PRODUCTS
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ABOUT US

Tayfur Water Systems, which was established by Tayfun Yazaroğlu in 2004 in Izmir. We continue our activities as "Tayfur Water Systems Machinery Engineering Industry and Trade Inc." since 2017.

Our company offers its products and experiences to the local market and international market. Tayfur Water Systems, while strengthening its recognition abroad, continues to expand its production, sales and marketing activities every day.

Our engineers and technical staff, technological infrastructure, manufacturing, sales, project-consulting, contracting and service planning meets the requirements of the sector.

Our company manufactures "TYPHOON" brand, hydraulic control valves, plastic hydraulic control valves, backwash valves, plastic backwash valves, impact-free dynamic suction cups, plastic suction cups, bottom clamps, filter reverse flushing control devices. It is progressing towards becoming a strong brand in both domestic and foreign markets by meeting the special demands of its domestic and foreign customers.

Our Quality Policy

In order to be a leader in quality in the sales, marketing and service sector by complying with legal conditions and to comply with the requirements of Quality Management System in order to meet the needs and expectations of our customers, to continuously improve the efficiency and to not compromise the quality under any circumstances.

Our Mission

To be a company aiming to present its synergy in the national and international market which has always taken its responsibilities, desires and expectations of our customers in a correct, reliable and timely manner, within the framework of high quality standards, transforming efficiency and competition into an advantage...

Our Vision

To be a leading, innovative, powerful and reputable enterprise in its sector.

HYDRAULIC CONTROL VALVES

Flanged - Threaded - Angled - Victaulic

Typhoon hydraulic control valves are automatic valves with direct diaphragm shut-off working with line pressure. It is a comfortable, smooth flow in the minimum pressure loss of the body and diaphragm, which is kept in the foreground in its design.

In hydraulic control valves, worn parts such as shafts, bearings and bushings are longevity. The single moving part of valves is the diaphragm.

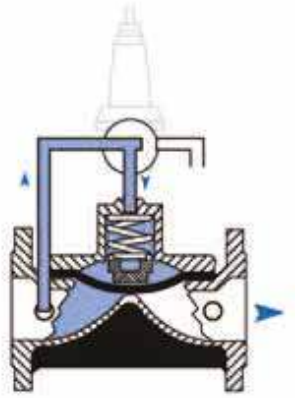
TYPHOON hydraulic control valves, in-line drinking water pump, agricultural irrigation, fire systems, filtration, industrial, etc. designed for use in areas.

M	Manually Controlled Valve
PR	Pressure Reducing Control Valve
PRPS	PressureReducing + Pressure Sustaining Control Valve
PS	Pressure Sustaining Control Valve
PREL	Pressure Reducing + Solenoid Controlled Valve
EL	Solenoid Controlled Valve
QR	Quick Relief Control Valve
FL	Float Level Control Valve
FLEL	Electric Float Level Control Valve
DIFL	Differential Float Level Control Valve
PC	Pump (Booster) Control Valve
DPC	Deep Well (Submersible) Pump Control Valve
SA	Surge Anticipating Control Valve
HD	Hydraulic Check Valve

They are automatic control valves which are used hydraulically to perform the desired operations with line pressure without the need of energy sources in the mains line.

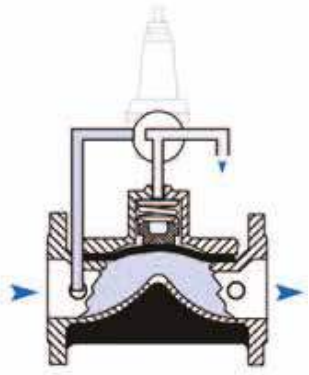
Valve Closing Mode

When the pilot discharge position on the main control valve in the closed position is reached, the pressurized water on the diaphragm of the main control valve is drained. When the line pressure reaches the position of spring force, hydraulic force is applied to the diaphragm of the control valve under water, so that the valve is in full open position.



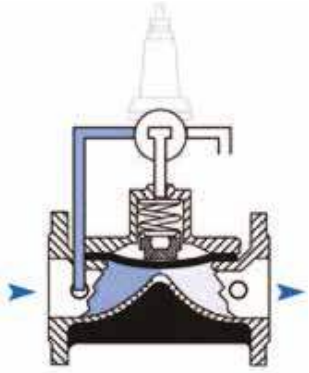
Valve Opening Mode

When the pilots on the main control valve reach the water pressure diaphragm, the water creates a hydraulic force. The resulting hydraulic force combines the diaphragm with the force applied by the spring to create a complete seal and close.



Modulation Mode

These are the pilot valves which are connected to the control valve which allows the main valve to operate in this position. According to the amount of flow and pressure to be adjusted, the water pressure on the diaphragm is controlled constantly, allowing it to operate in a modulated position.



Models

Flanged

Connection	Material	Body	Transmition Pressure
Flanged	GGG40	Globe	PN10 - PN16 - PN25

Available Diameters

mm	50	65	80	100	125	150	200	250	300
inch	2	2½	3	4	5	6	8	10	12

Threaded

Connection	Material	Body	Transmition Pressure
Threaded	GGG40	Globe	PN10 - PN16 - PN25

Available Diameters

mm	20	25	32	40	50	65	80
inch	¾	1	1¼	1½	2	2½	3

Victaulic

Connection	Material	Body	Transmition Pressure
Victaulic	GGG40	Globe	PN10 - PN16 - PN25

Available Diameters

mm	50	65	80	100	150	200
inch	2	2½	3	4	6	8

Angled

Connection	Material	Body	Transmition Pressure
Flanged Threaded	GGG40	Globe	PN10 - PN16 - PN25

Available Diameters

mm	50	80	100	150
inch	2	3	4	6

Hydraulic Performance

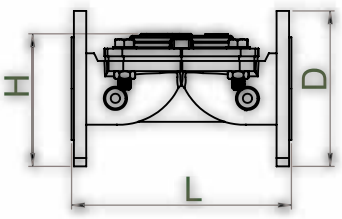
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
Valve Diameter	2	50	2½	65	3	80	4	100	5	125	6	150	8	200	10	250	12	300
Kv m³/h @ 1bar	88		88		174		187		187		419		1139		1698		2276	
Cv gmp @ 1psi	102		102		201		216		216		484		1316		1961		2629	

$$Kv(Cv) = Q.\sqrt{G/\Delta P}$$

Kv : Valve flow coefficient (flow rate at 1 bar pressure loss m^3/h @ 1 bar)
Cv : Valve flow coefficient (flow in pressure loss of 1 psi GPM @ 1 psi)
Q : Flow (m^3/h, gpm)

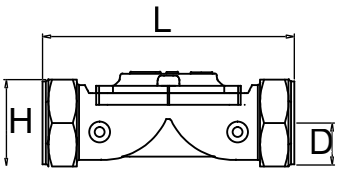
Cv = 1,155Kv
ΔP : Pressure Loss (bar, psi)
G : The specific gravity of water(Water=1.0)

Flanged



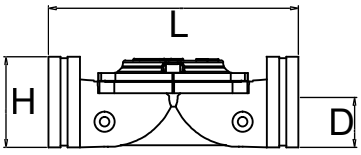
DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
2	50	6,50	165	8,66	220	5,87	149	17,60	8,00
2½	65	7,28	185	8,66	220	6,06	154	21,60	9,80
3	80	7,87	200	11,26	286	6,81	173	38,80	17,46
4	100	8,66	220	12,99	330	6,81	173	46,47	29,08
5	125	9,84	250	14,49	368	8,35	212	62,30	28,25
6	150	11,22	285	15,51	394	12,80	325	114,40	51,90
8	200	13,38	340	18,19	462	14,96	380	200,80	91,10
10	250	15,94	405	21,46	545	19,09	458	332,90	151,00
12	300	18,11	460	22,19	582	19,69	500	392,90	178,20

Threaded



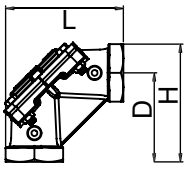
DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
3/4	20	0,9	23	5,2	132	2	50	2,2	1
1	25	0,9	23	5,2	132	2	50	2,2	1
1¼	32	1,35	34	6,8	173	3,6	92,3	6,3	2,85
1½	40	1,35	34	6,8	173	3,6	92,3	5,8	2,65
2	50	1,65	41,5	7,3	186	4,4	112	9	4,1
2½	65	1,8	46	8,9	226	4,6	118	11,7	5,3
3	80	2,05	52,5	12,5	318	5	127	26,4	12

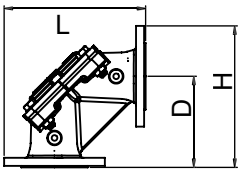
Victaulic



DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
2	50	1,18	30	7,24	184	3,11	79	8,6	3,9
2½	65	1,46	37	8,9	226	3,74	95	9,92	4,5
3	80	1,77	45	11,42	290	3,7	94	13	5,9
4	100	2,26	57,5	12,48	317	4,19	106,5	13,6	6,2
6	150	3,3	84	17,87	454	5,24	133	66	30
8	200	4,53	115	21,40	544	13,10	332	143,3	

Angled



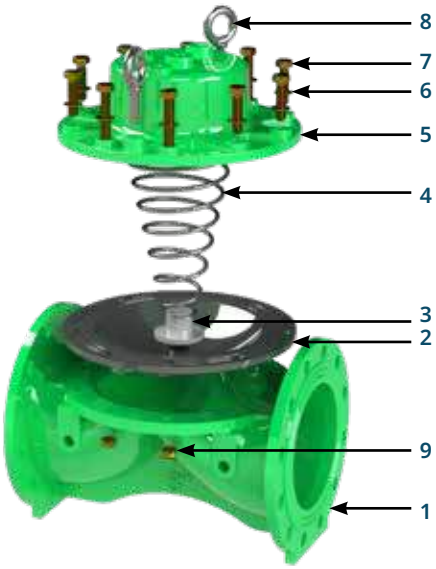


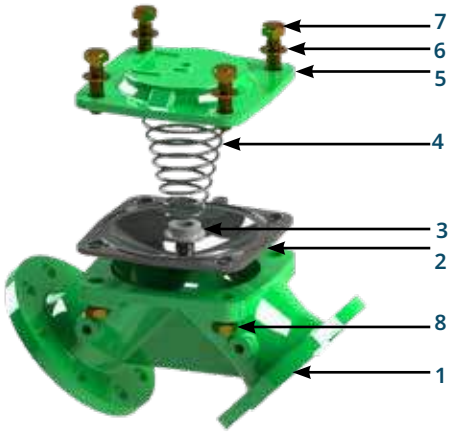
	DN		D		L		H		Weight	
	inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
Threaded	2	50	4,4	112	6,05	154	6,05	154	9,47	4,3
	3	80	7,1	180	9,45	240	9,45	240	29,3	13,3
Flanged	2	50	4,4	112	7,44	189	7,44	189	19,07	8,65
	3	80	7,1	180	10,95	278	10,95	278	39,02	17,7
	4	100	7,48	190	12	305	12	305	60,19	27,3
	6	150	9,05	230	14,92	379	14,92	379	106,26	48,2

Main Parts

Flanged

Nr.	Material Name	Type Of Material
1	Body	GGG40
2	Diaphragm	Natural Rubber
3	Spring Seat	Polyamide
4	Spring	SST 302
5	Cover	GGG40
6	Washer	8.8 Coated Steel
7	Bolt	8.8 Coated Steel
8	Lifting Eyebolts	8.8 Coated Steel
9	Nut	8.8 Coated Steel





Threaded - Victaulic - Angled

Nr.	Material Name	Type Of Material
1	Body	GGG40
2	Diaphragm	Natural Rubber
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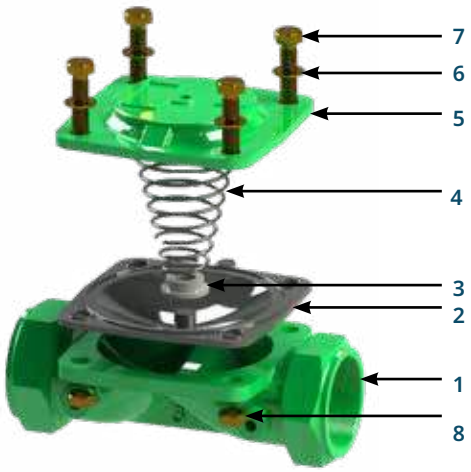
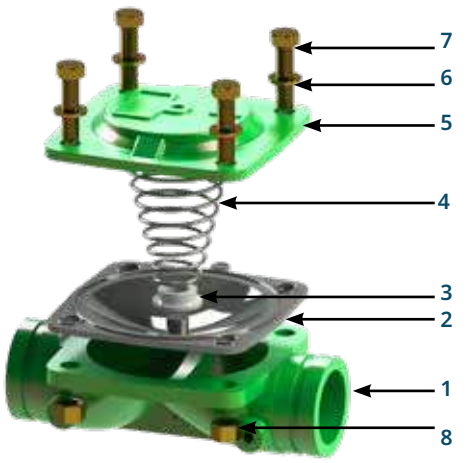
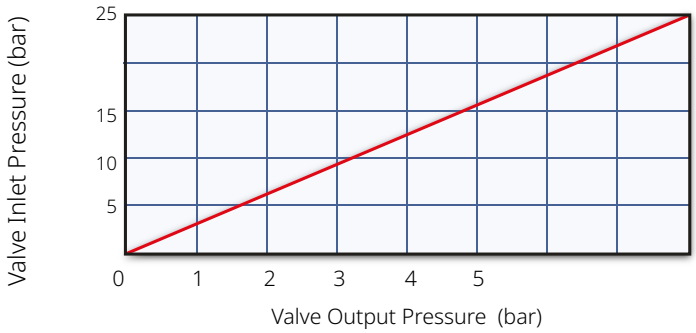




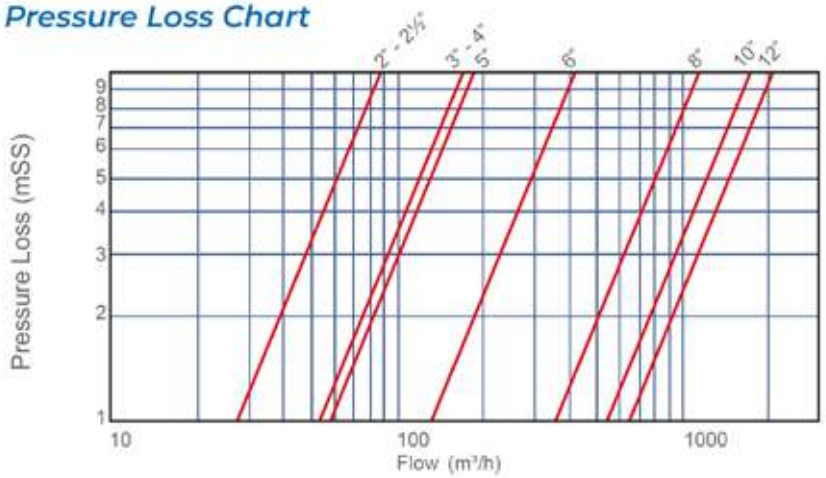
Technical Specifications

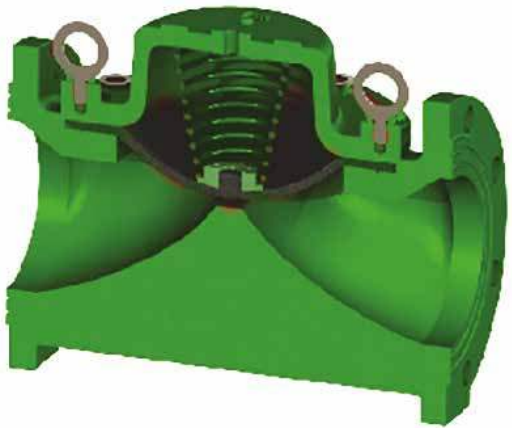
Operating Pressure	Standard	0,7 - 16 bar (10 - 240 psi)
	Low Pressure Range	0,5 - 10 bar (7,5 - 160 psi)
	High Pressure Range	0,7 - 25 bar (10 - 360 psi)
Temperature	Minimum Operating Temp.	- 10 °C (14 °F) DIN 2401/2
	Maximum Operating Temp.	80 °C (176 °F) DIN 2401/2
Connection	Flanged	DIN 2501, ISO 7005 - 2
	Threaded	ISO (BSP) , ANSI (NPT)
Covering	Standard	Epoxy
	Optional	Polyester
Hydraulic Connections	Standard	Reinforced Nylon (Air Brake) Hydraulic Tube SAE J 844
	Optional	Copper DIN1057
Actuator Type	With Single Control Chamber | Aperture With Diaphragm	

Cavitation Chart



Pressure Loss Chart





Mannualy Controlled Valve

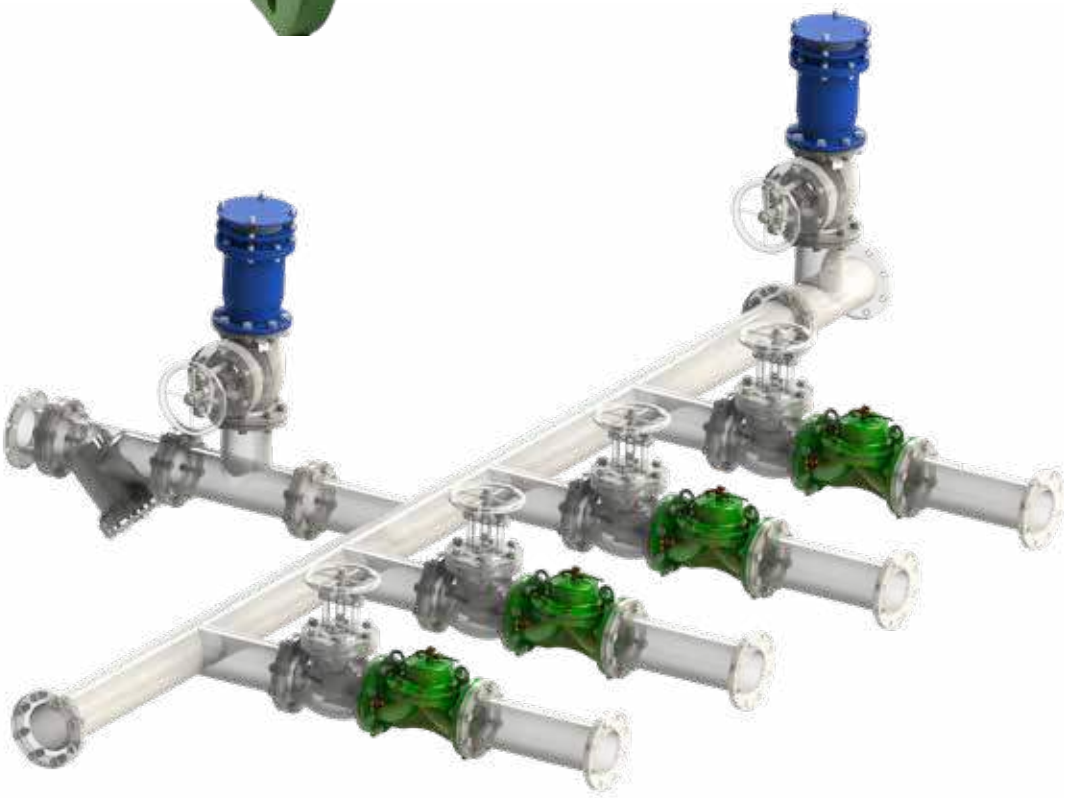
Hydraulic Control Valves

Manualy Controled Valves are hydraulic control valves which are operated by line pressure and provide 3-way mini valves for on-off operation. The valve has a minimum opening pressure of 0.7 bar. Thanks to its flexible diaphragm, it performs an easy and quick check operation in high pressure applications and is shut off without impact.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type

