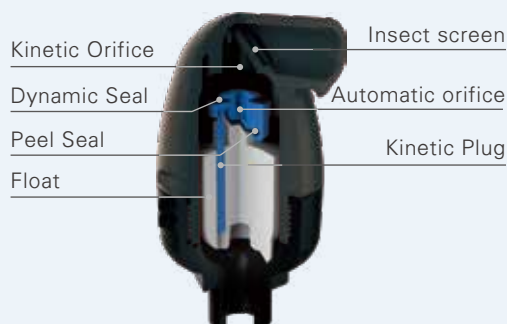
When the system is under pressure, air accumulates above the valve cavity. When the amount of air increases, the level inside the valve drops and the float drops as well. At this time, the automatic micro-exhaust port opens to discharge the accumulated air. The level rises, the float rises, and then the automatic micro-exhaust port closes.

System draining:

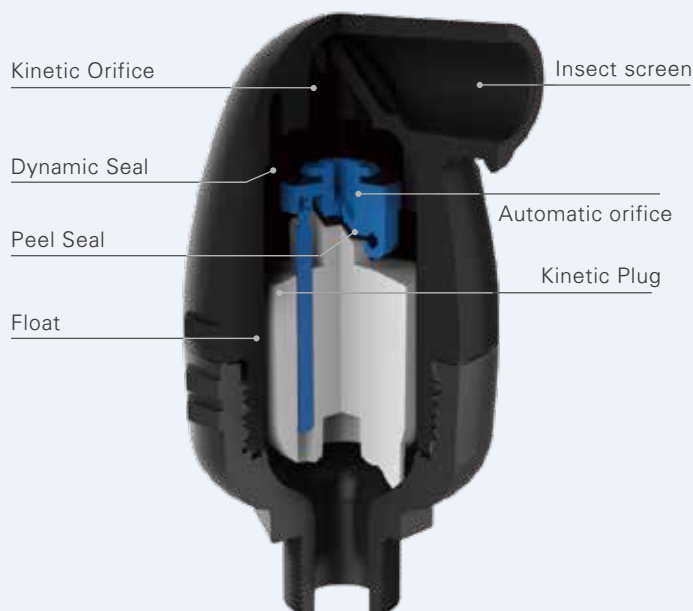
When the system is emptied, a negative pressure difference is formed and the air pushes the float downward. With the kinetic inlet and exhaust port open, the air goes into the air valve to avoid the formation of a negative vacuum pressure in the system.



BAV160V50



BAV150C25

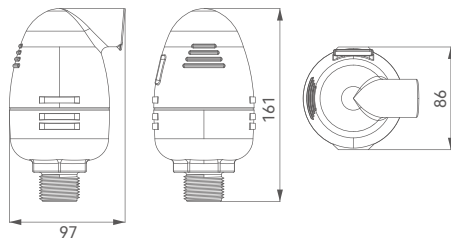


BAV170C50

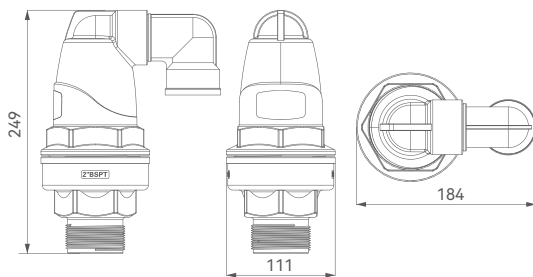
SPECIFICATION

MODEL	CONNECTIONS BSP/NPT	ORIFICE SIZE (mm ²)	WORKING PRESSURE (Bar)	DIMENSIONS (mm)	WEIGHT (g)
BAV150C25	DN25 1"	454	0.2-10	162*97*86	488
BAV160C50	DN50 2"	908	0.2-16	249*187*110	1020
BAV170C50	DN50 2"	1200	0.2-10	255*130*120	1100

DIMENSION



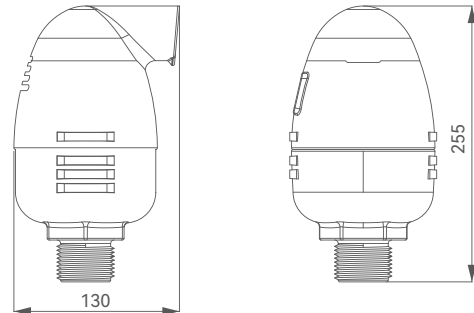
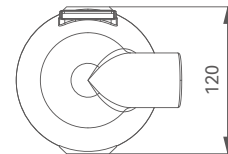
BAV150C25



BAV160C50

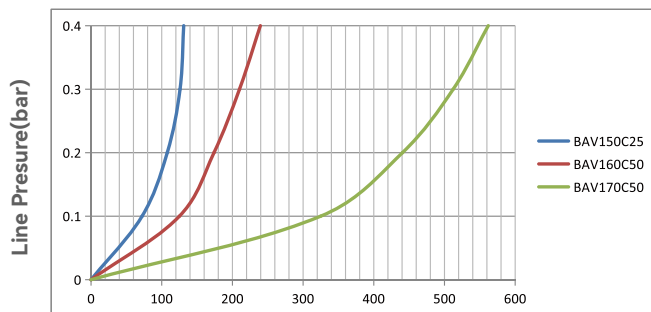
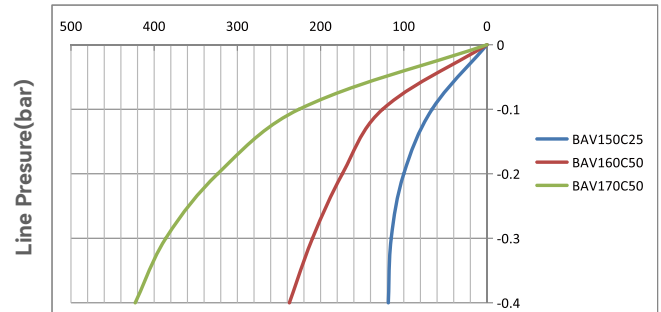
MATERIAL LIST

No	Description	Material
1	Body	PP
2	Float	PP



BAV170C50

PERFORMANCE

Discharge Data(m³/h)Discharge Data(m³/h)



AUTOMATIC BACKFLUSHING CONTROLLERS

BAC series automatic backflushing filtration controller is equipped with built-in computer microchip and LCD which can show real-time operation status of equipment. It can automatically control each filter to be taken turns to clean. Meanwhile, it can uninterruptedly provide filtration water, so it achieves the purpose of unmanned automatic control.

BAC601 SERIES AUTOMATIC BACKFLUSHING CONTROLLER

BALDR series automatic backflushing controller is equipped with built-in computer microchip. Automatic backflushing control system is made up of the solenoid valve, three-way backflushing valve, filter units, hydraulic sensor, alarm, pressure sustaining valve, water pump and so on, which are linked by the programming software through input and output signals of controller. It can automatically take turns to clean each filter. Meanwhile, it can uninterruptedly provide filtration water. So it achieves the purpose of unmanned automatic control. The controller is equipped with LCD which can show real-time operation status of equipment.



TYPICAL APPLICATION

It is suitable for auto backflushing sand media filter system and auto backflushing disc filter system.



THE MAIN FUNCTION

Modes of operation:

- Flushing triggered by pressure differential only
- Flushing triggered by time only
- Manual flushing

User selectable parameters:

- | | |
|-----------------------------------|---|
| • Flushing time per station | • DP response time |
| • Differential pressure set point | • Main valve yes/no |
| • Flushing interval | • Looping limit-maximum backflushing cycles by DP |
| • Dwell delay | |

Logging:

- Number of cycles triggered manually

Alarms: (Only shown on the LCD screen)

- Endless looping of consecutive backflushing cycles
- Low Pressure indication
- Low battery power alert







Real time displayed information:

- Actual pressure differential value
- During the backflushing process showing the backflushing time and backflushing running station number
- Between the backflushing cycles showing the left time until next cycle

DP Sensor Calibration:

- Calibrate the DP sensor as zero with disconnecting port of inlet and outlet

FEATURES

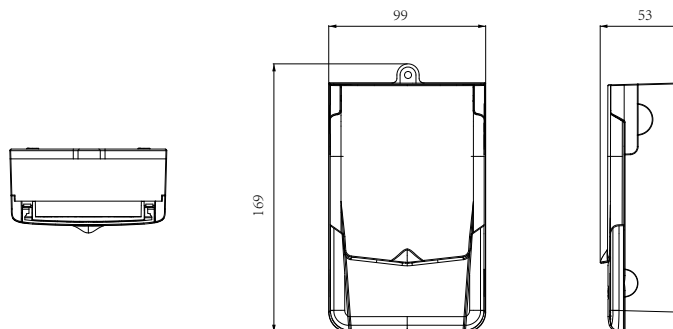
-  Integrated structure design, IPX4 waterproof
-  Powered by DC 1.5V*4 AA batteries
-  Output DC12V to control DC12V latch solenoids
-  6 stations can be available for flushing 1 to 6 filter units
-  Battery life 6 months
-  Built-in DP sensor

TECHNICAL DATA

MODEL	CONTROL ROUTE	SUPPLY VOLTAGE	STATION OUTPUT	SCREEN DISPLAY	WORKING TEMPERATURE
BAC601D06	6	DC 1.5V x 4	DC12V (Latch)	LCD feild screen	0°C ~ 60°C

DIMENSION

Unit: mm



BAC901 SERIES AUTOMATIC BACKFLUSHING CONTROLLERS

BAC901 series automatic backflushing controller is equipped with built-in computer microchip. Automatic backflushing control system is made up of the solenoid valve, three-way backflushing valve, filter units, hydraulic sensor, alarm, pressure sustaining valve, water pump and so on, which are linked by the programming software through input and output signals of controller. It can automatically take turns to clean each filter online. Meanwhile, it can uninterruptedly provide filtration water. So it achieves the purpose of unmanned automatic control. The controller is equipped with LCD which can show real-time operation status of equipment.



TYPICAL APPLICATION

It is suitable for auto backflushing sand media filter system and auto backflushing disc filter system.



THE MAIN FUNCTION

Modes of operation:

- Flushing triggered by pressure differential only
- Flushing triggered by time only
- Manual flushing

User selectable parameters:

- Flushing time per station
- Differential pressure set point
- Flushing interval
- Dwell delay
- DP response time
- Main valve yes/no
- Looping limit-maximum backflushing cycles by DP
- Pressure units BAR or PSI

Logging:

- Number of cycles triggered manually

Alarms:

- Endless looping of consecutive backflushing cycles with Buzzer alarm
- Low Pressure indication
- Low battery power alert only for DC model

Real time displayed information:

- Actual pressure differential value
- During the backflushing process showing the backflushing time and backflushing running station number
- Between the backflushing cycles showing the left time until next cycle

DP Sensor Calibration:

- Calibrate the DP sensor as zero with disconnecting port of inlet and outlet

Extension:

- Connecting external digital low pressure sensor & external alarm

FEATURES

- Modular structure design, IPX4 waterproof
- AC and DC version available
- DC version powered by DC 1.5V*4 AA batteries to control DC12V latch solenoids
- AC version powered by AC110V/220V to control AC 24V solenoids
- Modular structure design can be suitable for flushing 1-10 filter units
- Modular's quantity can be added or reduced flexibly by user according to the number of filter stations
- Built-in DP sensor

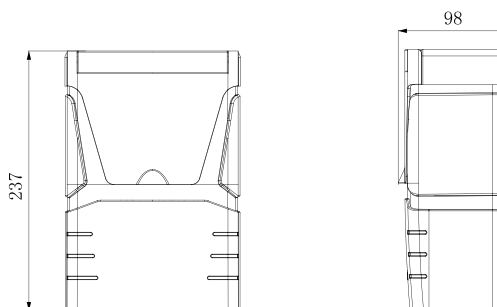
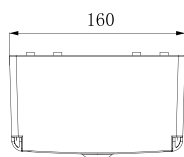
TECHNICAL DATA

MODEL	CONTROL ROUTE	SUPPLY VOLTAGE	STATION OUTPUT	SCREEN DISPLAY	WORKING TEMPERATURE
BAC901A02	2	AC 110V/220V	AC24V	LCD feild screen	0°C ~ 60°C
BAC901A04	4	AC 110V/220V	AC24V	LCD feild screen	0°C ~ 60°C
BAC901A06	6	AC 110V/220V	AC24V	LCD feild screen	0°C ~ 60°C
BAC901A08	8	AC 110V/220V	AC24V	LCD feild screen	0°C ~ 60°C
BAC901A10	10	AC 110V/220V	AC24V	LCD feild screen	0°C ~ 60°C
BAC901D02	2	DC 1.5V x 4	DC12V (Latch)	LCD feild screen	0°C ~ 60°C
BAC901D04	4	DC 1.5V x 4	DC12V (Latch)	LCD feild screen	0°C ~ 60°C
BAC901D06	6	DC 1.5V x 4	DC12V (Latch)	LCD feild screen	0°C ~ 60°C
BAC901D08	8	DC 1.5V x 4	DC12V (Latch)	LCD feild screen	0°C ~ 60°C
BAC901D10	10	DC 1.5V x 4	DC12V (Latch)	LCD feild screen	0°C ~ 60°C

MODEL	FUNCTION						INPUT		OUTPUT	
	TIMING BACKFLUSHING	DP BACKFLUSHING	MANUAL BACKFLUSHING	ALARM	LP PROTECTION	BACKFLUSHING COUNT	PRESSURE SENSOR	DP SENSOR	PC VALVE	ALARM
BAC901A02~ BAC901A10	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
BAC901D02~ BAC901D10	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

DIMENSION

Unit: mm



AUTO DISC FILTRATION SYSTEM

Baldr LP filtration equipment provides real water and labor saving. It is able to backwash with a low pressure of only 1.5 bar (21 PSI). It is used both in agriculture and industry and specially suitable for applications where high pressure is not available.



ortex TECHNOLOGY

AUTO DISC FILTRATION SYSTEM

2" T, 3" T SERIES

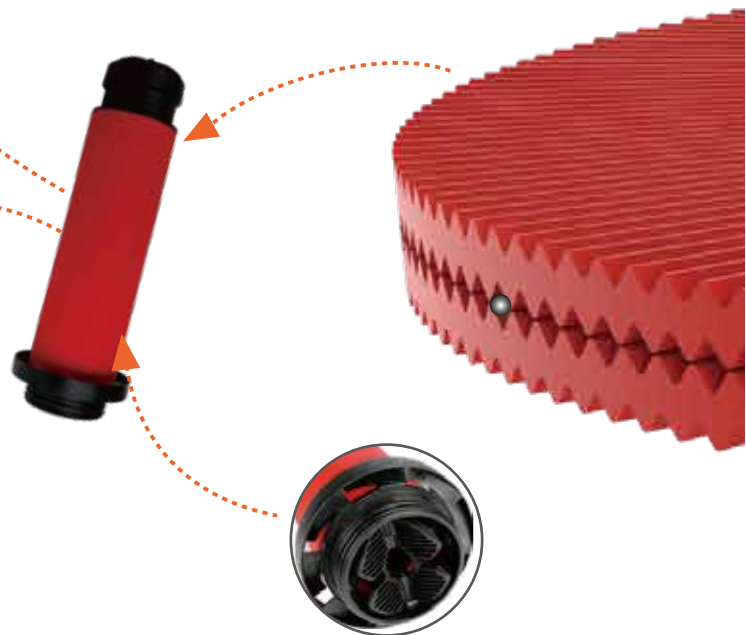
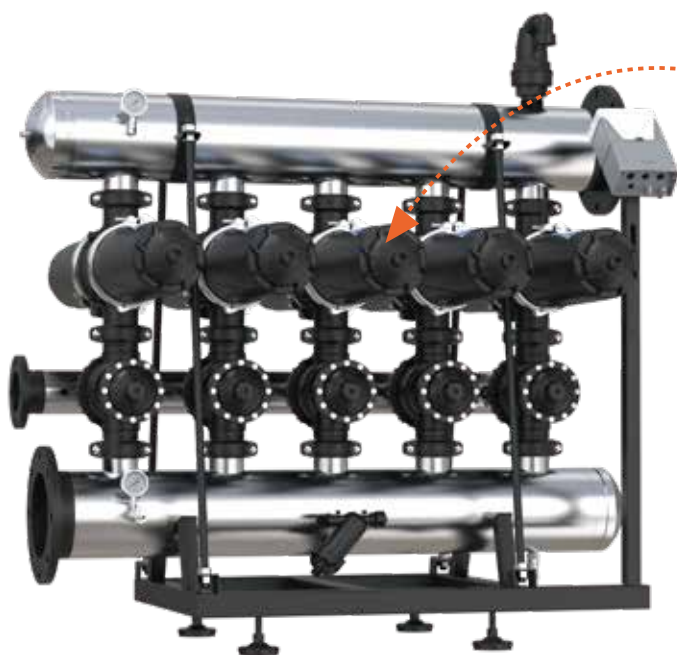


BALDR automatic disc filtration system adopt the modular design, it well meets various market demands of different flow volume by providing T-type or H-type backwash filtration unit. Going with 2", 3" or 4" hydraulic backwash valve as well as built-in computer chip for automatic scheduling work, it works as an automatic unattended water filtration system, which ensures continuous water supply while discharging the sewage.