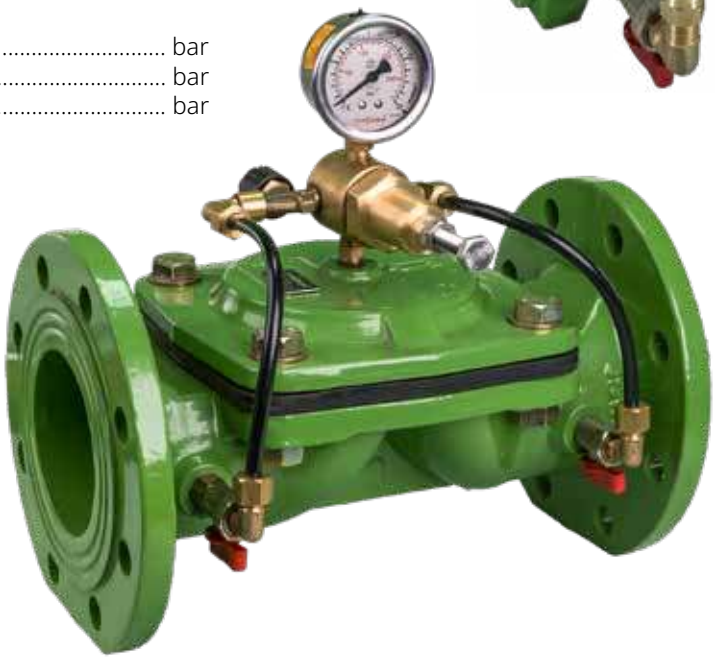


Pressure Reducing Control Valves are hydraulic control valves that reduce the input pressure value to the desired pressure value by means of a pressure reducer pilot mounted on it. The pressure reducer control valve constantly controls the output pressure value to be set without being influenced by the flow rate and inlet pressure values. When there is no flow in the system, the valve closes itself. When the valve inlet pressure value in the system falls below the set outlet pressure value, the valve opens itself. The valve can be used in horizontal or vertical position on the system.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type
- Maximum valve inlet pressure ..... bar
- Minimum valve inlet pressure..... bar
- Desired outlet pressure value..... bar



Solenoid Controlled Valve

Hydraulic Control Valves

The Solenoid Controled Valve is the hydraulic control valve operated by line pressure and designed to ensure opening/closing process by means of built-in 3/2-way solenoid pilot valves controlled remotely with electric signal. Electric signal for solenoid pilot valves is ensured by means of a control device, time relay, main switch and PLC control units etc.

Opening/Closing process may be realized easily thanks to manual control on solenoid pilot valve. Depending on desire, 24V AC 50Hz/60Hz or 12V DC, 9V DC LATCH and 12V DC latch normally open (N.O.) or normally closed (N.C.) solenoid coils may be used on main valve.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type
- Electric voltage value to be used ..... volt

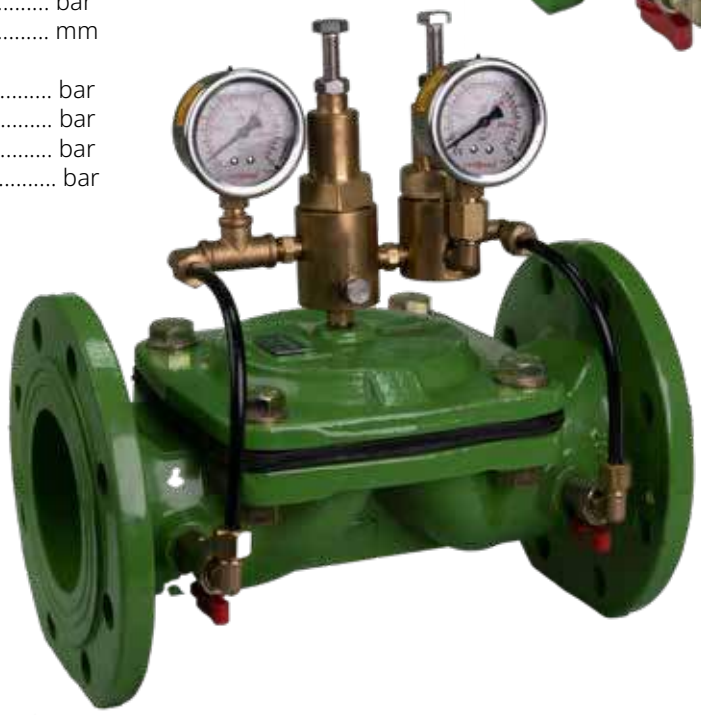
The Pressure Reducing and Sustaining Control Valve is the control valve that reduces the output pressure to the desired value by holding the input pressure. There are two pilots on the valve. The pilot in the inlet direction is the pressure stabilization pilot and fixes the inlet pressure.

The other pilot ensures that the pressure reducer remains constant by reducing the pilot pressure and the output pressure to the desired value. The pressure reducing and stabilizing control valve allows the system to operate at normal values by reducing excessive flow in the downward slope direction and lowering the high pressure. The valve keeps constantly controlling the inlet pressure and outlet pressure without being influenced by the flow rate changes.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type
- Maximum valve inlet pressure ..... bar
- Minimum valve inlet pressure..... bar
- Desired outlet pressure value..... bar
- Desired valve inlet pressure ..... bar



Pressure Reducing Solenoid Control Valve

Hydraulic Control Valves

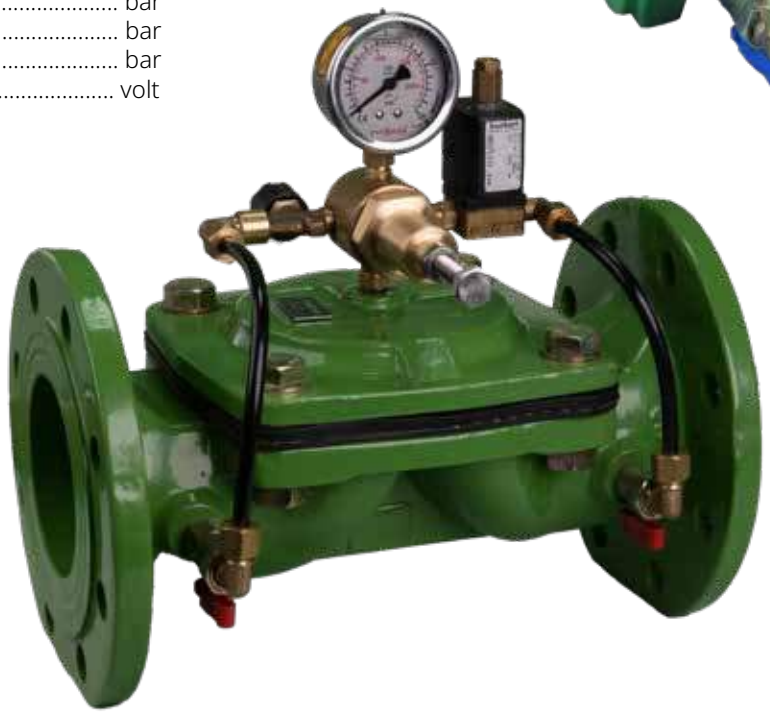
Solenoid Controlled Pressure Reducing Control Valve is a hydraulic control valve that reduces the input pressure value to the desired pressure value. The control of the main valve is effected by solenoid coils mounted on it.

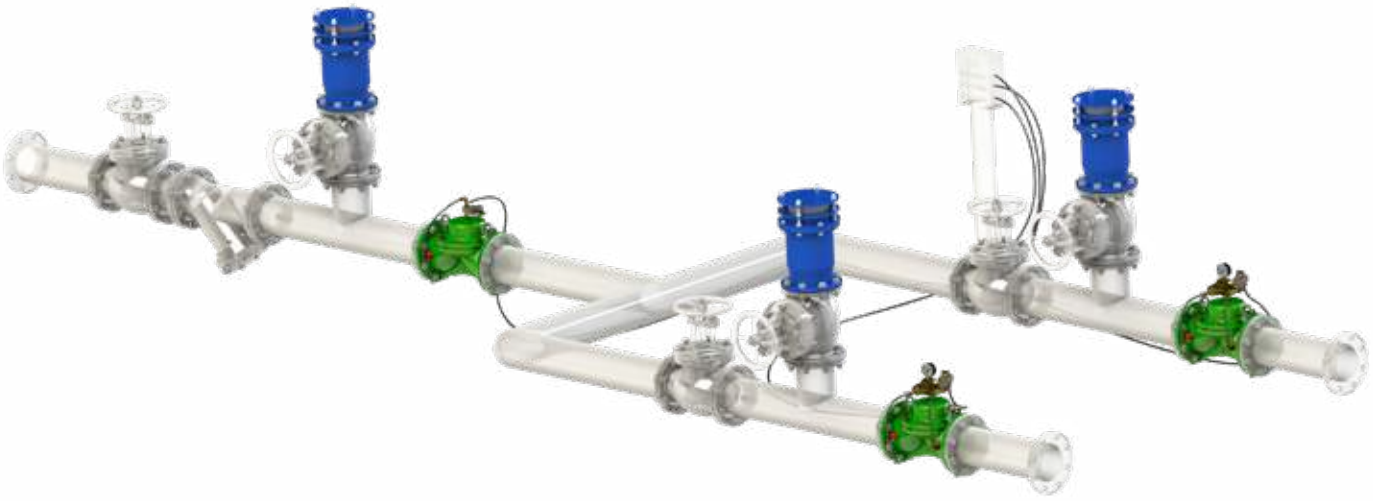
The solenoid valve is provided with an electrical signal, a control device, a time relay, a switch, a PLC control unit, and control equipment. Thus, automation and control in application systems are easily achieved.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type
- Maximum valve inlet pressure ..... bar
- Minimum valve inlet pressure..... bar
- Desired outlet pressure value..... bar
- Electric voltage value to be used ..... volt





Pressure Sustaining Control Valve is a hydraulic control valve designed to protect the system by rapidly discharging the high pressure wave by sudden opening movement in water systems with excessive pressure increase. With the pilot on the valve, the input pressure is adjusted with the desired pressure. If for any reason the inlet pressure in the system rises above the set value, the valve is opened quickly to release the excess pressure to the outside and the system is protected.

Despite its sudden opening, due to the hydraulic principle of operation, the closing of the valve is slowed down so as not to create a ripple. It provides a completely leak-tight seal. It can also be used as a safety and warning valve at the exit points of the pressure reducing control valves alone at critical points in the water system.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type
- Desired valve inlet pressure ..... bar

Hydraulic Check Valve

Hydraulic Control Valves

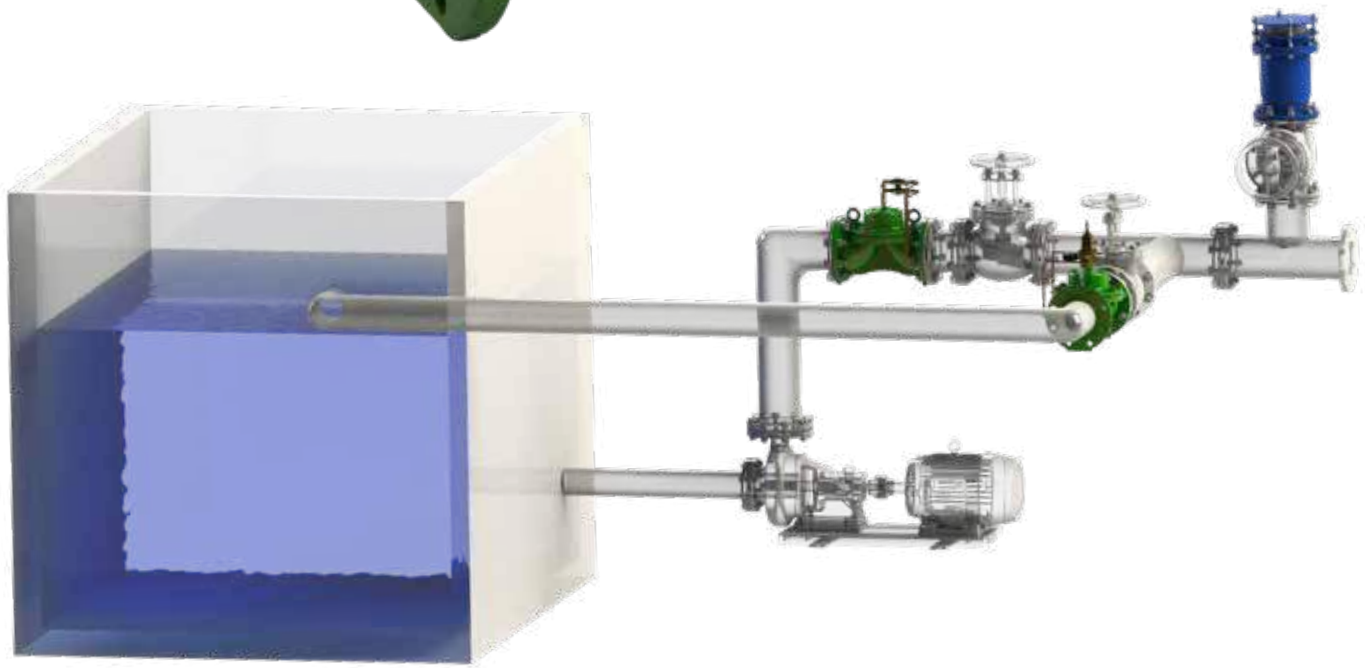
Hydraulic Check Valve is hydraulically controlled check valve which operates with line pressure and prevents back-flow in system. When downstream pressure value exceeds upstream pressure value, valve is closed as wholly sealed without causing surge.

When upstream pressure value exceeds downstream pressure value, check valve is opened by itself slowly. So it damps pressure surges formed during start-up.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type



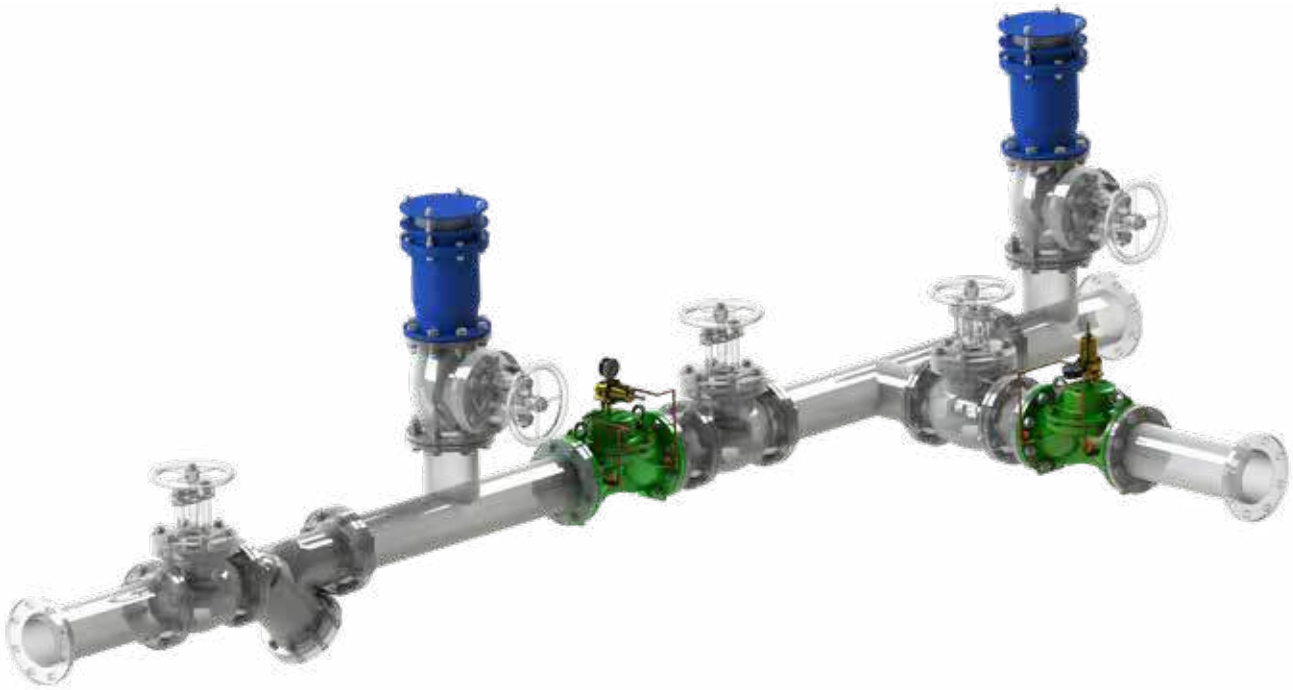
The Quick Pressure Relief Control Valve is the safety control valve designed to protect system by releasing pressure surges to atmosphere quickly caused from sudden changes in water speed because pumps put into/out of service frequently in water network elevation lines.