Flow rate range: 40 m³/h (176 gpm) to 640 m³/h (2816 gpm)

Filtration grades: 20 micron to 400 micron

3" H, 4" H SERIES



FEATURE & ADVANTAGE

-  Manufactured in Polyamide, resistance to chemical products and wear-resistant;
-  To achieve unmanned performance by chips built-in controller;
-  Compatible with different filter units according to different flow rate requirement;
-  Auto backflushing procedure setting by the discrepancy of water pressure between inlet & outlet, manual setting is also available;
-  Manifold made either in Stainless steel, PE or epoxy coated carbon steel;
-  Minimum water consumption and low maintenance cost;
-  Efficient water saving in auto backflushing with minimum pressure 1.5 bar and flow rate 2.1 L/s minimum.

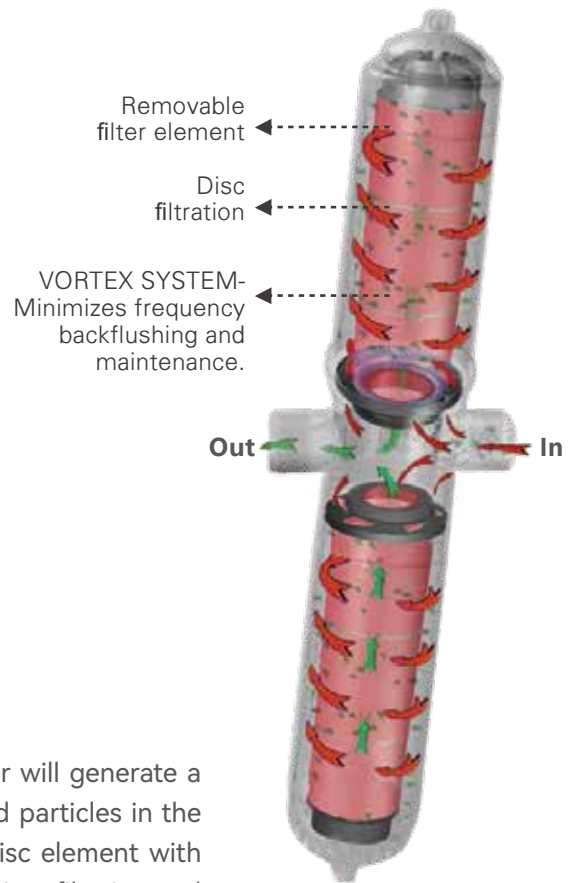
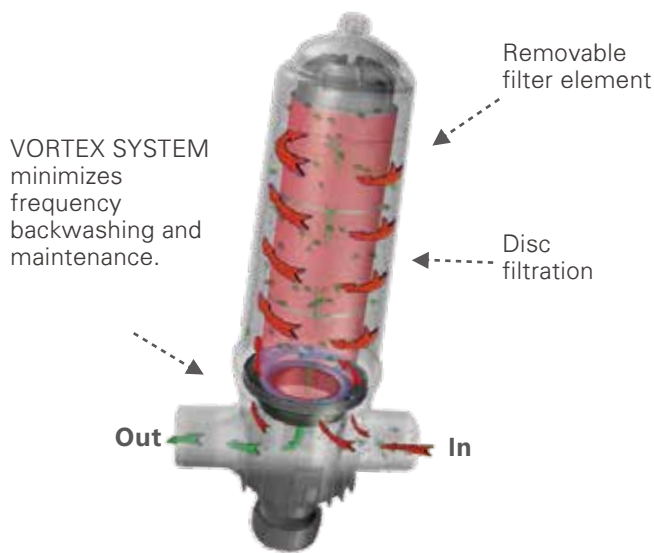


UNIQUE DISC TECHNOLOGY

Baldr uses micron level thin discs with specific colors. The discs are diagonally grooved in opposite directions on both sides. Different colors represent different groove depth, which make different filtration grades. A series of discs are stacked and compressed on a special designed spine in the filter. The grooves of any two adjacent discs with opposite direction pressed together, creating many small crossing space to keep dirt in unique filtration pass. During filtration process, the force of the spring along with the differential pressure firmly compresses these discs together and through multiple crossing points, it can provide distinctive in-depth filtration.



VORTEX DISC FILTRATION TECHNOLOGY



With the unique disc and vortex structure design, the filter will generate a centrifuge spiral flow of water, which moves away the solid particles in the water. The solid particles will be collected to the top of disc element with rotational flow. The vortex disc filter system ensure high efficient filtering and water-saving for the low frequency of backflushing.

MATERIAL

MANIFOLD	SS304 or PE
HOUSING	Reinforced Polyamide
FILTERING ELEMENT	PP grooved discs
CLAMP	Stainless steel 304
SEALING ELEMENT	NBR

TECHNICAL DATA

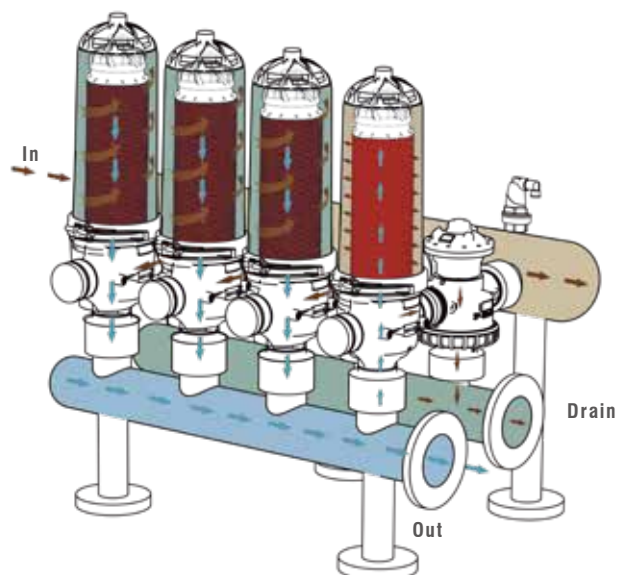
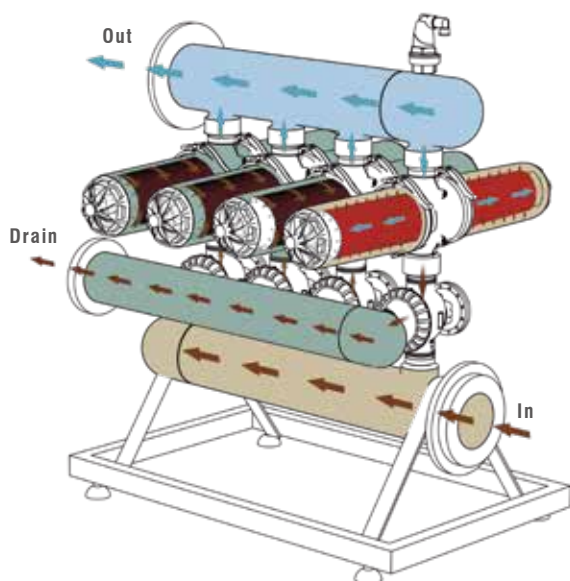
	BALDR VORTEX AUTOMATIC
Working Pressure	1.2/10 bar
Minimal Backflushing Pressure	1.5 bar (21 psi)

Maximum pressure 10 bar / 145 psi
Maximum temperature 60 °C / 140 °F

HOW IT WORKS

Filtration stage

Under the command of the controller, the dirty water flow into to the filters in filtration stage via the backflushing control valves, then the Vortex and the disc keeps the particles in the grooves of the discs, the clean water flow into the outlet .



Backwashing stage

Under the command of the controller, only one of filter starts backflushing at a time. The backflushing control valves change the water flow direction, then the filtered water is introduced in reverse through the filtering element which decompresses the stack of discs for the backflushing procedure. The solids are expelled from the discs and discharged through the drainage manifold. The filtration process starts again after finishing the backflushing stage. The filter will start backflushing successively until all filters finish cleaning.



FILTRATION GRADES

Six colors are used to identify the six filtration grades of the discs.

400 micron
(40 mesh)

200 micron
(75 mesh)

130 micron
(120 mesh)

100 micron
(150 mesh)

50 micron
(300 mesh)

20 micron
(750 mesh)

SYSTEM SELECTION FOR DIFFERENT FLOW RATE

Modular design provides a wide range models for various flow requirement. BALDR has T type auto filtration system and H type auto filtration system available.

2" SERIES T TYPE AUTO DISC FILTRATION SYSTEM

2" series T type auto disc filtration system is composed of unit BAF050TB with 2" backflushing control valve, which can be set by controller for automatic scheduling work as an unattended system.



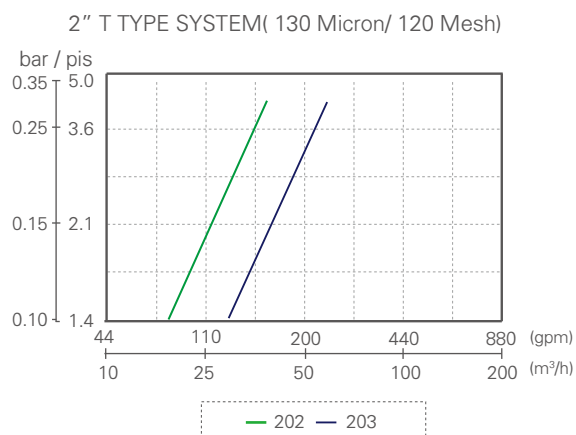
TYPICAL APPLICATION

Agriculture irrigation: applicable to small scale agriculture irrigation, removing the particles of water from the lake and river etc. Protecting the sprayers of the irrigation system.

Garden irrigation: provide solutions for the water recycling of garden irrigation or water landscape, ensure the water quality and protect the sprayer and the dripper.

Industrial filtration: provide solutions for low flow water recycling in industrial application.

HEAD LOSS



Note: The flow rate will fluctuate with different water quality.

MODULAR BAF050TB SPECIFICATION

	MODULAR MODEL	BAF050TB						UNIT
	Filtering Surface	1020						cm²
	Filtration Grades	400 40	200 80	130 120	100 150	50 300	micron mesh	
QUALITY OF WATER	Good	28 123		24 106		20 88	m³h gpm	
	Average	24 106		20 88		16 70	m³h gpm	
	Poor	20 88		16 70		12 53	m³h gpm	
	Very Poor	14 62		8 35		4 18	m³h gpm	



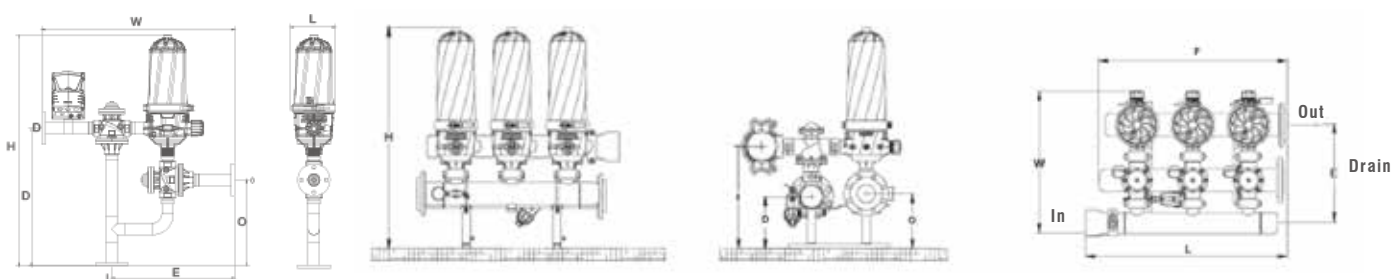
2" BAF050TB

2" T TYPE AUTO FILTRATION SYSTEM

MODEL	Unit No.	FILTERING SURFACE (cm ²)	MANIFOLD (in/mm)	CONNECTION	MAX FLOW (m ³ /h) (gpm)	WEIGHT (kg)
BSS201T2	1	1020	2 50	Grooved/Flange	20 88	29.2
BSS202T3	2	2040	3 80	Grooved/Flange	40 176	52
BSS203T4	3	3060	4 100	Grooved/Flange	60 284	87

DIMENSION

MODEL	L (mm) (in)		W (mm) (in)		H (mm) (in)		I (mm) (in)		O (mm) (in)		D (mm) (in)		E (mm) (in)	
BSS201T2	235	9.25	955	37.6	115	4.52	465	18.3	426	16.8	682	26.9	608	23.9
BSS202T3	750	29.5	760	29.9	890	35	425	16.7	190	7.5	170	6.7	495	19.5
BSS203T4	1025	40.4	800	31.5	920	36.2	455	17.9	205	8.1	208	8.1	505	19.5



BES201T2

3" SERIES T TYPE AUTO DISC FILTRATION SYSTEM

3" series T type auto disc filtration system is composed of unit BAF080TB with 3" backflushing control valve, which can be set by controller for automatic scheduling work as an unattended system.

TYPICAL APPLICATION

Agriculture irrigation: applicable to medium scale agriculture irrigation, removing the particles of water from the lake and river etc. Protecting the sprayers of the irrigation system.

Garden irrigation: provide solutions for the water recycling of garden irrigation or water landscape, ensure the water quality and protect the sprayer and the dripper.

Industrial filtration: provide solutions for low flow water recycling in industrial application.



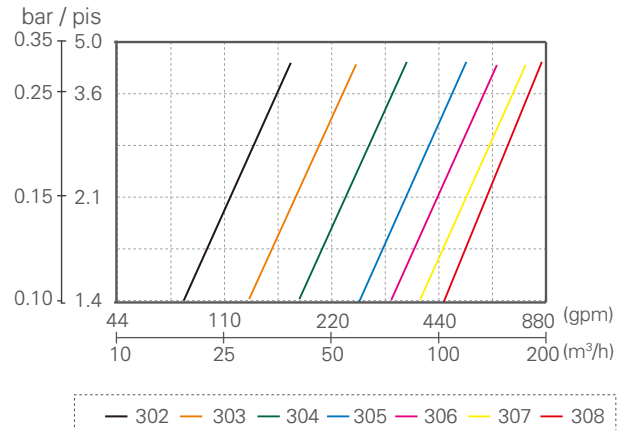
3" BAF080TB

MODULAR BAF080TB SPECIFICATION

	MODULAR MODEL	BAF080TB				UNIT
	Filtering Surface	1492				cm ²
	Filtration Grades	400 40	200 75	130 120	100 150	micron mesh
QUALITY OF WATER	Good	36 158		32 140		m ³ /h gpm
	Average	32 140		30 131		m ³ /h gpm
	Poor	26 114		24 106		m ³ /h gpm
	Very Poor	16 70		14 62		m ³ /h gpm

HEAD LOSS

3" T TYPE SYSTEM(130 Micron/ 120 Mesh)



Note: The flow rate will fluctuate with different water quality.

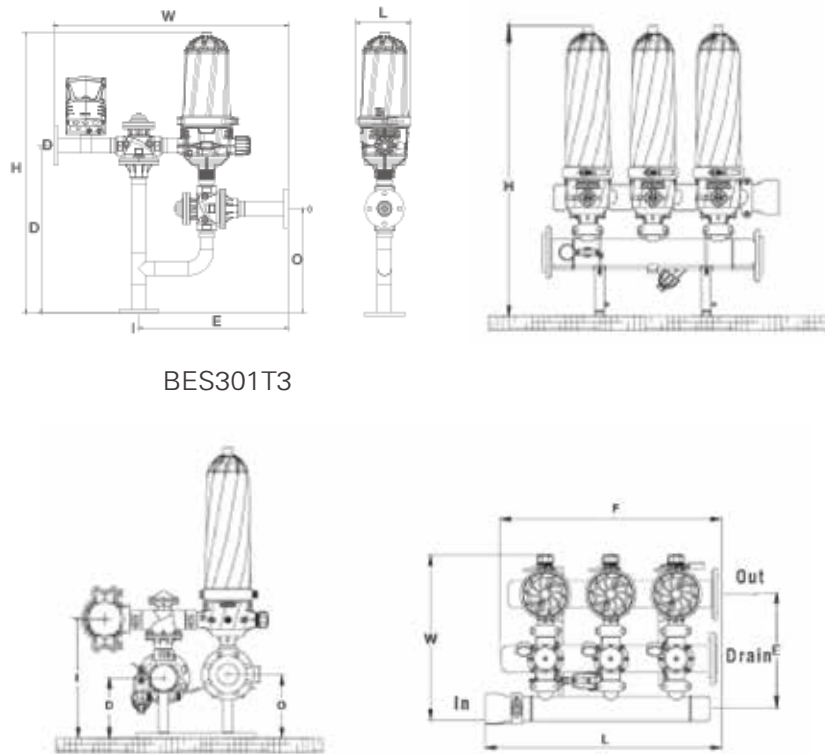
BSS 3" T TYPE AUTO DISC FILTRATION SYSTEM SPECIFICATION

MODEL	UNIT NO.	FILTERING SURFACE (CM ²)	MANIFOLD (in) (mm)	CONNECTION	MAX FLOW (m ³ /h) (gpm)	WEIGHT (kg)
BSS301T3	1	1492	3 80	Grooved/Flange	32 141	45
BSS302T3	2	2984	3 80	Grooved/Flange	64 282	68
BSS303T4	3	4476	4 100	Grooved/Flange	108 475	102
BSS304T6	4	5968	6 150	Grooved/Flange	144 634	145
BSS305T6	5	7460	6 150	Grooved/Flange	180 792	234
BSS306T8	6	8952	8 200	Grooved/Flange	216 951	234
BSS307T8	7	10444	8 200	Grooved/Flange	252 1109	260
BSS308T8	8	11936	8 200	Grooved/Flange	288 1268	288