When network pressure goes beyond set point, valve opens by itself quickly and protects system by releasing over pressure. When line pressure decreases to normal level, it is closed slowly and automatically as wholly sealed without causing surge.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type
- Maximum valve inlet pressure ..... bar
- Desired inlet pressure value..... bar



Float Level Control Valve

Hydraulic Control Valves

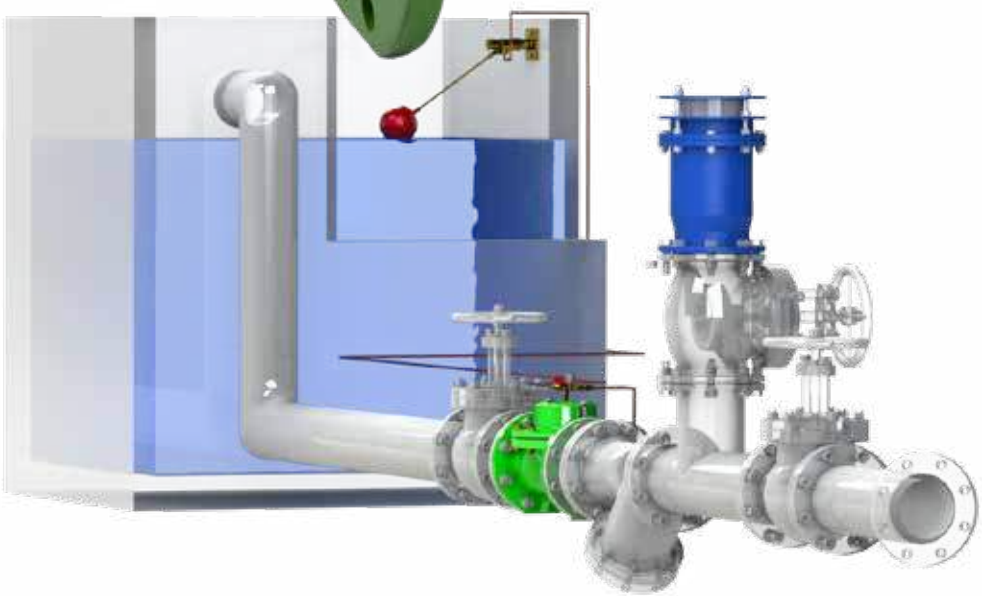
The Float Level Control Valve is the hydraulic control valve designed to control water level in reservoirs and tanks continuously. Main valve is controlled by 2-way modulating type float pilot valve manually.

Main valve mounted on reservoir and tank upstream is closed as fully sealed without causing surge when water level reaches to maximum level. Valve opening/closing speed may be adjusted in set value. It may be used in the system by mounting horizontal or vertical positions.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type

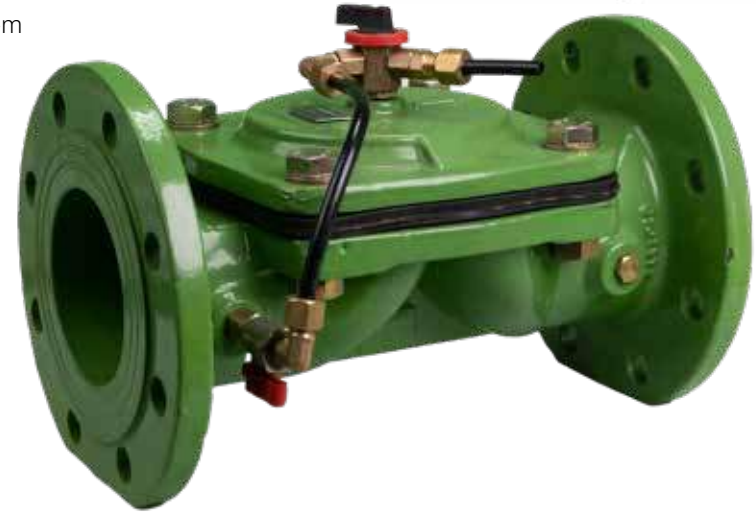


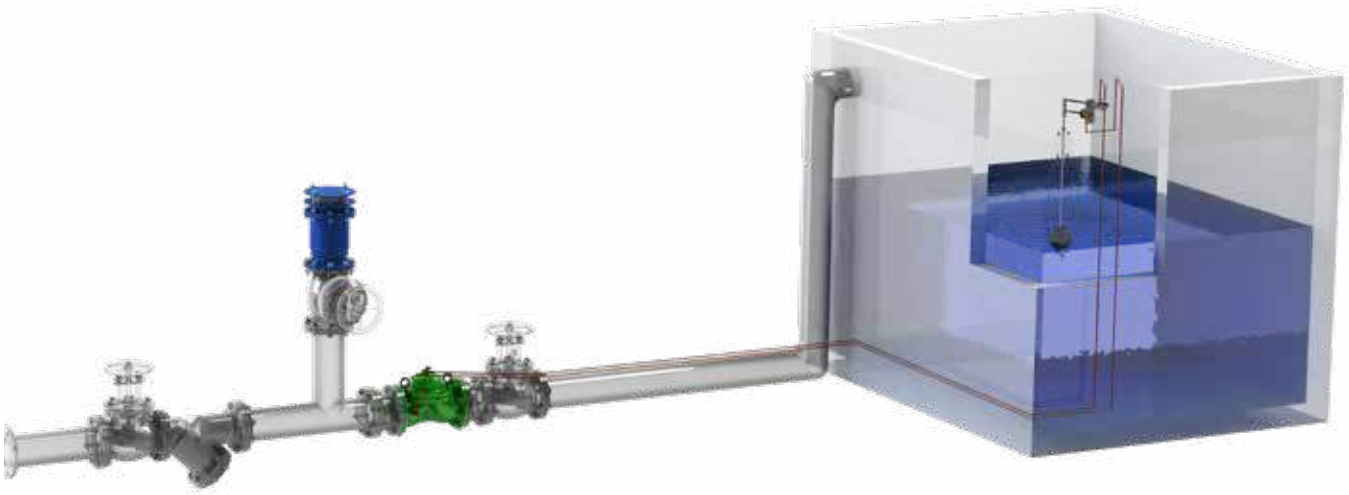
The Differential Float Level Control Valve is the hydraulic control valve designed to control water level in reservoirs and tanks continuously. Main valve is controlled by 2-way modulating type float pilot valve manually. Main valve mounted on reservoir and tank upstream is closed as fully sealed without causing surge when water level reaches to maximum level. Valve opening/ closing speed may be adjusted in set value. It may be used in the system by mounting horizontal or vertical positions.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type
- Desired level control range ..... -m





Electrik Float Level Control Valve

Hydraulic Control Valves

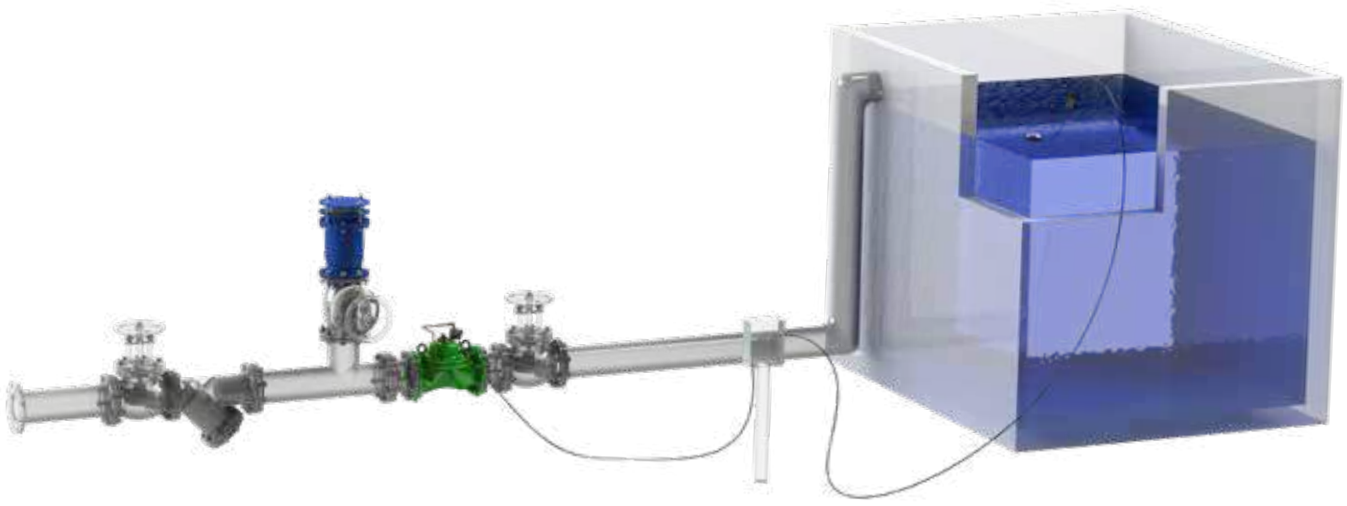
Electric Float Level Control Valve is a valve that constantly controls water level by electric float placed in the tank. When the water level at the bottom falls below the desired value, the electric floater sends a signal to the solenoid coil on the main valve.

This allows the valve to open itself fully and keep the reservoir constantly full. When the water level reaches the maximum level, the electric switch sends a signal again to the solenoid coil and the valve closes itself. The valve can be operated on the system horizontally or vertically.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type
- Electric voltage value to be used ..... volt

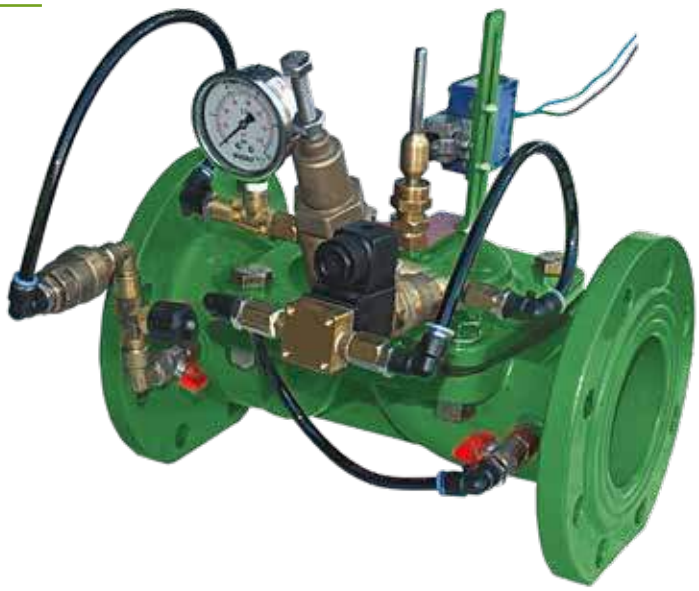


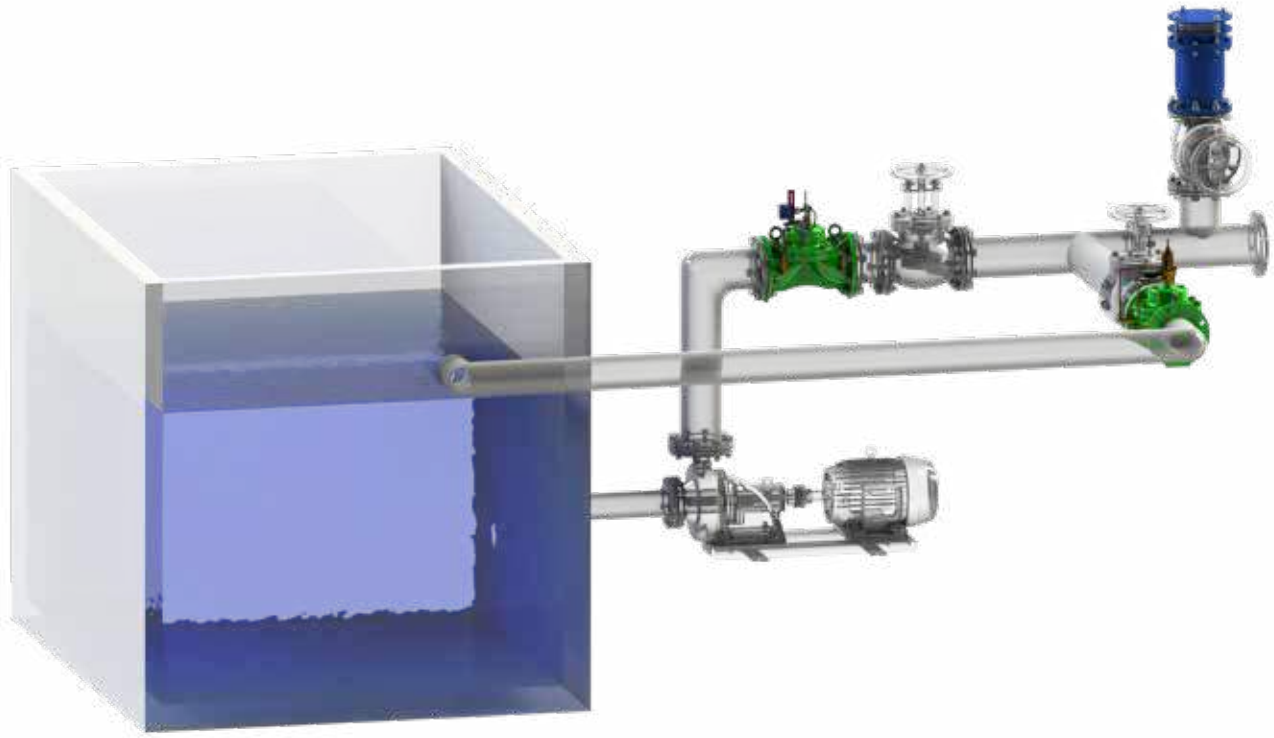
Pump Control Valve is a control valve designed for putting booster type pumps into/out of service automatically which is used water network elevating lines. When start button is pressed, pump control valve is opened by itself slowly in comparison with booster pump until pump rotation will reach working rotation. When "stop" button is pressed, control valve is closed slowly without causing surge in the first plan. When pump control valve was closed as fully sealed, it is disengaged from system by means of "Limit Switch" on it. In situations like energy interruption, works as a check valve to prevent back-flow to pump and eliminates use of an extra check valve in the system.

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type





Surge Anticipating Control Valve

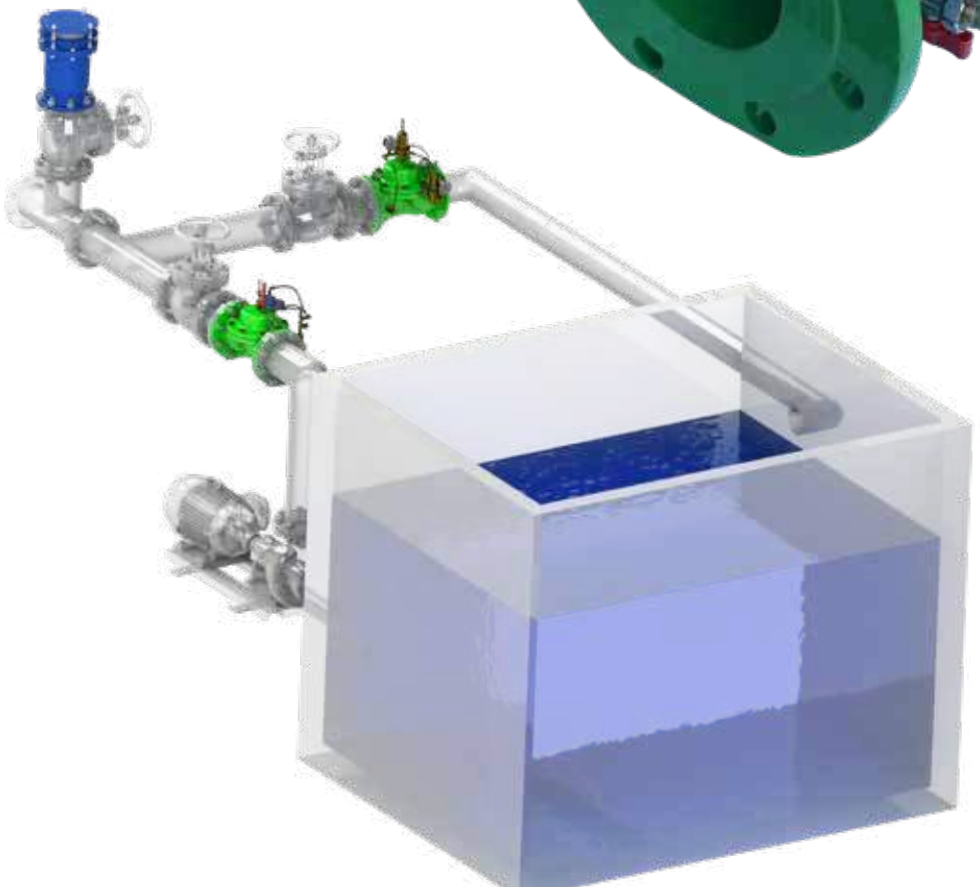
Hydraulic Control Valves

The Surge Anticipating Control Valve is the safety control valve designed to protect system in relatively longer water supply network elevating line by damping energy waves formed by energy interruptions in pumping systems and by releasing waterhammers which are caused from sudden changes in water flow rate to atmosphere automatically and quickly. Valve is opened quickly by sensing diminished pressure wave previously by means of pressure signal tube it owned. When line pressure reached normal level, it is closed slowly and automatically as wholly sealed

Order Information

Please provide the following information in order

- Maximum flow rate ..... m^3/h
- Maximum mains / operating pressure ..... bar
- Main pipeline diameter ..... mm
- Valve connection type



Flow control valves are hydraulic control valves designed to limit the amount of flow demanded. A pressure difference is created with the orifice at the valve inlet, and the flow control pilot installed in the control chamber detects the pressure difference and ensures that the control valve remains open at the desired flow rate. Flow control valve limits the amount of flow desired to be adjusted by keeping it constant without being affected by the inlet pressure and flow values.

It is also used to prevent the pump from overloading and cavitation. It avoids excessive water loss by preventing excessive flow during backwashing process in filtration systems. It avoids excessive water loss by limiting the excessive demands of consumers.

Y Type

Hydraulic Control Valves

TYPHOON Y Type Automatic Hydraulic Control Valves have been designed in "Y" body model type, with their high modulation capacity, to work with minimum pressure loss, cavitation and noise in hard working conditions with high pressure differences.

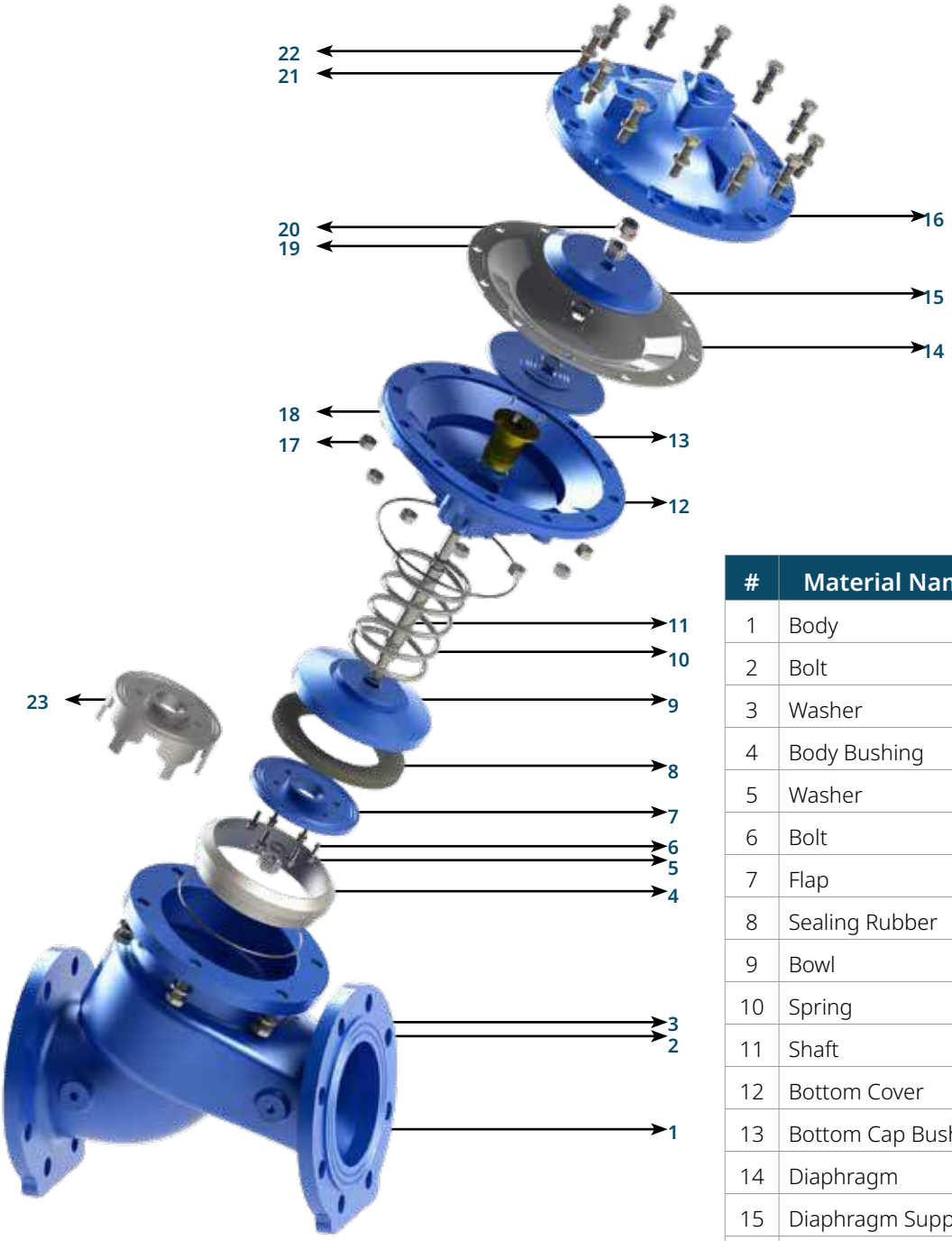
TYPHOON Y Type Automatic Hydraulic Control Valves must close the flap with double chamber diaphragm actuator. It has double control chamber as standard. It can be used as a single chamber without using an extra control chamber. In addition, V-Port is added to the valve, providing excellent control in low flow applications. It operates in a controlled and smooth manner thanks to the valve shaft which is rigidly mounted on the valve body, and opens and closes fully sealed without causing any impact.

TYPHOON Y Type Automatic Hydraulic Control Valves can be obtained by adding various control equipments to the Basic valve body and valves that can perform different tasks.

TYPHOON Y Type Automatic Hydraulic Control Valves are used in drinking water promotion lines, agricultural irrigation, fire systems, filtration, industrial etc. It is designed to be used in areas.

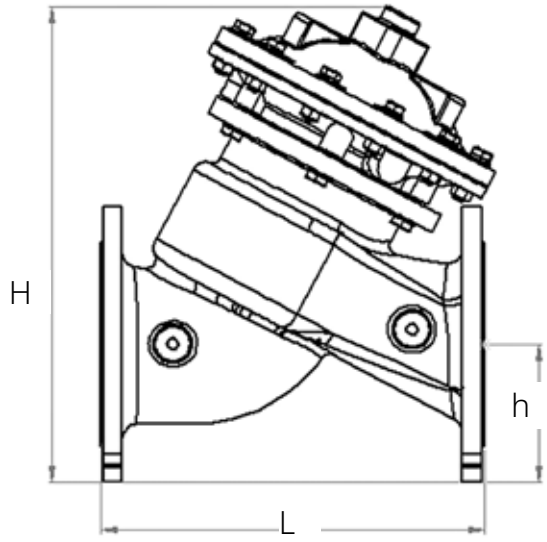
Features

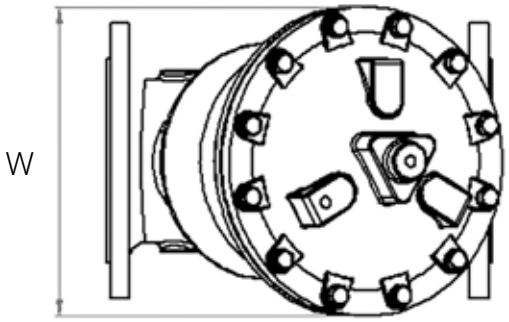
- Easy to use and maintain with its simple structure
- Lower costs
- Working in wide pressure range
- Perfect modulation even at low flow rates
- Impact-free opening and closing with flexible diaphragm
- Complete sealing with reinforced diaphragm and inner spring
- Long life with epoxy -Polyester coating
- Wide control application area with the use of different pilot valves
- Ability to work in horizontal and vertical positions in the application areas



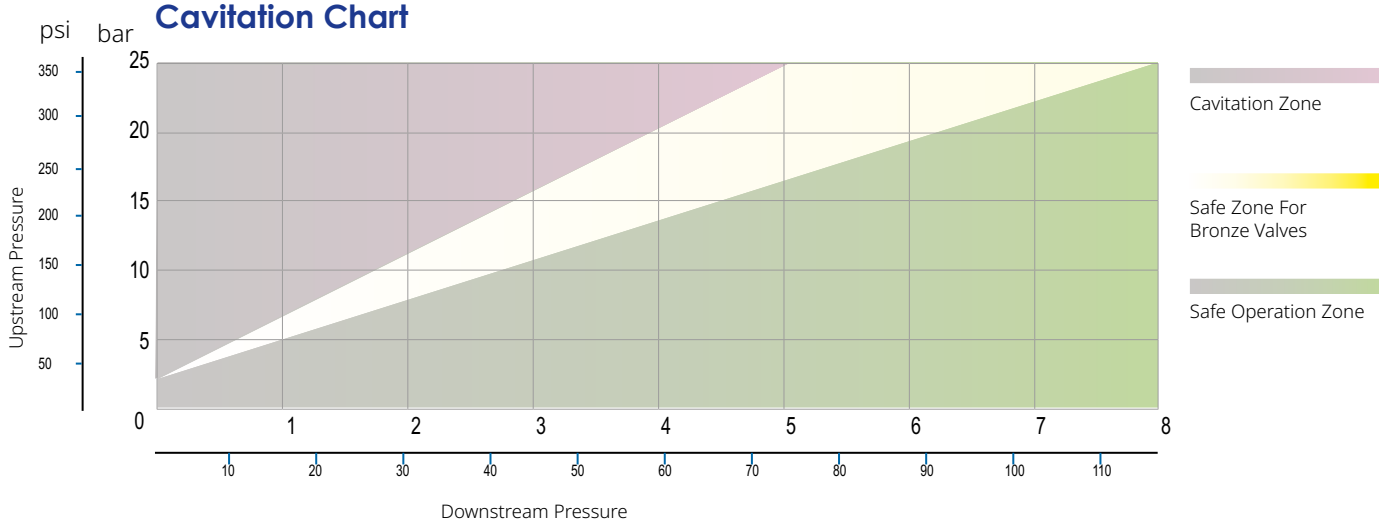
#	Material Name	Type of material
1	Body	GGG40
2	Bolt	A2
3	Washer	A2
4	Body Bushing	Stainless Steel
5	Washer	A2
6	Bolt	A2
7	Flap	GGG40
8	Sealing Rubber	Natural Rubber
9	Bowl	GGG40
10	Spring	AISI302
11	Shaft	AISI302
12	Bottom Cover	GGG40
13	Bottom Cap Bushing	Brass
14	Diaphragm	Natural Rubber
15	Diaphragm Support	GGG40
16	Top Cover	GGG40
17	Nut	A2
18	Bolt	A2
19	Nut	A2
20	Nut	A2
21	Bolt	A2
22	Washer	A2
23	V-Port (Optional)	Stainless Steel

DN		L		h		H		W		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg
2	50	8,86	225	3,25	82,5	11,61	295	6,50	165	28,67	13
2½	65	8,86	225	3,64	92,5	11,61	295	7,28	185	33,08	15
3	80	11,86	300	3,94	100,0	15,16	385	8,27	210	66,15	30
4	100	12,60	320	4,53	115,0	15,75	400	9,84	250	77,18	35
5	125	13,07	332	4,92	125,0	16,22	412	9,84	250	85,98	39
6	150	15,75	400	5,61	142,5	19,49	495	12,60	320	154,35	70
8	200	19,88	505	6,69	170,0	22,83	580	16,34	415	264,60	120





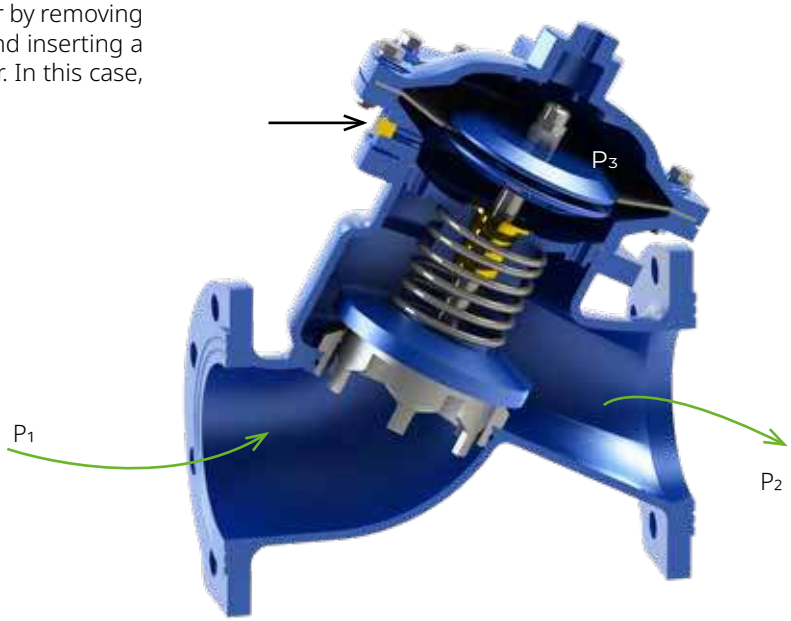
Cavitation Chart



Usage With Single Chamber Actuator

The valve actuator is made with a single chamber by removing 2 blind plugs located under the bottom cover and inserting a blind plug into the port next to the bottom cover. In this case, the pressures are P_1, P_2, P_3.

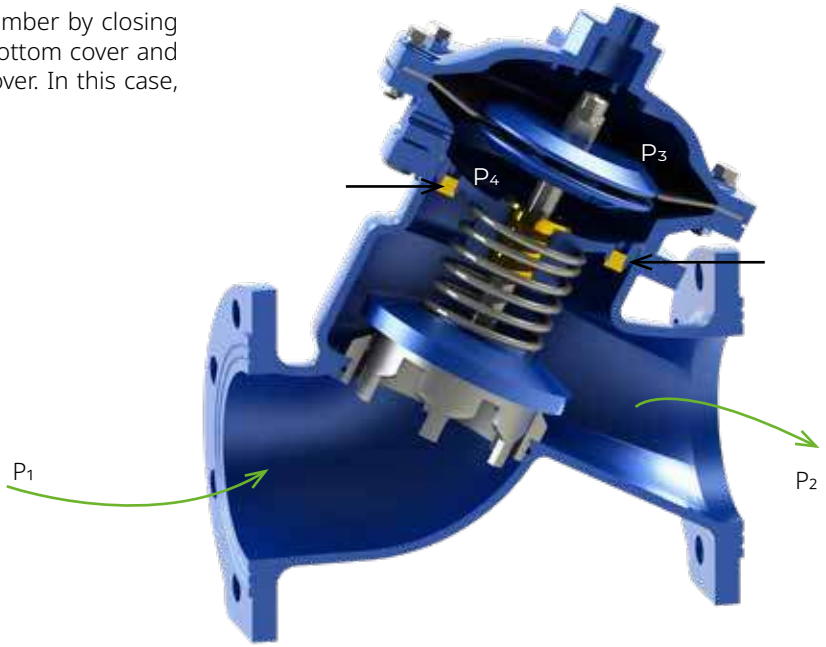
P_1: Inlet pressure
P_2: Outlet Pressure
P_3: Actuator Pressure



Usage with Double Chamber Actuators

The valve actuator is turned into double chamber by closing the blind plug with 2 port holes under the bottom cover and opening the port hole next to the bottom cover. In this case, the pressures are P_1, P_2, P_3, P_4.

P_1: Inlet pressure
P_2: Outlet Pressure
P_3: Actuator Pressure
P_4: External Pressure}

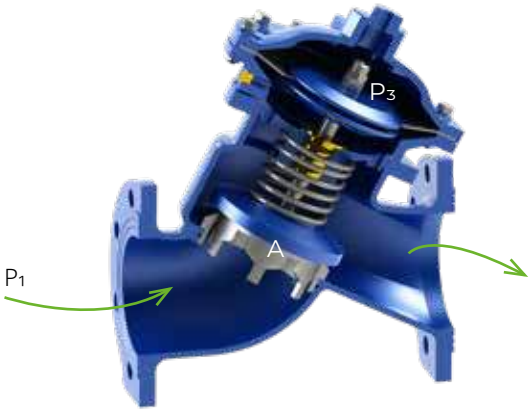


Working Principles

They are automatic control valves with double chamber diaphragm actuators, which are used to perform hydraulically desired operations with line pressure without the need for energy sources in the network line.

P_1: Inlet Pressure
P_2: Outlet Pressure
P_3: Actuator Pressure

P_{spring}: Spring Force
A: The Valve's Influence

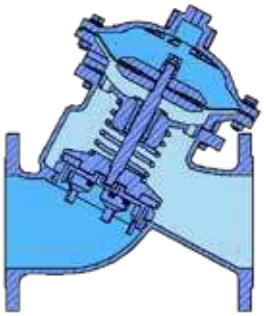


Valve Closing Mode

When the pilots on the main control valve bring the inlet pressure (P_1) above the diaphragm, the water creates hydraulic force. Though to this force, the valve flap fits into the body bushing and ensures the valve to be closed in a fully sealed manner.

If the forces are exemined in closing mode ;

$P_3 \times 3A + P_{Spring} > P_1 \times A$
Inequality is achieved. If there is no external influence on the area indicated by the P_3 pressure, the P_3 pressure will be equal to the maximum P_1 pressure.

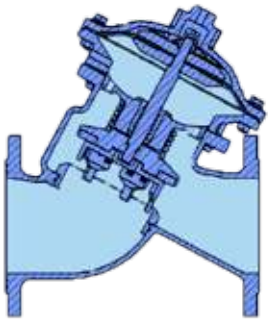


Valve Opening Mode

The inlet pressure of the main control valve is provided to open the valve by overcoming the spring force that helps the closing process and the force created by the pressure P3 on the diaphragm.
If the forces are exemined in opening mode ;

$P_1 \times A > Pspring + P_3 \times 3A$

Inequality is achieved. As the area indicated by the pressure P_3 is evacuated, the differential pressure becomes 0. Thus, P_1xA force is overcome by spring force and the valve is opened. Spring force determines the minimum opening pressure that enables the valve to open.

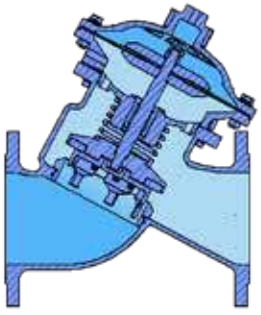


Modulation Mode

The pilots on the main control valve constantly control the pressure of the fluid and enable it to operate in modulation mode.
If the forces are exemined in modulation mode ;

$P_1 \times A + P_2 \times 3A = P_3 \times 3A + Pspring + P_2 \times A$

Equality is achieved. The pilot valve, which enables the valve to operate in modulation mode, regulates the pressures of P_2 and P_3, providing force equality. Thus, the valve operates in modulation mode.



Description

It is speccially designed for projects that require rapid water access. Typhoon's Quick-Coupling are engineered to endure many years of daily use and designed for maximum reliability.

On-off takes place with a quarter turn key cycle.
It has a locked cover that prevents dirt from entering the valve

Technical Specifications

Thread type
-BSP Parallel Pipe thread -NPT

Pressure Number
PN-10
PN-16

Sizes
3/4" & 1"

Hydraulic Check Valve

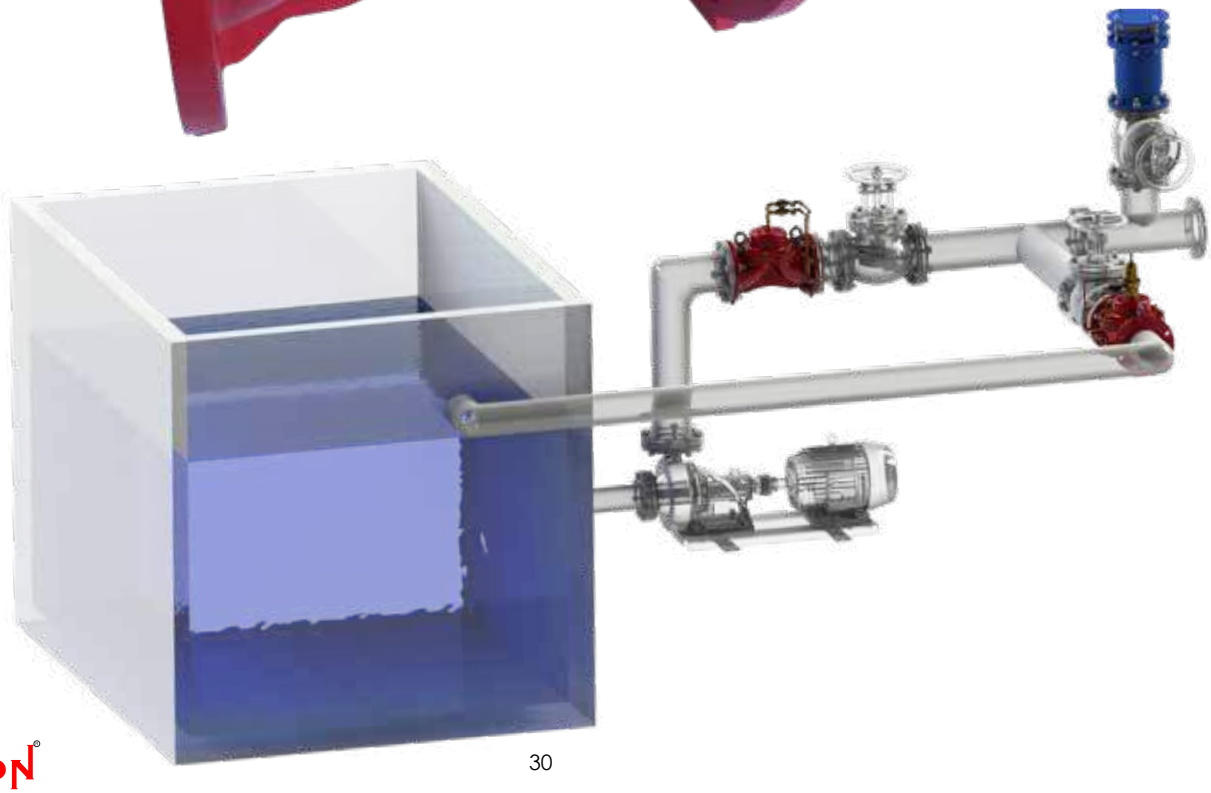
Hydraulic Control Valves - Fire Systems

Hydraulic Check Valve is hydraulically controlled check valve which operates with line pressure and prevents back-flow in system. When downstream pressure value exceeds upstream pressure value, valve is closed as wholly sealed without causing surge. When upstream pressure value exceeds downstream pressure value, check valve is opened by itself slowly. So it damps pressure surges formed during start-up.