DIMENSION

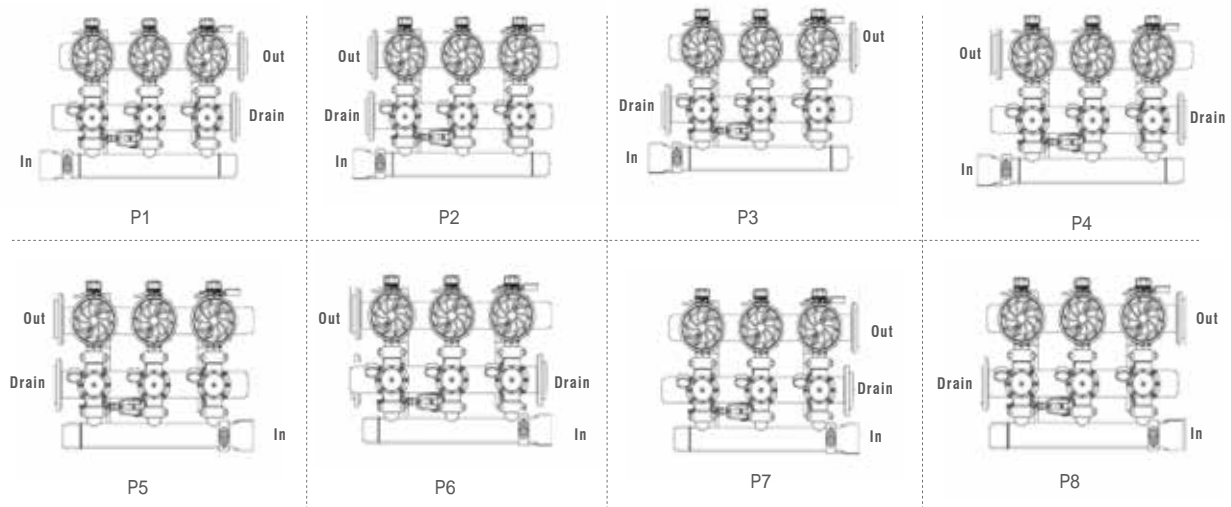
MODEL	L (mm) (in)		W (mm) (in)		H (mm) (in)		I (mm) (in)		O (mm) (in)		D (mm) (in)		E (mm) (in)	
BSS301T3	235	9.3	955	37.6	1452	57.2	0	0	572	22.5	868	34.2	682	26.9
BSS302T3	1025	40.4	870	34.3	1030	40.6	470	18.5	205	8.1	160	6.3	570	22.4
BSS303T4	1025	40.4	870	34.3	1055	41.5	470	18.5	205	8.1	160	6.3	570	22.4
BSS304T6	1340	52.8	925	36.4	1165	45.9	565	22.2	285	11.2	270	10.6	600	23.6
BSS305T6	1615	63.6	925	36.4	1165	45.9	565	22.2	285	11.2	270	10.6	600	23.6
BSS306T8	1895	74.6	980	38.6	1205	47.4	615	24.2	305	12	310	12.2	630	24.8
BSS307T8	2170	85.4	980	38.6	1205	47.4	615	24.2	305	12	310	12.2	630	24.8
BSS308T8	2445	96.3	980	38.6	1205	47.4	615	24.2	305	12	310	12.2	630	24.8

DIMENSION



2" 3" SERIES T TYPE AUTO DISC FILTRATION SYSTEM VARIOUS INSTALLATION DIRECTION

The direction of outlet, inlet and drain can be chosen according to the installed situation.



3" H TYPE AUTO DISC FILTRATION SYSTEM

3" series H type auto disc filtration system is composed of unit BAF080HB with 3" backflushing control valve, which can be set by controller for automatic scheduling work as an unattended system.



TYPICAL APPLICATION

Agriculture irrigation: applicable to large scale agriculture irrigation, removing the particles of water from the lake and river etc. Protecting the sprayers of the irrigation system.

Garden irrigation: provide solutions for the water recycling of garden irrigation or water landscape, ensure the water quality and protect the sprayer and the dripper.

Industrial filtration: provide solutions for high flow water recycling in industrial application.

MODULAR BAF080HB SPECIFICATION

	MODULAR	BAF080HB					UNIT
	Filtering Surface	2040					cm ²
	Filtration Grades	400 40	200 80	130 120	100 150	50 300	micron mesh
QUALITY OF WATER	Good	50 220		45 198		38 167	m ³ /h gpm
	Average	46 202		40 176		34 150	m ³ /h gpm
	Poor	36 158		32 141		28 123	m ³ /h gpm
	Very Poor	27 119		22 97		18 79	m ³ /h gpm



3" BAF080HB

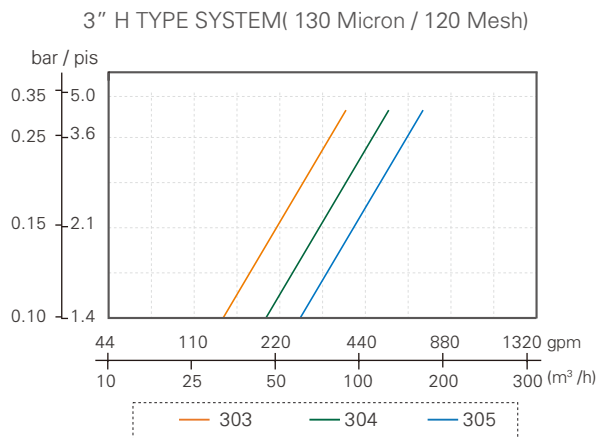
BAS 3" H TYPE AUTO DISC FILTRATION SYSTEM SPECIFICATION

MODEL	UNIT NO.	FILTERING SURFACE (cm ²)	MANIFOLD (in) (mm)	CONNECTION	MAX FLOW (m ³ /h) (gpm)	WEIGHT (kg)
BSS303H6	3	6120	6 150	Grooved/Flange	135 594	137
BSS304H6	4	8160	6 150	Grooved/Flange	180 792	164
BSS305H8	5	10200	8 200	Grooved/Flange	225 990	227

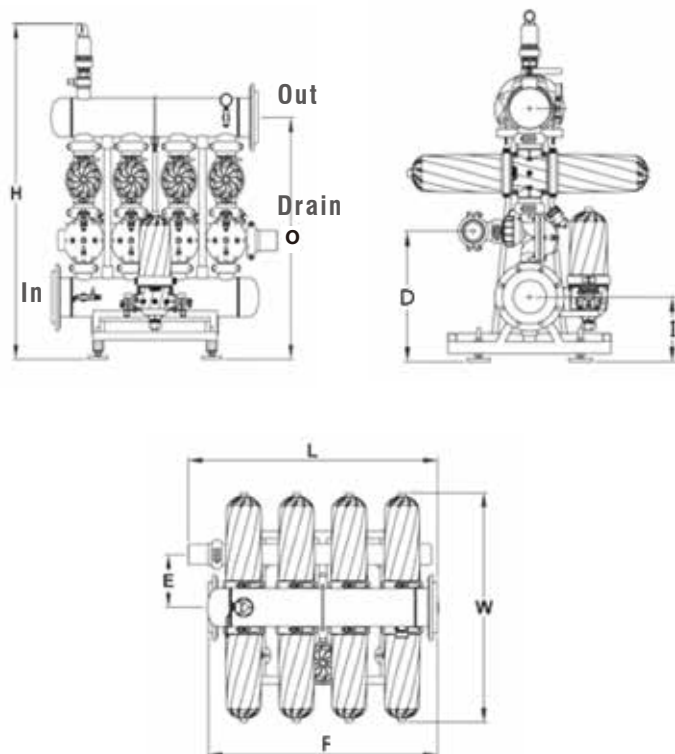
DIMENSION

MODEL	L (mm) (in)	W (mm) (in)	H (mm) (in)	I (mm) (in)	O (mm) (in)	D (mm) (in)	E (mm) (in)
BSS303H6	1025 40.4	925 36.4	1510 59.4	365 14.4	1275 50.2	650 25.6	310 12.2
BSS304H6	1340 52.8	925 36.4	1510 59.4	365 14.4	1275 50.2	650 25.6	310 12.2
BSS305H8	1620 63.8	925 36.4	1630 64.2	365 14.4	1275 50.2	650 25.6	310 12.2

HEAD LOSS



Note: The flow rate will fluctuate with different water quality.