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type



Pressure Reducing Control Valves are hydraulic control valves that reduce the input pressure value to the desired pressure value by means of a pressure reducer pilot mounted on it. The pressure reducer control valve constantly controls the output pressure value to be set without being influenced by the flow rate and inlet pressure values. When there is no flow in the system, the valve closes itself. When the valve inlet pressure value in the system falls below the set outlet pressure value, the valve opens itself. The valve can be used in horizontal or vertical position on the system.

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type
Maximum valve inlet pressure ..... bar
Minimum valve inlet pressure..... bar
Desired outlet pressure value..... bar

Electric Float Level Control Valve

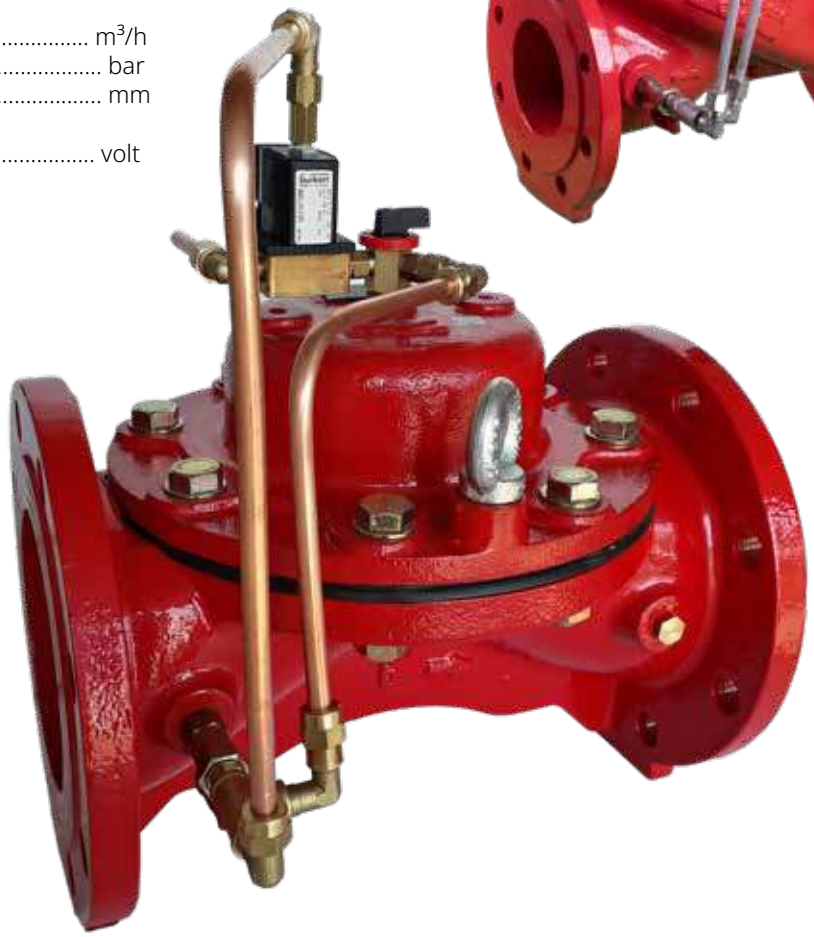
Hydraulic Control Valves - Fire Systems

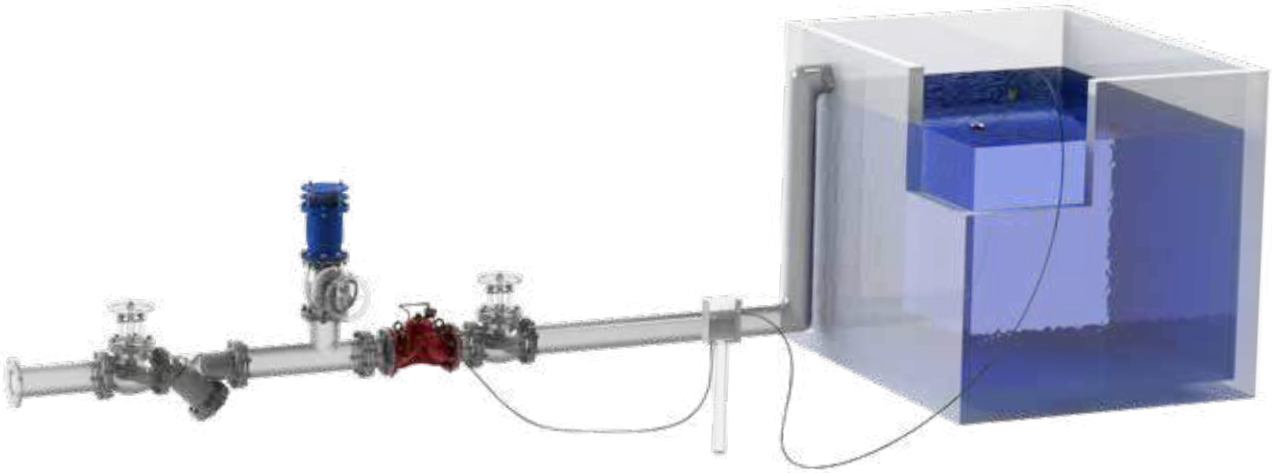
Electric Float Level Control Valve is a valve that constantly controls water level by electric float placed in the tank. When the water level at the bottom falls below the desired value, the electric floater sends a signal to the solenoid coil on the main valve. This allows the valve to open itself fully and keep the reservoir constantly full. When the water level reaches the maximum level, the electric switch sends a signal again to the solenoid coil and the valve closes itself. The valve can be operated on the system horizontally or vertically.

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type
Electric voltage value to be used ..... volt



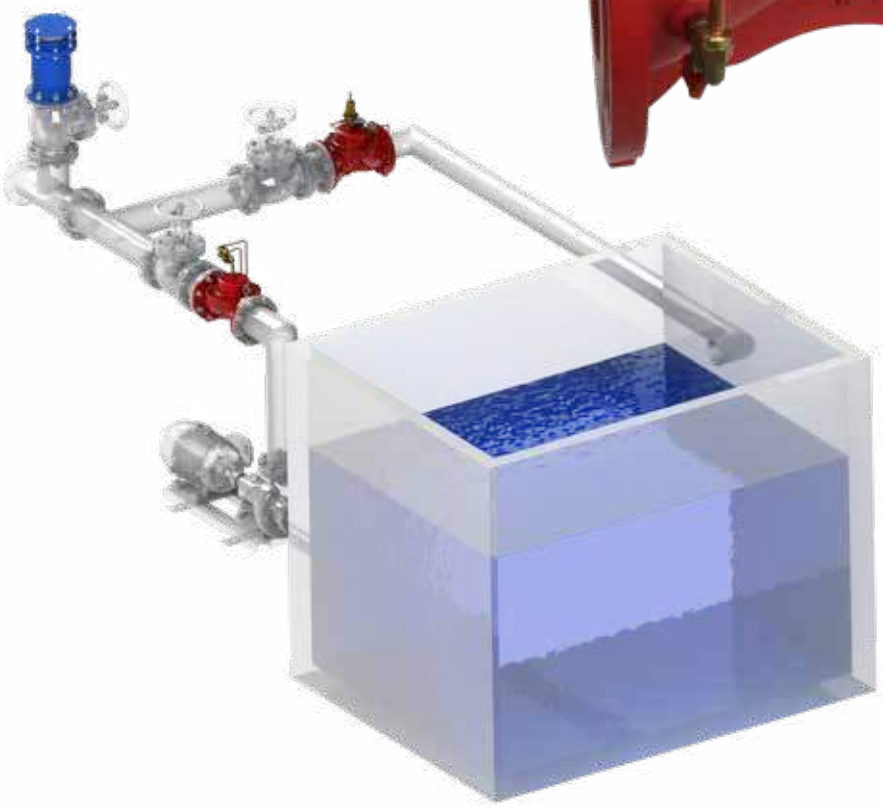


The Quick Pressure Relief Control Valve is the safety control valve designed to protect system by releasing pressure surges to atmosphere quickly caused from sudden changes in water speed because pumps put into/out of service frequently in water network elevation lines. When network pressure goes beyond set point, valve opens by itself quickly and protects system by releasing over pressure. When line pressure decreases to normal level, it is closed slowly and automatically as wholly sealed without causing surge.

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type
Desired inlet pressure value..... bar



Float Level Control Valve

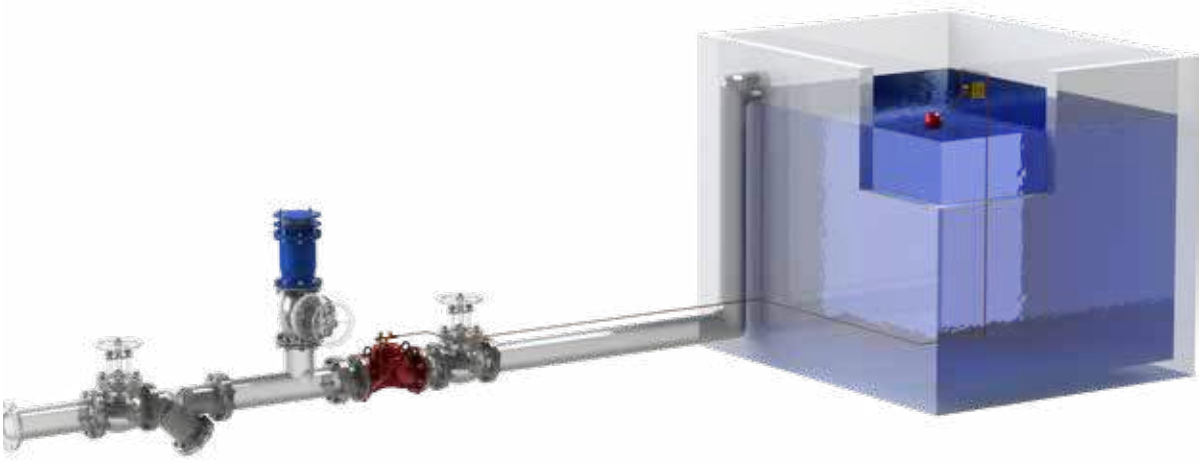
Hydraulic Control Valves - Fire Systems

The Float Level Control Valve is the hydraulic control valve designed to control water level in reservoirs and tanks continuously. Main valve is controlled by 2-way modulating type float pilot valve manually. Main valve mounted on reservoir and tank upstream is closed as fully sealed without causing surge when water level reaches to maximum level. Valve opening/ closing speed may be adjusted in set value. It may be used in the system by mounting horizontal or vertical positions.

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type

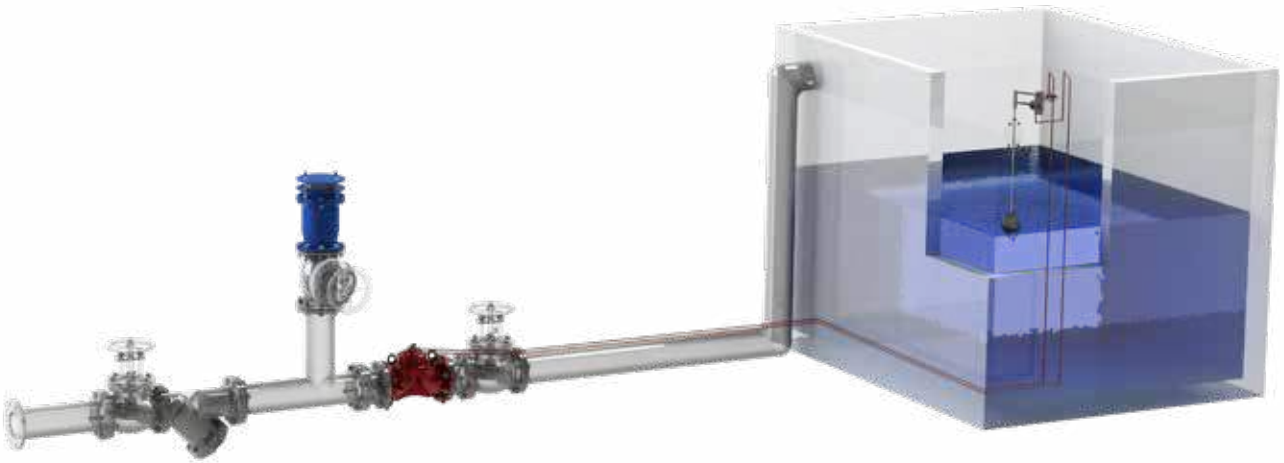


The Differential Float Level Control Valve is the hydraulic control valve designed to control water level in reservoirs and tanks continuously. Main valve is controlled by 2-way modulating type float pilot valve manually. Main valve mounted on reservoir and tank upstream is closed as fully sealed without causing surge when water level reaches to maximum level. Valve opening/ closing speed may be adjusted in set value. It may be used in the system by mounting horizontal or vertical positions.

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type
Desired level control range ..... -m



Plastic Hydraulic Control Valves

Flanged - Threaded - Angled

TYPHOON Plastic Hydraulic Valves are automatic control valves with diaphragm working with line pressure. Hydraulic Control Valves are used in agricultural irrigation, drinking water lines, filtration and industrial areas.

TYPHOON Plastic Valves are automatic control valves with diaphragm closure working with line pressure. Valve body and diaphragm design ensure smooth flow with minimum pressure loss. Since there is no bearing, bush and shaft in the valve body, valve life is longer. The only moving part of the valve is the diaphragm.

TYPHOON Plastic Hydraulic Control Valves are used in agricultural irrigation, drinking water lines, filtration and industrial areas.

Features

- Easy operation and maintenance with simple structure
- Lower costs
- Wide pressure range operation
- Perfect modulation even at low flow rates
- Flexible diaphragm to open and close without impact
- Fully sealed with reinforced diaphragm and internal springu
- Wide range of control applications with different pilot valves
- Ability to work in horizontal and vertical positions in application areas

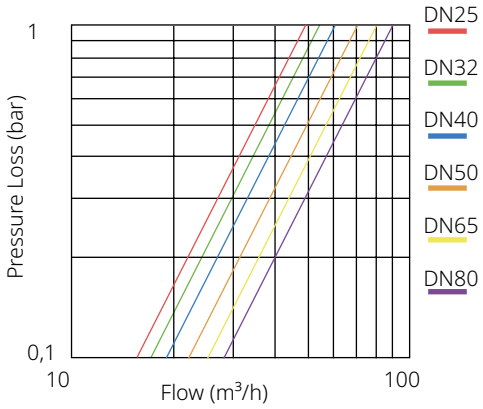
Main Parts

#	Material Name	Type of Material
1	Body	Glass Reinforced Polyamide
2	Diaphragm	Natural Rubber
3	Spring Seat	Polypropylene
4	Spring	SST 302
5	Cover	Glass Reinforced Polyamide
6	Washer	A2 Stainless Steel
7	Bolt	A2 Stainless Steel
8	Nut	Brass

Model

Connection	Threaded	
Material	Glass Reinforced Polyamide	
Body	Globe	
Available Diameters	inch	mm
	3/4	25
	1	32
	1½	40
	2	50
	2½	65
	3R	80
Max. Operating Pressure	10 Bar	

Pressure Loss Chart

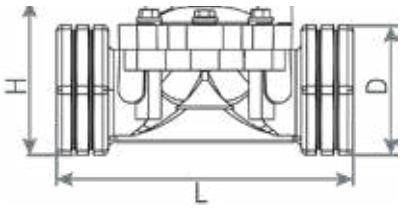


Hydraulic Performance

	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
Valve Diameter	¾	25	1	32	1½	40	2	50	2½	65	3R	80
Kv m³/h@1bar	50		55		60		70		80		90	
Cv gmp@1psi	56		66		69		81		92		104	

Dimensions and Weights

DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
¾	20	1,73	44	5,51	140	2,36	62,50	0,66	0,30
1	25	1,73	44	5,51	140	2,36	62,50	0,66	0,30
1½	40	2,48	63	7,91	201	4,28	100,00	2,54	1,15
2	50	2,95	75	8,07	211	4,33	105,50	2,65	1,20
2½	65	3,66	93	8,64	219	4,64	112,50	3,09	1,40
3	80	4,33	110	8,78	223	4,88	124,50	3,42	1,55



$$Kv(Cv) = Q.\sqrt{G/\Delta P}$$

Kv : Valve flow coefficient (flow rate at 1 bar pressure loss m³/h @ 1 bar)
Cv : Valve flow coefficient (flow in pressure loss of 1 psi GPM @ 1 psi)
Q : Flow (m³/h, gpm)

Cv = 1,155Kv
ΔP : Pressure Loss (bar, psi)
G : The specific gravity of water(Water=1.0)

Plastic Hydraulic Control Valves

Flanged - Threaded

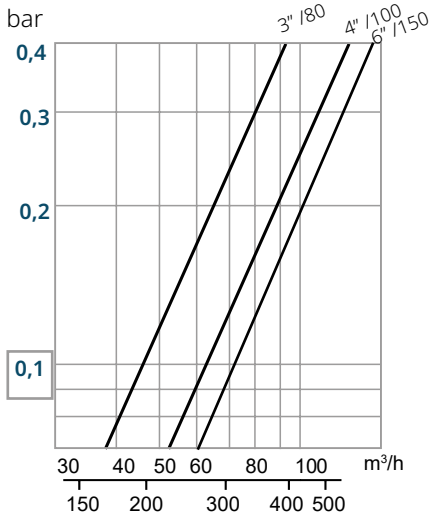
Main Parts

#	Material Name	Type of Material
1	Body	Glass Reinforced Polyamide
2	Flange Adapter	Glass Reinforced Polyamide
3	Flange	Glass Reinforced Polyamide
4	Diaphgram	Natural Rubber
5	Spring Seat	Polypropylene
6	Spring	SST302
7	Cover	Glass Reinforced Polyamide
8	Bolt	8.8 Coated Steel
9	Nut	8.8 Coated Steel
10	Rondela	8.8 Coated Steel

Model

Connection	Flanged - Threaded	
Material	Glass Reinforced Polyamide	
Body	Globe	
Available Diameters	inch	mm
	3	80
	4	100
	6	150 (Flanged)
Max. Operating Pressure	10 Bar	

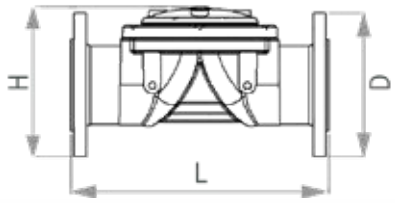
Pressure Loss Chart



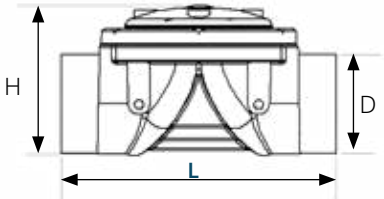
Hydraulic Performance

	inch	mm	inch	mm	inch	mm
Valve Diameter	3	80	4	100	6	150
Kv m³ / h @1bar	166		208		220	
Cv gmp @1psi	193		242		260	

Dimensions and Weights



DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
3	80	7,87	200	14,57	370	8,66	220	14,52	6,60
4	100	9,00	227	14,57	370	9,17	233	16,28	7,40
6	150	11,02	280	15,55	395	10,43	265	16,76	7,6



DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
3	80	4,72	120	11,58	294	7,05	179	10,25	4,65
4	100	4,72	120	13,23	336	7,28	185	9,70	4,40

$$Kv(Cv) = Q.\sqrt{G/\Delta P}$$

Kv : Valve flow coefficient (flow rate at 1 bar pressure loss m^3/h @ 1 bar)
Cv : Valve flow coefficient (flow in pressure loss of 1 psi GPM @ 1 psi)
Q : Flow (m^3/h, gpm)

Cv = 1,155Kv
ΔP : Pressure Loss (bar, psi)
G : The specific gravity of water(Water=1.0)

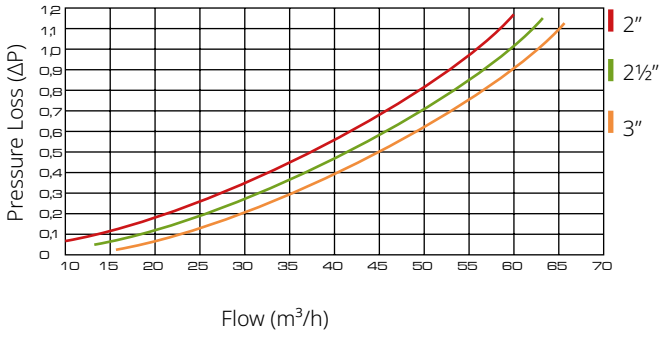
Main Parts

#	Material Name	Type of Material
1	Body	Glass Reinforced Polyamide
2	Diaphragm	Natural Rubber
3	Spring Seat	Polypropylene
4	Spring	SST 302
5	Cover	Glass Reinforced Polyamide
6	Bolt	A2 Stainless Steel
7	Washer	A2 Stainless Steel
8	Nut	Brass

Model

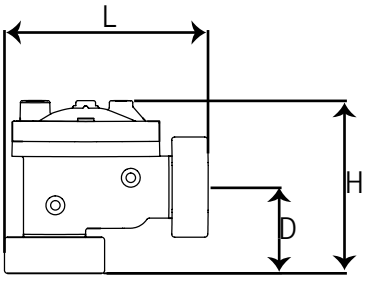
Connection	Threaded	
Material	Glass Reinforced Polyamide	
Body	Angled Globe	
Available Diameters	inch	mm
	2	50
	2½	65
	3R	80
Max. Operating Pressure	10 Bar	

Pressure Loss Chart



Hydraulic Performance

	inch	mm	inch	mm	inch	mm
Valve Diameter	2	50	2½	65	3R	80
Kv m³ / h @1bar	51,0		56,0		66,0	
Cv gmp @1psi	58,9		64,7		76,2	



Dimensions and Weights

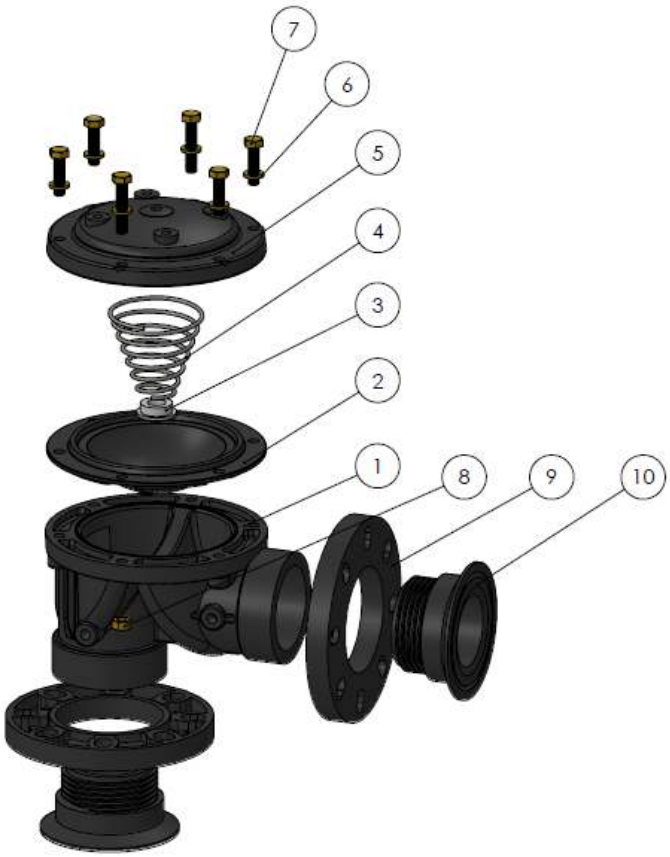
DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
2	50	3,4	86	8	203	6,77	172	2,86	1,30
2½	65	3,4	86	8	203	6,77	172	2,86	1,20
3R	80	3,4	86	8	203	6,77	172	2,86	1,06

$$Kv(Cv) = Q.\sqrt{G/\Delta P}$$

Kv : Valve flow coefficient (flow rate at 1 bar pressure loss m³/h @ 1 bar)
Cv : Valve flow coefficient (flow in pressure loss of 1 psi GPM @ 1 psi)
Q : Flow (m³/h, gpm)

Cv = 1,155Kv
ΔP : Pressure Loss (bar, psi)
G : The specific gravity of water(Water=1.0)

Angled Flanged - Threaded

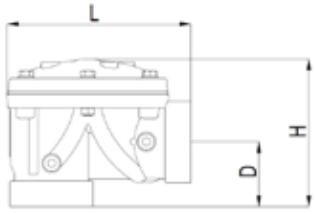


Main Parts

#	Material Name	Type of Material
1	Body	Glass Reinforced Polyamide
2	Diaphragm	Naturel Rubber
3	Spring Wedge	Polypropylene
4	Spring	SST 302
5	Cover	Glass Reinforced Polyamide
6	Washer	8.8 Coated Steel
7	Bolt	8.8 Coated Steel
8	Nut	8.8 Coated Steel
9	Flange	Glass Reinforced Polyamide
10	Adapter	Glass Reinforced Polyamide

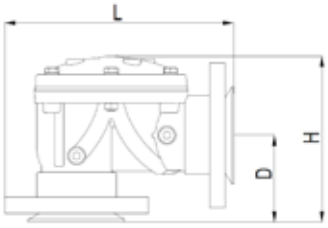
Model

Connection	Flanged - Threaded	
Material	Glass Reinforced Polyamide	
Body	Globe	
Available Diameters	inch	mm
	3	80
	4	100
	6	150
Max. Operating Pressure	10 Bar	



Dimensions and Weights

DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
3	80	3,9	99	10,9	277	8,78	223	11,13	5,05
4	100	3,9	99	10,9	277	8,78	223	10,8	4,90



DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
3	80	5,08	129	13,42	341	9,96	253	15,43	7
4	100	5,35	136	14,84	377	10,28	261	17,19	7,8
6	150	6,38	162	16,18	411	11,14	283	17,64	8

$$Kv(Cv) = Q.\sqrt{G/\Delta P}$$

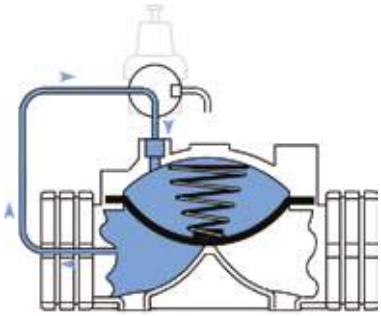
Kv : Valve flow coefficient (flow rate at 1 bar pressure loss m^3/h @ 1 bar)
Cv : Valve flow coefficient (flow in pressure loss of 1 psi GPM @ 1 psi)
Q : Flow (m^3/h, gpm)

Cv = 1,155Kv
ΔP : Pressure Loss (bar, psi)
G : The specific gravity of water(Water=1.0)

It is a fully automatic hydraulic control valve designed to perform the hydraulically desired modulation processes with the line pressure without the need for different energy sources such as electricity, pneumatic or mechanical in the main valve mains line.

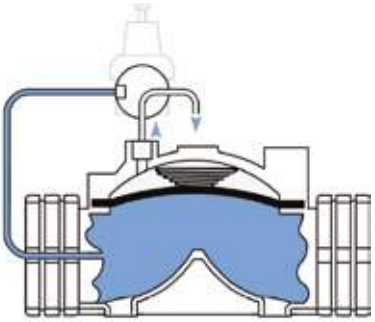
Valve Closing Mode

Pilot valves connected to the main valve create a hydraulic force on the valve diaphragm when the water pressure at the valve inlet reaches the actuator actuator (control reservoir) of the valve. This hydraulic force that is created combines the diaphragm of the valve with the extra force exerted by the internal spring to ensure a tight seal.



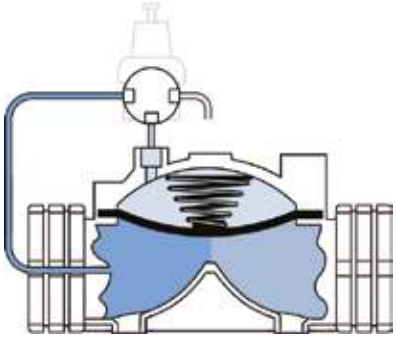
Valve Opening Mode

When the path of the pilot valve on the main valve in the closed position is set to the discharge position, the pressurized water in the control chamber on the diaphragm of the main valve is discharged. When the line pressure reaches the spring force, the valve diaphragm applies a hydraulic force to the diaphragm to bring the valve into the full open position.



Modulation Mode

The pilot valves that connect the actuator to the main valve allow the main valve to operate in the modulated position. The valve in the actuator of the main valve (control reservoir), according to the flow quantity or pressure conditions to be adjusted, ensures that the fluid continuously operates in the modulated position by controlling the pressure.



Solenoid Controlled Pressure Reducing Valve

Plastic Hydraulic Control Valve

Solenoid Controlled Pressure Reducing Control Valve is a hydraulic control valve that reduces the input pressure value to the desired pressure value. The control of the main valve is effected by solenoid coils mounted on it. The solenoid valve is provided with an electrical signal, a control device, a time relay, a switch, a PLC control unit, and control equipment. Thus, automation and control in application systems are easily achieved.

Pressure Range: PN 10
Diameters : 3/4" 1"-1 ½" – 2" – 2 ½" – 3"R - 3"-4"
DN80 - DN100 - DN150 Flanged

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type
Maximum valve inlet pressure ..... bar
Minimum valve inlet pressure..... bar
Desired outlet pressure value..... bar
Electric voltage value to be used..... volt

Plastic Hydraulic Control Valve

Pressure Reducing Control Valves are hydraulic control valves that reduce the input pressure value to the desired pressure value by means of a pressure reducer pilot mounted on it. The pressure reducer control valve constantly controls the output pressure value to be set without being influenced by the flow rate and inlet pressure values. When there is no flow in the system, the valve closes itself. When the valve inlet pressure value in the system falls below the set outlet pressure value, the valve opens itself. The valve can be used in horizontal or vertical position on the system.

Pressure Range: PN 10
Diameters : 3/4" 1"-1 ½" – 2" – 2 ½" – 3"R - 3"-4"
DN80 - DN100 - DN150 Flanged

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type
Maximum valve inlet pressure ..... bar
Minimum valve inlet pressure..... bar
Desired outlet pressure value..... bar

Pressure Reducing and Sustaining Control Valve

Plastic Hydraulic Control Valve

The Pressure Reducing and Sustaining Control Valve is the control valve that reduces the output pressure to the desired value by holding the input pressure. There are two pilots on the valve. The pilot in the inlet direction is the pressure stabilization pilot and fixes the inlet pressure. The other pilot ensures that the pressure reducer remains constant by reducing the pilot pressure and the output pressure to the desired value. The pressure reducing and stabilizing control valve allows the system to operate at normal values by reducing excessive flow in the downward slope direction and lowering the high pressure. The valve keeps constantly controlling the inlet pressure and outlet pressure without being influenced by the flow rate changes.

Pressure Range: PN 10
Diameters : 3/4" 1"-1 ½" – 2" – 2 ½" – 3"R - 3"-4"
DN80 - DN100 - DN150 Flanged

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type
Maximum valve inlet pressure ..... bar
Minimum valve inlet pressure..... bar
Desired outlet pressure value..... bar
Desired valve inlet pressure ..... bar

Quick Pressure Relief Control Valve

Plastic Hydraulic Control Valve

The Quick Pressure Relief Control Valve is the safety control valve designed to protect system by releasing pressure surges to atmosphere quickly caused from sudden changes in water speed because pumps put into/out of service frequently in water network elevation lines. When network pressure goes beyond set point, valve opens by itself quickly and protects system by releasing over pressure. When line pressure decreases to normal level, it is closed slowly and automatically as wholly sealed without causing surge.

Pressure Range: PN 10
Diameters : 3/4" 1"-1 ½" – 2" – 2 ½" – 3"R - 3"-4"
DN80 - DN100 - DN150 Flanged

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type
Desired valve inlet pressure ..... bar

Plastic Hydraulic Control Valve

The Solenoid Controled Valve is the hydraulic control valve operated by line pressure and designed to ensure opening/closing process by means of built-in 3/2-way solenoid pilot valves controlled remotely with electric signal. Electric signal for solenoid pilot valves is ensured by means of a control device, time relay, main switch and PLC control units etc. Opening/Closing process may be realized easily thanks to manual control on solenoid pilot valve. Depending on desire, 24V AC 50Hz/60Hz or 12V DC, 9V DCLATCH and 12V DC latch normally open (N.O.) or normally closed (N.C.) solenoid coils may be used on main valve.

Pressure Range: PN 10
Diameters : 3/4" 1"-1 ½" – 2" – 2 ½" – 3"R - 3"-4"
DN80 - DN100 - DN150 Flanged

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type
Electric voltage value to be used ..... volt

Plastic Hydraulic Control Valve

Pressure Sustaining Control Valve is a hydraulic control valve designed to protect the system by rapidly discharging the high pressure wave by sudden opening movement in water systems with excessive pressure increase. With the pilot on the valve, the input pressure is adjusted with the desired pressure. If for any reason the inlet pressure in the system rises above the set value, the valve is opened quickly to release the excess pressure to the outside and the system is protected. Despite its sudden opening, due to the hydraulic principle of operation, the closing of the valve is slowed down so as not to create a ripple. It provides a completely leak-tight seal. It can also be used as a safety and warning valve at the exit poi nts of the pressure reducing control valves alone at critical points in the water system.

Pressure Range: PN 10
Diameters : 3/4" 1"-1 ½" – 2" – 2 ½" – 3"R - 3"-4"
DN80 - DN100 - DN150 Flanged

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type
Maximum valve inlet pressure ..... bar
Desired valve inlet pressure ..... bar

Float Level Control Valve

Plastic Hydraulic Control Valve

The Float Level Control Valve i}s the hydraulic control valve designed to control water level in reservoirs and tanks continuously. Main valve is controlled by 2-way modulating type float pilot valve manually. Main valve mounted on reservoir and tank upstream is closed as fully sealed without causing surge when water level reaches to maximum level. Valve opening/ closing speed may be adjusted in set value. It may be used in the system by mounting horizontal or vertical positions.

Pressure Range: PN 10
Diameters : 3/4" 1"-1 ½" – 2" – 2 ½" – 3"R - 3"-4"
DN80 - DN100 - DN150 Flanged

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type

Plastic Hydraulic Control Valve

Manualy Controled Valves are hydraulic control valves which are operated by line pressure and provide 3-way mini valves for on-off operation. The valve has a minimum opening pressure of 0.7 bar. Thanks to its flexible diaphragm, it performs an easy and quick check operation in high pressure applications and is shut off without impact.

Pressure Range: PN 10
Diameters : 3/4" 1"-1 ½" – 2" – 2 ½" – 3"R - 3"-4"
DN80 - DN100 - DN150 Flanged

Order Information

Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type

Y Type

Plastic Hydraulic Control Valve

TYPHOON Y Type Plastic Automatic Hydraulic Control Valves are designed in "Y" body model type, with high modulation capacity, to work with minimum pressure loss, cavitation and noise under difficult working conditions with high pressure differences.

TYPHOON Y Type Plastic Automatic Hydraulic Control Valves are close the flap with double chamber diaphragm actuator. It has double control chamber as standard. It can be used as a single chamber without using an extra control chamber. Through to the valve shaft, which is rigidly mounted on the valve body, it operates in a controlled and properly opens and closes fully sealed without causing impact.

TYPHOON Y Type Plastic Automatic Hydraulic Control Valves provide maximum performance under difficult conditions with glass reinforced nylon body structure. It is easy to assemble and disassemble with its simple and reliable structure. It has high chemical and corrosion resistance.

TYPHOON Y Type Automatic Hydraulic Control Valves can be obtained by adding various control equipments to the Basic valve body and valves that can make different tasks.