4" SERIES H TYPE AUTO DISC FILTRATION SYSTEM

4" series H type auto disc filtration system is composed of unit BAF100HB, matching 4" backflushing control valve, which can be set by controller for automatic scheduling work as an unattended system.

TYPICAL APPLICATION

Agriculture irrigation: applicable to large scale agriculture irrigation, removing the particles of water from the lake and river etc. Protecting the sprayers of the irrigation system.

Garden irrigation: provide solutions for the water recycling of garden irrigation or water landscape, ensure the water quality and protect the sprayer and the dripper.

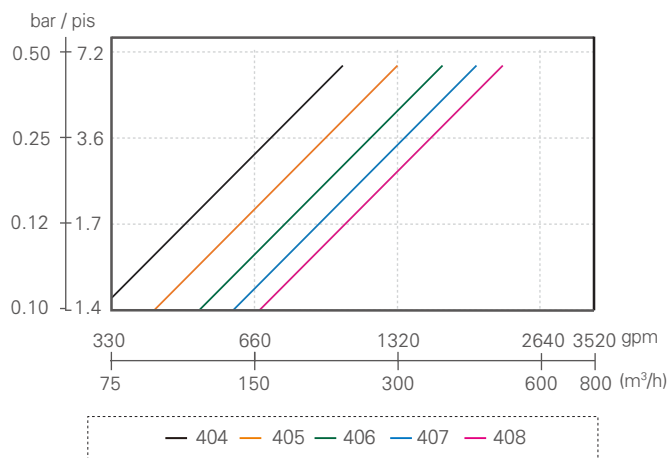
Industrial filtration: provide solutions for high flow water recycling in industrial application.

MODULAR BAF100HB SPECIFICATION

	MODULAR MODEL	BAF100HB			UNIT
	Filtering Surface	2984			cm ²
	Filtration Grades	400 40	200 75	130 120 100 150	50 300 micron mesh
QUALITY OF WATER	Good	70 308	64 282	34 150	m ³ /h gpm
	Average	63 277	59 260	28 123	m ³ /h gpm
	Poor	51 224	47 207	20 88	m ³ /h gpm
	Very Poor	32 141	28 123	14 62	m ³ /h gpm

HEAD LOSS

4" H TYPE SYSTEM(130 Micron / 120 Mesh)



Note: The flow rate will fluctuate with different water quality.



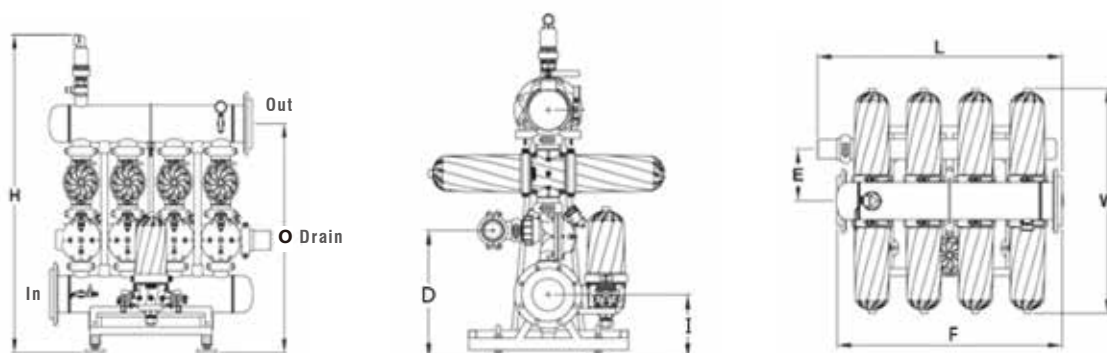
4" BAF100HSB

4" H TYPE AUTO DISC FILTRATION SYSTEM SPECIFICATION

MODEL	UNIT NO.	FILTERING SURFACE (cm ²)	MANIFOLD (in) (mm)	CONNECTION	MAX FLOW (m ³ /h) (gpm)	WEIGHT (kg)
BSS404H8	4	11936	8 200	Grooved/Flange	256 1127	252
BSS405H10	5	14920	10 250	Grooved/Flange	320 1408	329
BSS406H10	6	17904	10 250	Grooved/Flange	384 1690	394
BSS407H10	7	20888	10 250	Grooved/Flange	448 1972	440
BSS408H10	8	23872	10 250	Grooved/Flange	512 2254	491

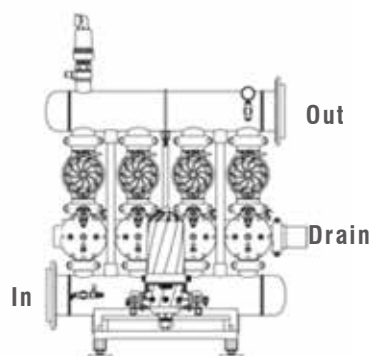
DIMENSION

MODEL	L (mm) (in)		W (mm) (in)		H (mm) (in)		I (mm) (in)		O (mm) (in)		D (mm) (in)		E (mm) (in)	
BSS404H8	1340	52.8	1200	47.2	1665	65.6	335	13.2	1325	52.2	640	25.2	380	15.0
BSS405H10	1640	64.6	1200	47.2	1745	68.7	355	14.0	1395	54.9	680	26.8	380	15.0
BSS406H10	1915	75.4	1200	47.2	1745	68.7	355	14.0	1395	54.9	680	26.8	380	15.0
BSS407H10	2190	86.2	1200	47.2	1745	68.7	355	14.0	1395	54.9	680	26.8	380	15.0
BSS408H10	2465	97.0	1200	47.2	1745	68.7	355	14.0	1395	54.9	680	26.8	380	15.0

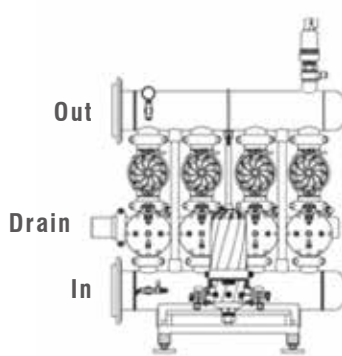


3" 4" SERIES H TYPE AUTO DISC FILTRATION SYSTEM VARIOUS INSTALLATION DIRECTION

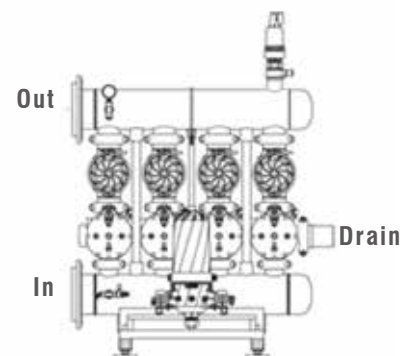
The direction of outlet, inlet, drain can be chosen according to the installed situation.



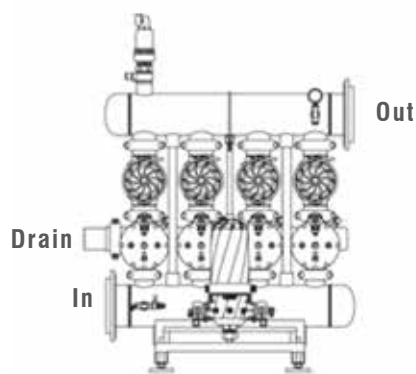
P1



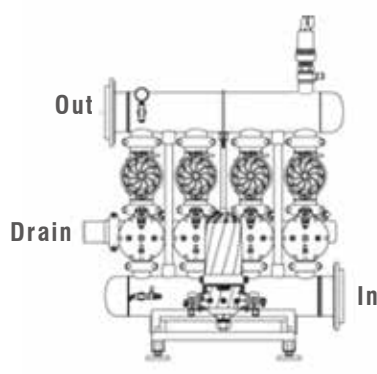
P2



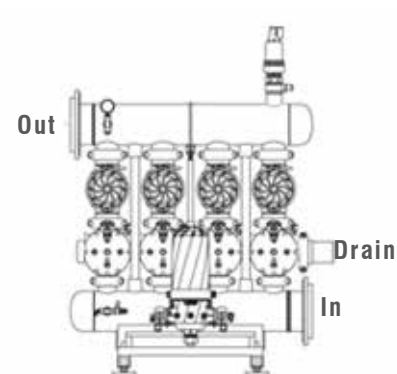
P3



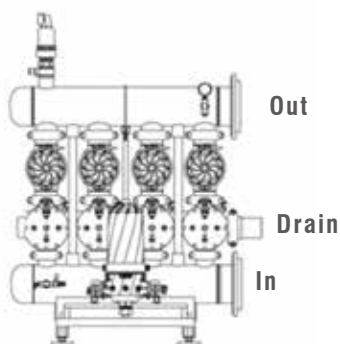
P4



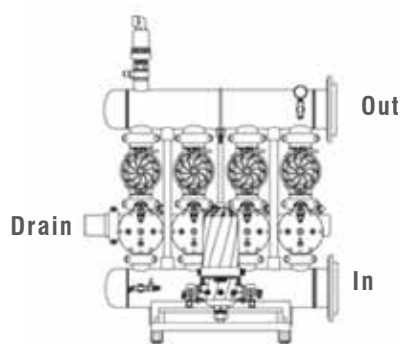
P5



P6



P7



P8

SAND MEDIA FILTRATION SYSTEM

BALDR sand media filtration system is composed of one or more standard filter sand tank units. The filter media is used to effectively remove suspended material and reduce turbidity.



SAND MEDIA FILTRATION SYSTEM

BALDR sand media filtration system is composed of one or more standard sand filter tanks. The filter media is used to effectively remove suspended objects and reduce turbidity, which can be used in conjunction with the high-precision disc filter or screen filter to achieve the perfect filtering effect. The system is equipped with a three-way backflushing control valve, and the automatic controller can realize multiple sand tanks to flush each other and continuously supply water forming an automatic water filtration system. Each tank is equipped with a unique water distributor and a water collector. The filtering sand layer works smoothly, with uniform filtered water and large water flow.



TYPICAL APPLICATION

Irrigation water: irrigation and fertilization, landscaping, municipal greening, and greening of golf courses.

Industrial water: the purification filtration of the recycled water in production.

Landscape leisure: water filtration for the fountains, water scenes, water curtain, swimming pool and water park, etc.

Raw water treatment: river water, lake water, seawater, and other surface water filtration.

FEATURES AND ADVANTAGE

- High filtration rate, low-pressure loss, large filtration water and especially the filtration effect for suspended floating objects in water;
- Modular design can be installed according to the flow requirement;
- The system filter unit has various specification from 16 (400mm) to 60 (1500mm);
- Carbon steel material is treated by phosphating and electrostatic spraying, and the material is good corrosion resistance; Stainless steel is also available;
- The system controller has a built-in computer chip, which can realize unattended automatic control;
- The dirt and impurities can be automatically backflushing online, and each unit can take turns to clean and filter the water supply continuously;
- The quartz sand or garnet can be used as the filter media, which can be selected according to the water quality. The minimum diameter can be selected as 0.16 mm;
- It is convenient to observe the internal situation by access port, and it also can be easy to clean and operate maintenance at any time.

THE COMPOSITION OF FILTRATION SYSTEM

The filter system consists of a filter unit, a three-way backflushing control valve, automatic backflushing controller, and other major components, which connect with a Y-type filter, air valve, pressure gauge, manifold, support frame, and other spare parts. The filter unit is filled with the appropriate filter media.

Filter unit



Control valve



Controller



Y type filter



Hydraulic control valves



Solenoid valve



Pressure gauge

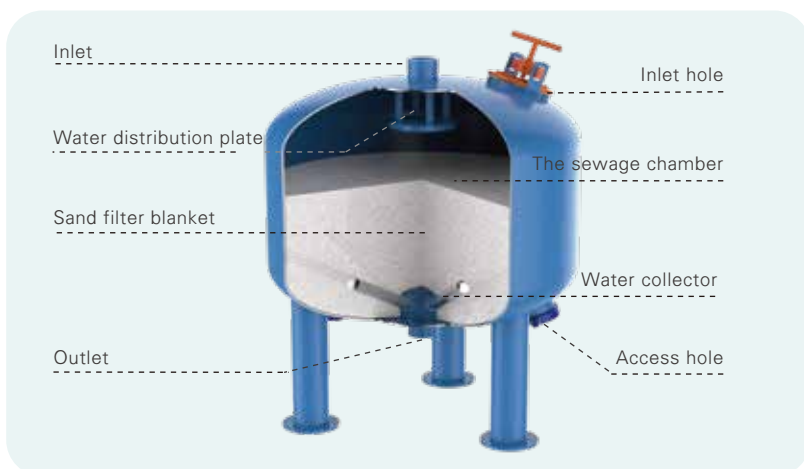


FILTER MEDIA SIZE AND USE LEVEL

FILTERING ACCURACY	BOTTOM SAND (cover water collector)	UPPER SAND (12-38cm thickness)
Normal Filtration	1.2-2.0mm	1.2-2.0mm
Fine Filtration	1.2-2.2mm	0.5-0.8mm

SINGLE-CHAMBER CONFIGURATIONS

BALDR single-chamber sand media filtration system adopts octagonal collecting design, and its unique precision gap can be collected filtered water evenly. When backflushing, a special eddy current is formed. With the severe friction of sand particles, it will be cleaned more thoroughly, and is not easily discharged through the water distributor. The single-chamber design makes the anti-rust treatment better. The outlet design at the bottom makes the system structure more compact and reduces the application space.



DOUBLE-CHAMBER CONFIGURATIONS

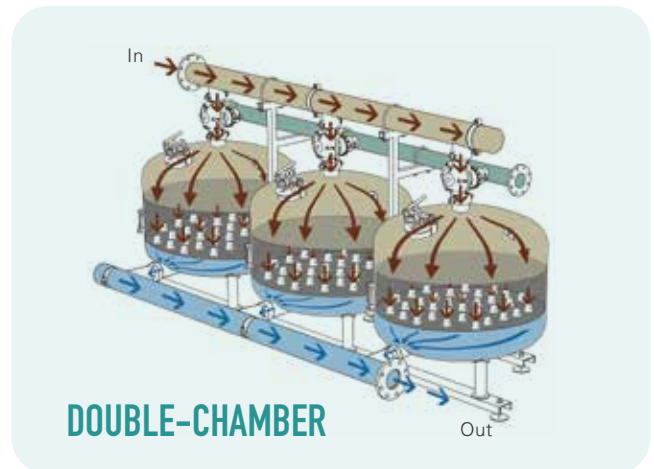
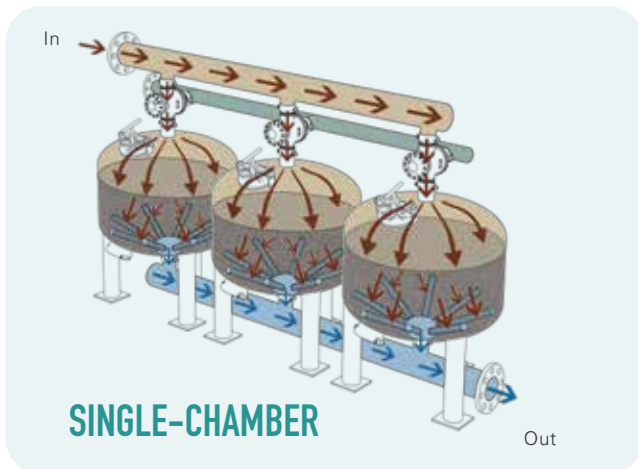
BALDR double-chamber sand media filter system on a number of water collectors evenly arranged, smooth and rapid flow of water. Backflush, the sand in the upper and lower water pressure under the force, repeated friction stripping contaminants. Side of the watering , It is easy to maintain the latter part.