Features

- Easy to use and maintain with its simple structure
- Lower costs
- Working in wide pressure range
- Perfect modulation even at low flow rates
- Impact-free opening and closing with flexible diaphragm
- Fully sealing with reinforced diaphragm and inner spring
- High diaphragm resistance
- Wide control application area with different pilot mounts
- Ability to work in horizontal and vertical positions

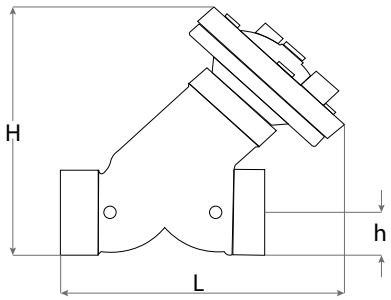
Order Information

Please provide the following information in order

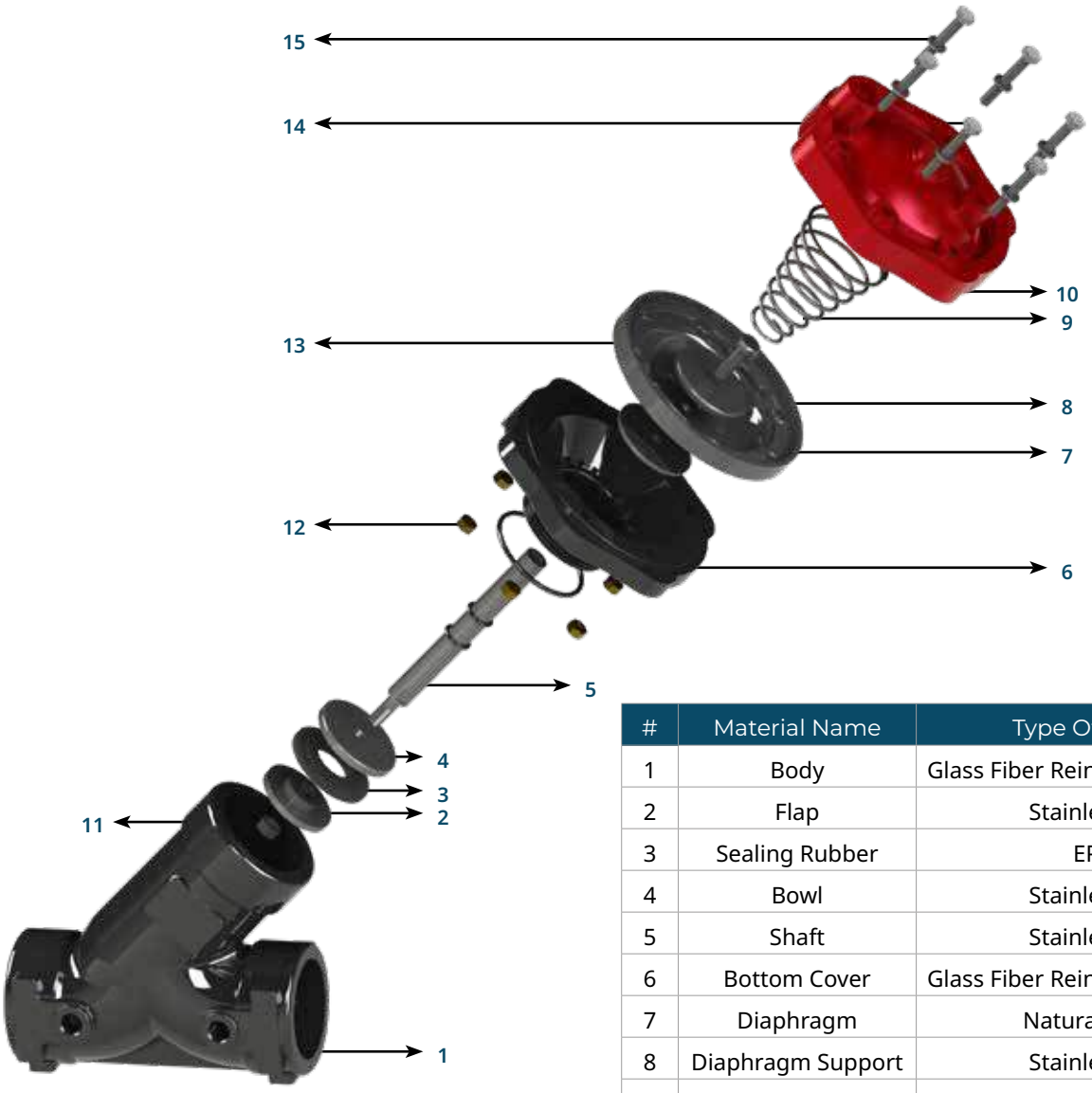
Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type

Dimentions and Weights

DN		L		h		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
2	50	6,49	165	1,49	38	8,86	225	3,86	1,75
¾	20	5,31	135	1,02	26	5,23	133	2,09	0,95
1	25	5,31	135	1,02	26	5,23	133	2,20	1
1¼	32	5,31	135	1,14	29	5,23	133	2,31	1,05
1½	40	8,78	165	1,49	38	8,86	225	3,86	1,75
2	50	6,49	165	1,49	38	8,86	255	3,86	1,75



Working Temperature: Maximum 80ºC
Working Pressure: Maximum ¹² Bar



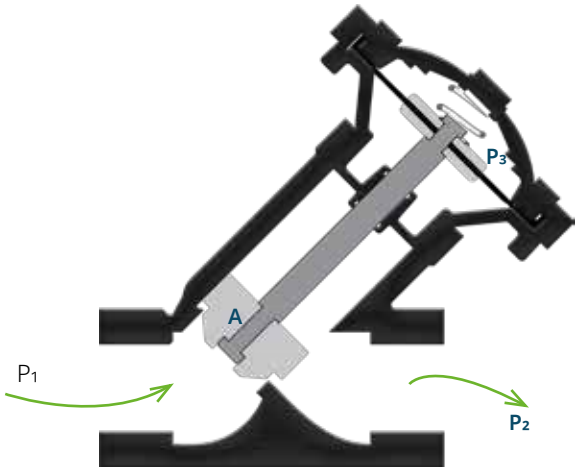
#	Material Name	Type Of Material
1	Body	Glass Fiber Reinforced Polyamide
2	Flap	Stainless Steel
3	Sealing Rubber	EPDM
4	Bowl	Stainless Steel
5	Shaft	Stainless Steel
6	Bottom Cover	Glass Fiber Reinforced Polyamide
7	Diaphragm	Natural Rubber
8	Diaphragm Support	Stainless Steel
9	Spring	Stainless Steel
10	Top Cover	Glass Fiber Reinforced Polyamide
11	Nut	Stainless Steel
12	Nut	Brass
13	Bolt	Stainless Steel
14	Bolt	Stainless Steel
15	Washer	Stainless Steel

Working Principles

They are automatic control valves with double chamber diaphragm actuators, which are used to perform hydraulically desired operations with line pressure without the need for energy sources in the network line.

P_1: Inlet Pressure
P_2: Outlet Pressure
P_3: Actuator Pressure

P_{spring}: Spring Force
A: The Valve's Influence



Valve Closing Mode

When the pilots on the main control valve bring the inlet pressure (P_1) above the diaphragm, the water creates hydraulic force. Though to this force, the valve flap fits into the body bushing and ensures the valve to be closed in a fully sealed manner.

If the forces are exemined in closing mode ;

$P_3 \times 3A + PSpring > P_1 \times A$
Inequality is achieved. If there is no external influence on the area indicated by the P_3 pressure, the P_3 pressure will be equal to the maximum P_1 pressure.

Valve Opening Mode

The inlet pressure of the main control valve is provided to open the valve by overcoming the spring force that helps the closing process and the force created by the pressure P3 on the diaphragm.
If the forces are exemined in opening mode ;

$P_1 \times A > Pspring + P_3 \times 3A$

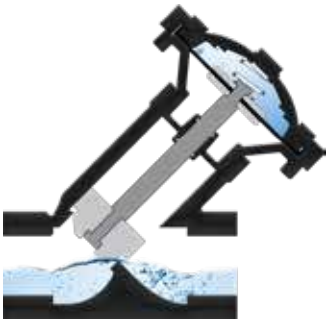
Inequality is achieved. As the area indicated by the pressure P_3 is evacuated, the differential pressure becomes 0. Thus, $P_1 x A$ force is overcome by spring force and the valve is opened. Spring force determines the minimum opening pressure that enables the valve to open.

Modulation Mode

The pilots on the main control valve constantly control the pressure of the fluid and enable it to operate in modulation mode.
If the forces are exemined in modulation mode ;

$P_1 \times A + P_2 \times 3A = P_3 \times 3A + Pspring + P_2 \times A$

Equality is achieved. The pilot valve, which enables the valve to operate in modulation mode, regulates the pressures of P_2 and P_3, providing force equality. Thus, the valve operates in modulation mode.



Foot Valve is used to prevent back flow that occurs when the pump is turned off. It reacts quickly with its flap system. It provides a silent, non-impact and leak-proof closure.

With its filter function, it prevents the entry of foreign / harmful particles into the system and prevents the parts inside from being damaged.

Order Information

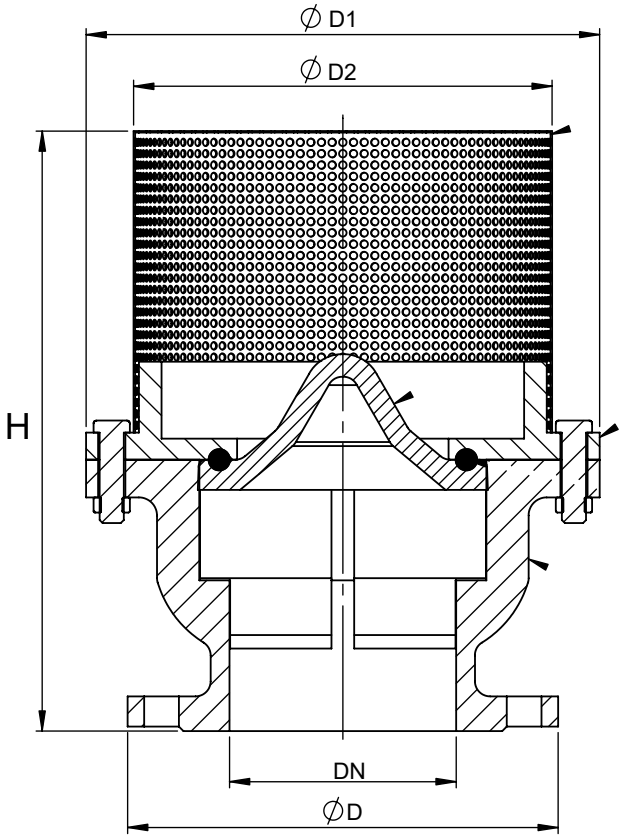
Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm

#	Material Name	Type of Material
1	Body	GGG40
2	Oring	NBR
3	Flap	GGG40
4	Oring	NBR
5	Cover	GGG40
6	Washer	8.8 Coated Steel
7	Bolt	8.8 Coated Steel
8	Filter	AISI 302
9	Nut	8.8 Coated Steel

Foot Valve

Sizes										Weight	
DN		D		D1		D2		H			
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg
2	50	6,50	165	9,84	250	7,24	184	10,98	279	38,39	17,45
2 ½	65	7,28	185	9,84	250	7,24	184	10,98	279	41,25	18,75
3	80	7,87	200	11,02	280	8,58	218	13,11	333	51,59	23,45
4	100	8,66	220	11,02	280	8,58	218	13,11	333	51,92	23,60
5	125	9,84	250	12,60	320	10,00	254	14,09	358	72,38	32,90
6	150	11,22	285	13,39	340	10,79	274	15,67	398	98,34	44,70
8	200	13,39	340	16,14	410	13,07	332	20,47	520	165,00	75,00
10	250	15,94	405	18,11	460	13,86	352	21,89	556	209,00	95,00
12	300	18,11	460	20,47	520	15,98	406	25,83	656	240,24	109,20
16	400	22,83	580	25,20	640	20,87	530	28,58	726	374,00	170,00
20	500	28,15	715	30,51	775	20,87	530	30,31	770	583	265,00



Air Valves

Plastic - Brass

It is called the Air Valve which determines the air - water balance in the system. During the filling of the pipeline; The air in the line evacuates the air in the system quickly. Due to various reasons, it allows small quantities of air to accumulate in the pipeline during operation, under pressure.

During the evacuation of the pipeline, air is sucked into the pipe to prevent vacuum formation, and cavitation hazards are prevented by balancing the system pressure with the atmospheric pressure.

Plastic Air Valves are three types;

1. Single Effect (Kinetic) Plastic Air Valve ½" - ¾" - 1" and 2"
2. Double Effect (Automatic) Plastic Air Valve ½" - ¾" and 1"
3. Tripple Effect (combination) Plastic Air Valve 2"

Order Information

Please provide the following information in order

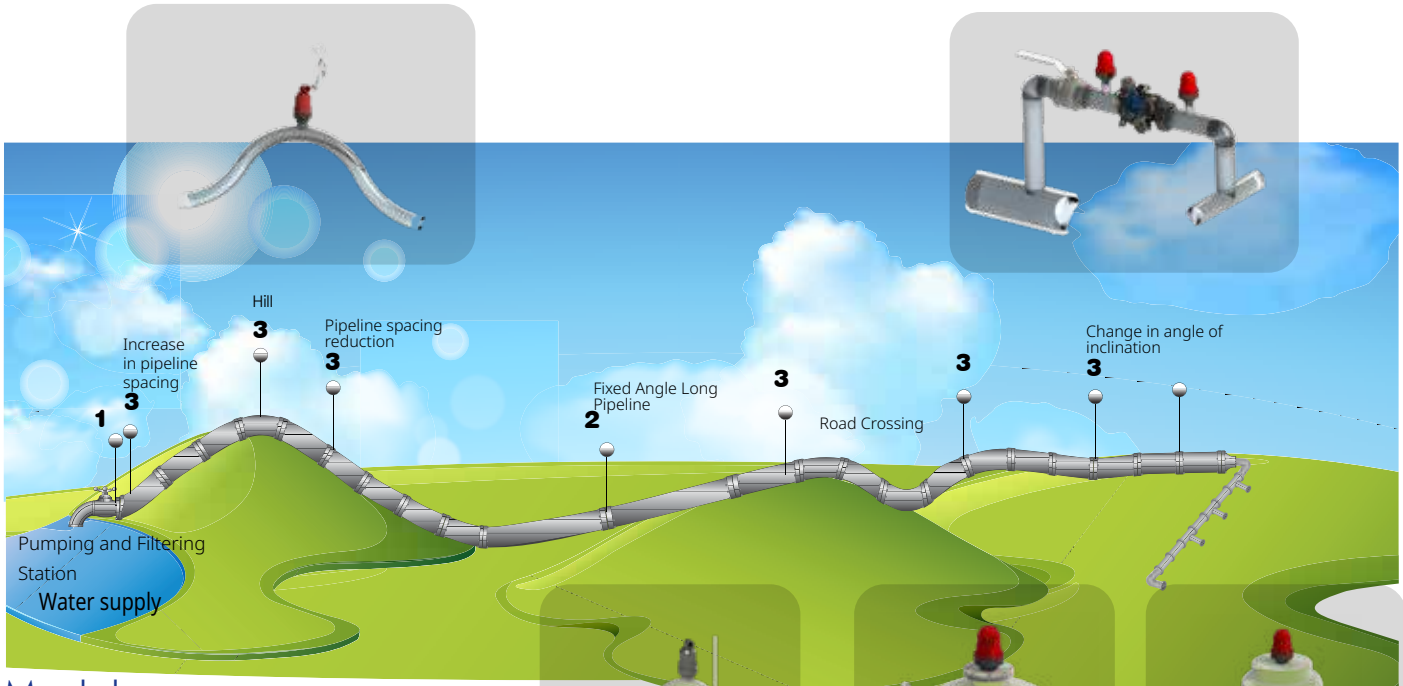
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type

Plastic Air Valves Usage Locations;

1. In agricultural irrigation, (every 400-500 mt on straight lines on the main line, at the beginning of the slope, 400-500 mt at the upward inclines at the peak points, before the beginning of the deflection and before the end of the line and before the irrigation valve (At the points indicated in the figure)

2. In filtration systems, (Disc Filter, Hydrocyclone, Gravel Tank, Automatic Horizontal Filters, etc.).

3. Factory installations in industrial areas, In treatment systems and so on.



Models

1. Single Effect (Kinetic) Air Valves
2. Double Effect (Automatic) Air Valves
3. Tripple Effect (Combination) Air Valves


Hydrasyclon

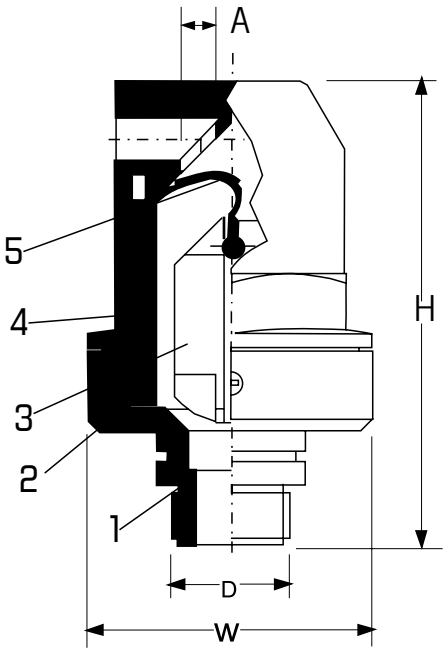

Gravel Tank


Disk Filter System

1/2" - 3/4" - 1" Double Effect (Automatic) Air Valve

#	Material Name	Type Of Material
1	Body	Glass Reinforced polyamide
2	O-Ring	NBR
3	Float	Polipropelen
4	Cover	Glass Reinforced polyamide
5	Float Tire	EPDM

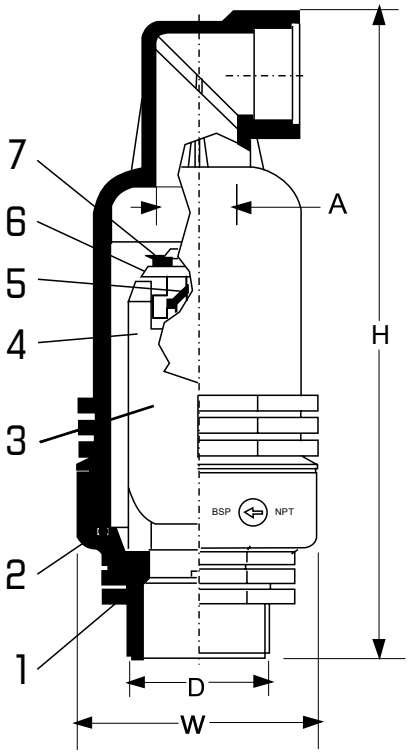
#	Unit	1/2"	3/4"	1"
H	Height (mm)	112	112,75	136,57
W	Width (mm)	58,88	58,88	85,65
D	Connection Diameter	1/2"BSP	3/4"BSP	1"BSP
A	Evacuation Mouthpiece	25mm²	25mm²	25mm²
-	Weight (kg)	0,140	0,141	0,304



2" Tripple Effect (Combination) Air Valve

#	Material Name	Type Of Material
1	Body	Glass Reinforced polyamide
2	O-Ring	NBR
3	Cover	Glass Reinforced polyamide
4	Float	Polipropylen
5	Fork Rubber	EPDM
6	Float Fork	Glass Reinforced polyamide
7	Float Seal	EPDM