HOW IT WORKS

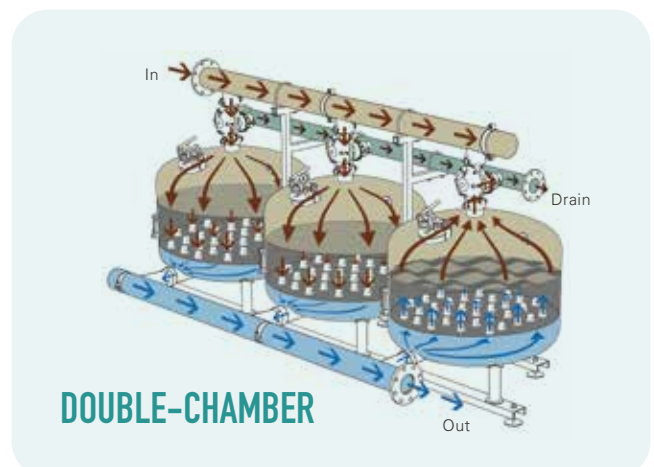
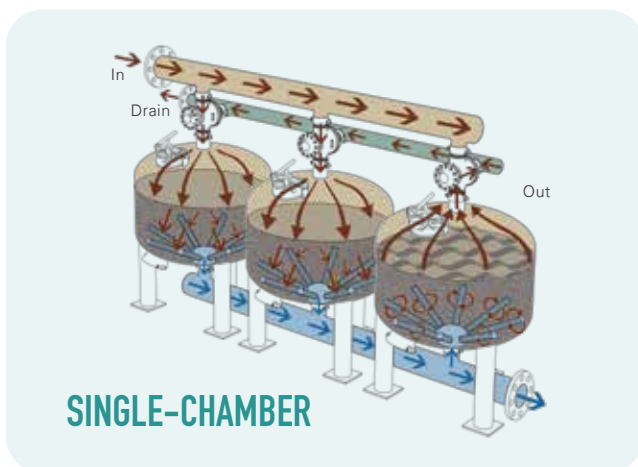
Filtration State

Under the control of the automatic controller, when all of the filter tanks units are in the filtering mode, the sewage enters at the high pressure, and the water is evenly distributed through the unique water distributor to keep the filter sand layer stable. The sewage passes through the filler layer in a laminar flow state and impurities are trapped in the filler layer. The filtered water passes through the collectors distributed at the bottom and is evenly collected and then discharged out through the outlet. Advection filtration allows the filter to operate at high flow rates.



Backflushing State

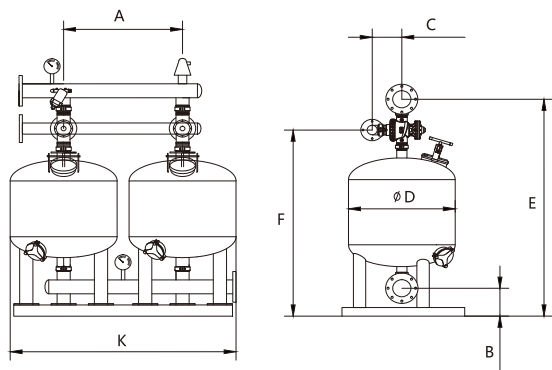
As the impurities accumulated in the filter media, the pressure loss increases continuously. When the pressure difference increases to a certain set value or reaches the set cleaning time, the system will automatically switch to the backflushing state. The pressurized water enters the filter media through the water collecting device and then it will be flushed to cause trapped impurities to fall down and discharge through the sewage outlet. The backflushing ends in 2 minutes, the backflushing control valve resumes the filtration state, and the flushed filter tank continues to enter the filtration state. The automatic controller issues an instruction to start the backflushing process of the next filter tank until all of the filter tanks are backflushed.



SINGLE-CHAMBER CONFIGURATIONS



MODEL	SAND CYLINDER NUMBER	SAND CYLINDER DIAMETER (mm/in)	CONTROL VALVES (in)	OUTLET & INLET DIAMETER (mm/in)	DRAIN OUTLET DIAMETER (in)	BACK FLUSHING FLOW RATE (m ³ /h)	FILTERING SURFACE (m ²)	MAX WORKING PRESSURE (Bar)	FLOW RATE RANGE (m ³ /h)
BBS242S33	2	600 24"	3"	DN80 3"	3"	15	0.6	10	30-50
BBS282S33	2	700 28"	3"	DN80 3"	3"	20	0.8	10	50-70
BBS322S43	2	800 32"	3"	DN100 4"	3"	25	1.0	10	60-80
BBS362S43	2	900 36"	3"	DN100 4"	3"	35	1.2	10	90-100
BBS482S63	2	1200 48"	3"	DN150 6"	3"	50	2.2	10	140-180
BBS483S84	3	1200 48"	3"	DN200 8"	4"	50	3.3	10	150-250
BBS484S84	4	1200 48"	3"	DN200 8"	4"	50	4.4	10	200-350

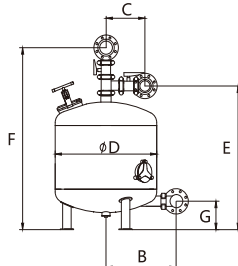
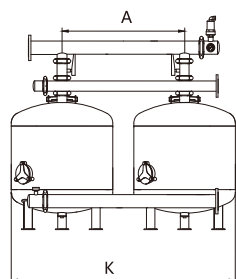
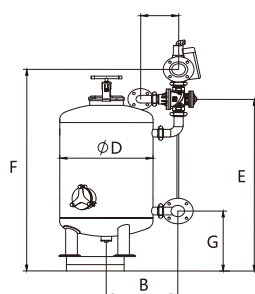
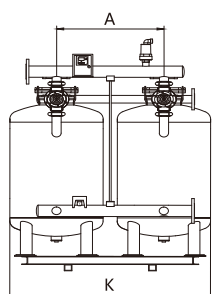


MODEL	D (mm)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	K (mm)
BBS242S33	600	700	130	240	1450	1215	1330
BBS282S33	700	800	140	240	1580	1305	1520
BBS322S43	800	900	140	300	1620	1345	1720
BBS362S43	900	1000	140	300	1660	1385	1920
BBS482S63	1200	1400	170	300	1925	1593	2620
BBS483S84	1200	1400	200	380	2005	1648	4020
BBS484S84	1200	1400	200	380	2025	1750	5420

DOUBLE-CHAMBER CONFIGURATIONS



MODEL	SAND CYLINDER NUMBER	SAND CYLINDER DIAMETER (mm/in)	CONTROL VALVES (in)	OUTLET & INLET DIAMETER (mm/in)	DRAIN OUTLET DIAMETER (in)	BACK FLUSHING FLOW RATE (m³/h)	FILTERING SURFACE (m²)	MAX WORKING PRESSURE (Bar)	FLOW RATE RANGE (m³/h)
BSS242D33	2	600 24"	3"	DN80 3"	3"	25	0.58	10	30-50
BSS302D43	2	800 30"	3"	DN100 4"	3"	35	0.91	10	40-70
BSS362D43	2	900 36"	3"	DN100 4"	3"	45	1.31	10	60-100
BSS363D63	3	900 36"	3"	DN150 6"	3"	60	1.96	10	80-120
BSS402D63	2	1000 40"	3"	DN150 6"	3"	65	1.62	10	90-130
BSS403D63	3	1000 40"	3"	DN150 6"	3"	65	2.43	10	100-150
BSS482D84	2	1200 48"	3"	DN200 8"	4"	80	2.32	10	120-180
BSS483D84	3	1200 48"	3"	DN200 8"	4"	80	3.18	10	150-270



MODEL	D (mm)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	G (mm)	K (mm)
BSS242D33	600	700	2200	243	1600	1800	135	1300
BSS302D43	800	900	2220	256	1650	1850	160	1700
BSS362D43	900	1100	2220	256	1650	1850	160	2000
BSS363D63	900	3100	2270	281	1690	1970	210	3100
BSS402D63	1000	1200	2270	281	1690	1970	210	2200
BSS363D63	1000	1200	2270	281	1690	1970	210	3400
BSS482D84	1200	1400	2320	308	1750	2080	260	2600
BSS483D84	1200	1400	2320	308	1750	2080	260	4000



Camda 福建嘉美特电子科技有限公司

ESOLDA 福建天成秀德环保科技有限公司

Togo 福建天成时代新能源科技有限公司

WORKSHOP
&PROJECT CASE









BALDR TECHNOLOGY CO.,LTD

Email: sale2@baldr.com.cn

Tel: 0591-38259610

Fax: 0591-38722069

Add: Building 2, No.71 Yangqi Road, Gai Shan Town,
Cangshan District, Fuzhou, China.