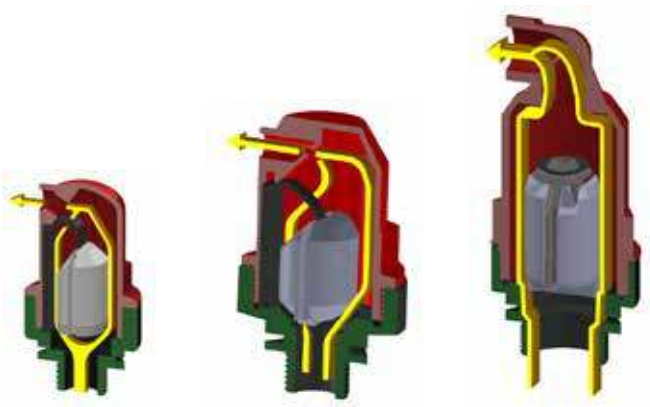
#	Unit	2"
H	Height (mm)	243
W	Width (mm)	103
D	Connection Diameter	2" BSP
a	Evacuation Mouthpiece	7mm²
-	Weight (kg)	0,695
A	Kinetic Nozzle Area	855mm²



Discharge Mode

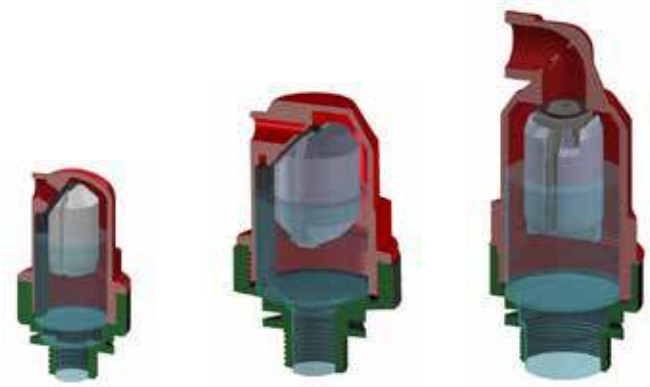
Open Position

Provides rapid evacuation of the high amount of air in the pipeline from the system during the first start of the system



Closed Position

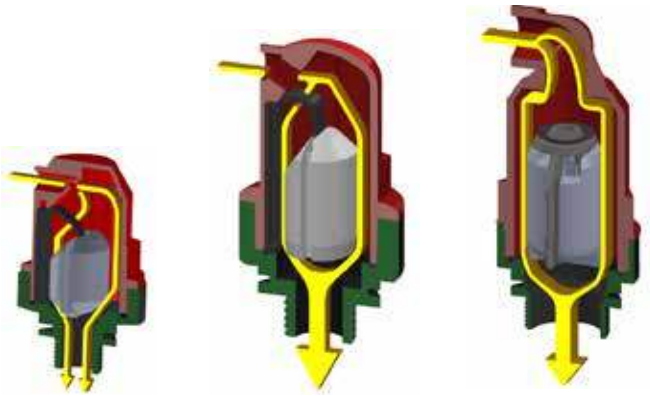
When the water reaches the air valve, the float lifts up and closes the outlet of the air valve



Pressure Stabilization Mode

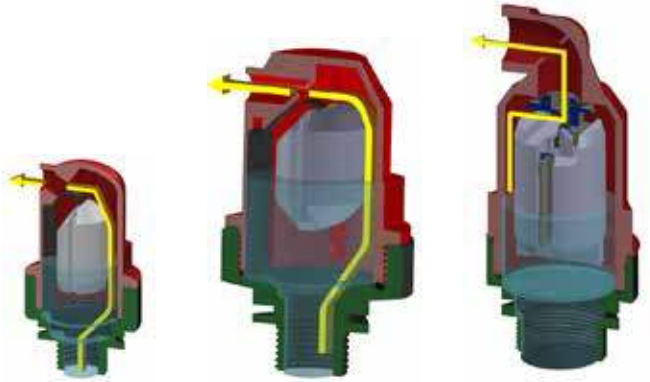
Open Position

During drawing or evacuating the water from the pipeline. The pressure in the line is lower than atmospheric pressure. This condition called vacuum effect, and its causes collapse and cavitation damage in pipes. The float goes down (Open position) and avoids this problem by letting air flow from the outside to the pipeline.



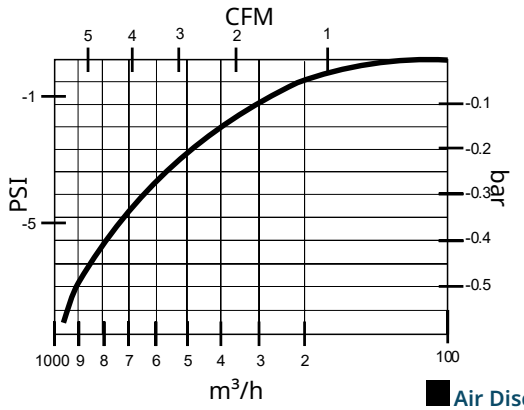
Closed Position

When the system is in service, that is, when the pipeline is under pressure, the low amount of air is dragged with water and collected in certain places such as high parts of the line. The high pressure accumulated air is evacuated with water and the float is partially opened (Modulation position). After evacuation, the float rises again and closes the air valve outlet (Closed position).

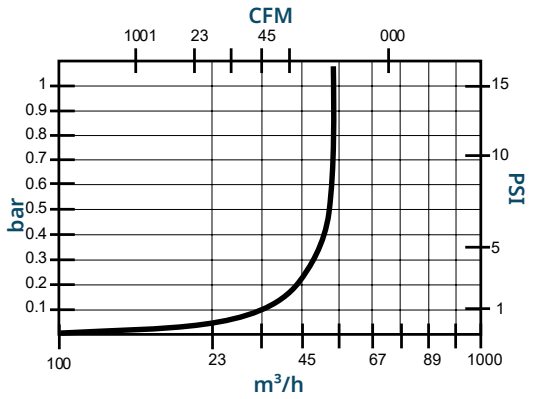


2" Tripple Effect (Combination) Air Valve

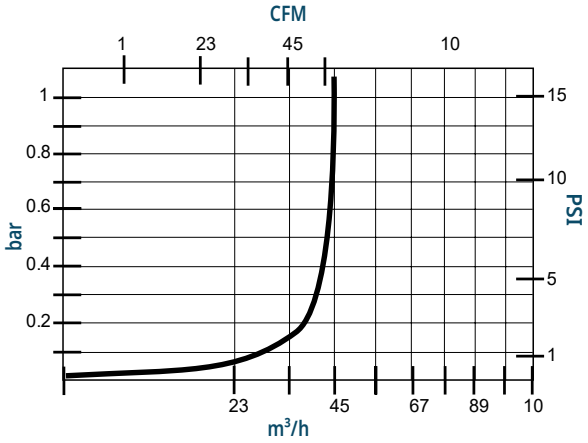
Air intake



Air Discharge

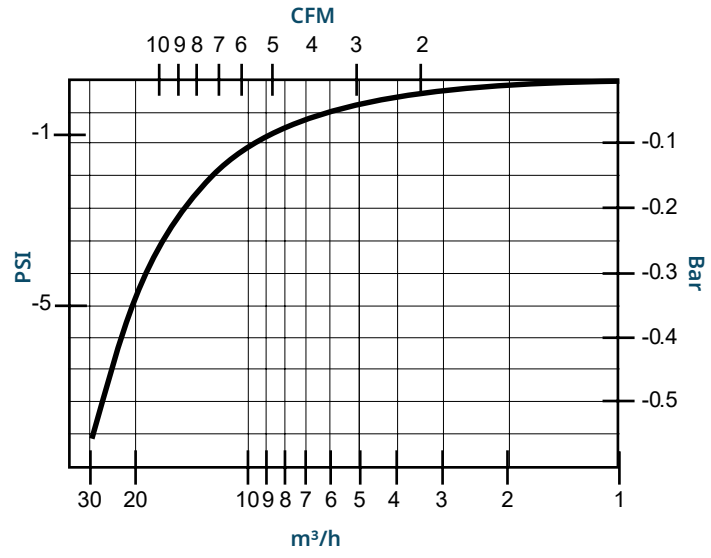


Air Discharge -Automatic Valve

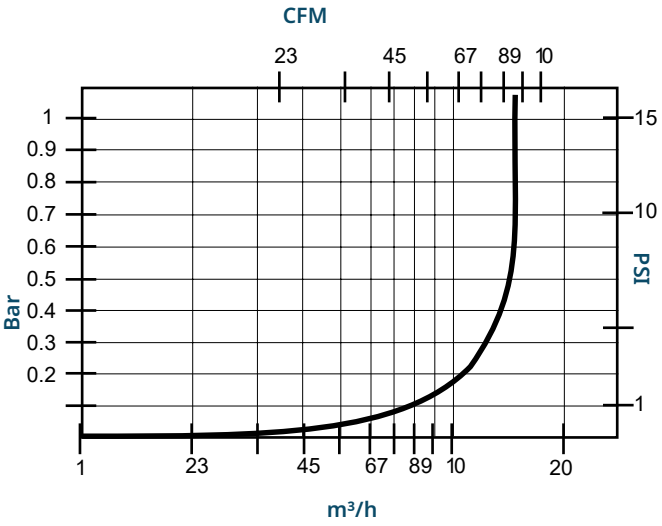


1/2" - 3/4" - 1" Double Effect (Automatic) Air Valve

Air intake



Air Discharge

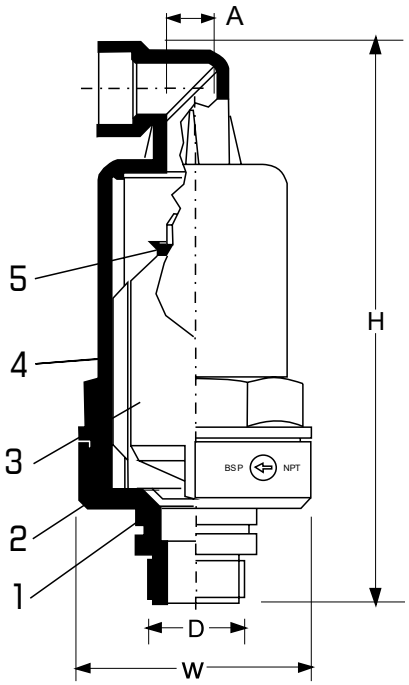


Plastic - Brass

1/2" - 3/4" - 1" Single Effect (Kinetic) Air Valve

#	Material Name	Type of Material
1	Body	Glass Reinforced polyamide
2	O-Ring	NBR
3	Float	Polipropylene
4	Cover	Glass Reinforced polyamide
5	Float Tire	EPDM

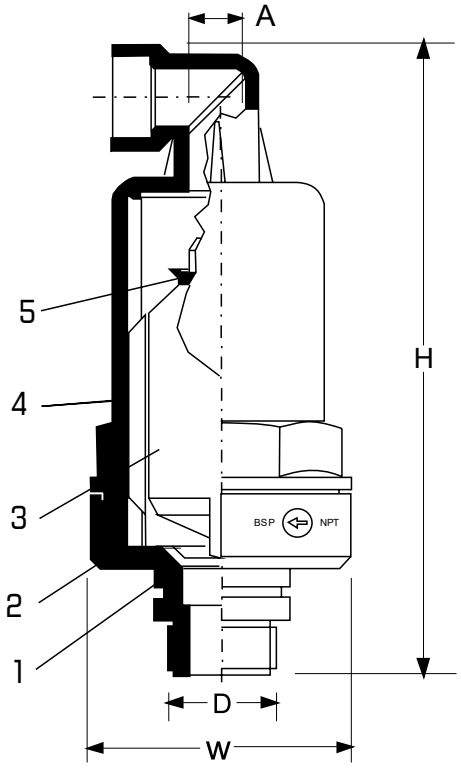
#	Unit	1/2"	3/4"	1"
H	Height (mm)	111,98	112,12	191,60
W	Width (mm)	58,88	58,88	85,65
D	Connection Diameter	1/2"BSP	3/4"BSP	1"BSP
A	Evacuation mouthplace	314 mm²	314 mm²	314 mm²
-	Weight (kg)	0,138	0,141	0,364



2" Single Effect (Kinetic) Air Valve

#	Material Name	Type of Material
1	Body	Glass Reinforced polyamide
2	O-Ring	NBR
3	Float	Polipropylene
4	Cover	Glass Reinforced polyamide
5	Float Tire	EPDM

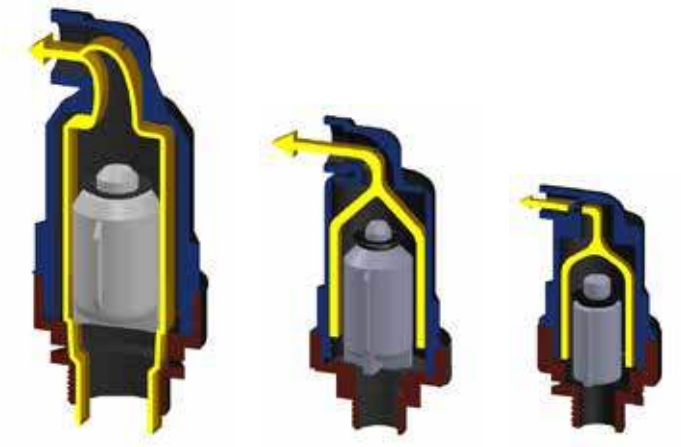
#	Unit	2"
H	Height (mm)	243
W	Width (mm)	103
D	Connection Diameter	2"BSP
A	Evacuation mouthplace	855 mm²
-	Weight (kg)	0,672



Discharge Mode

Open Position

Provides rapid evacuation of the high amount of air in the pipeline from the system during the first start of the system



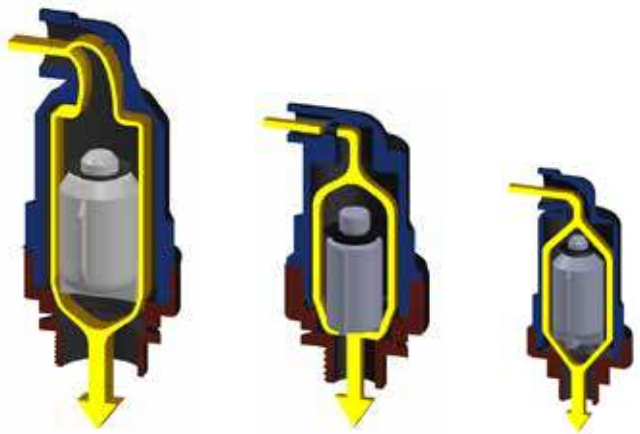
Closed Position

When the water reaches the air valve, the float lifts up and closes the outlet of the air valve

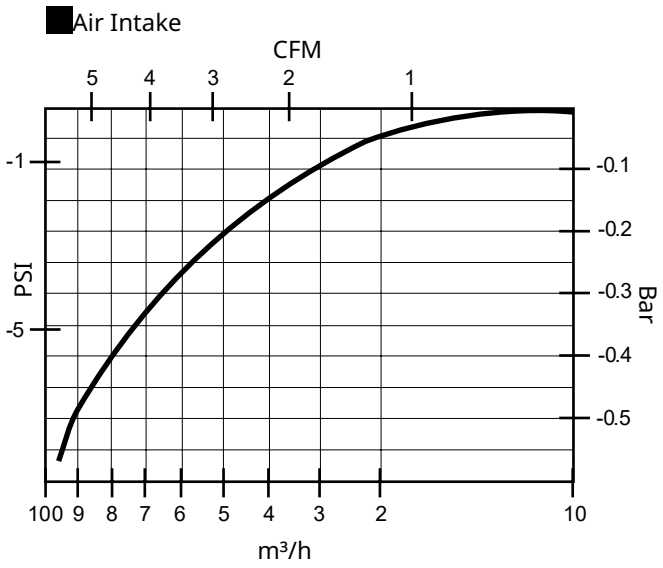
Pressure Stabilization Mode

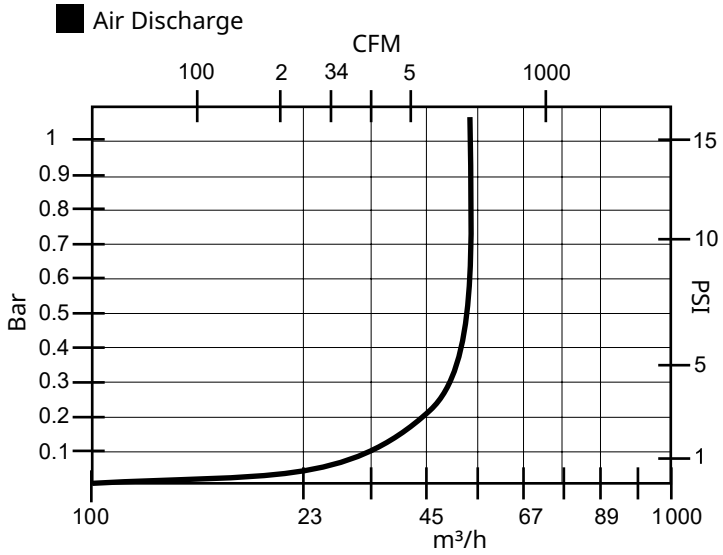
Open Position

During drawing or evacuating the water from the pipeline. The pressure in the line is lower than atmospheric pressure. This condition called vacuum effect, and its causes collapse and cavitation damage in pipes. The float goes down (Open position) and avoids this problem by letting air flow from the outside to the pipeline.

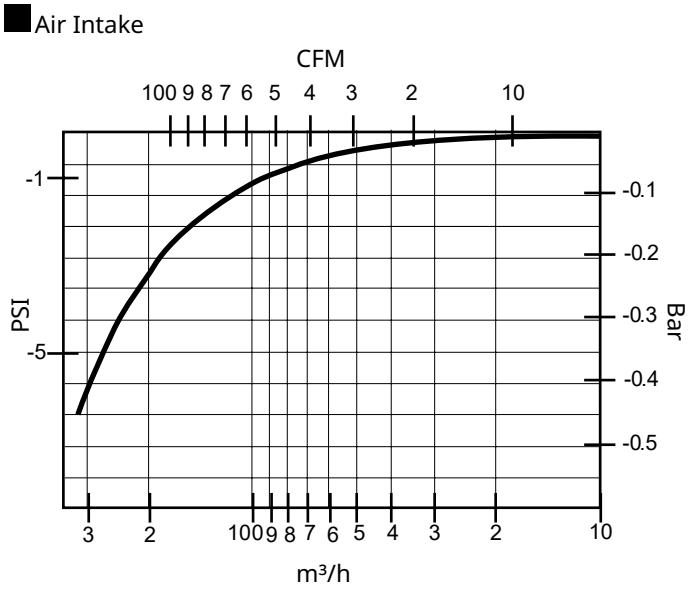


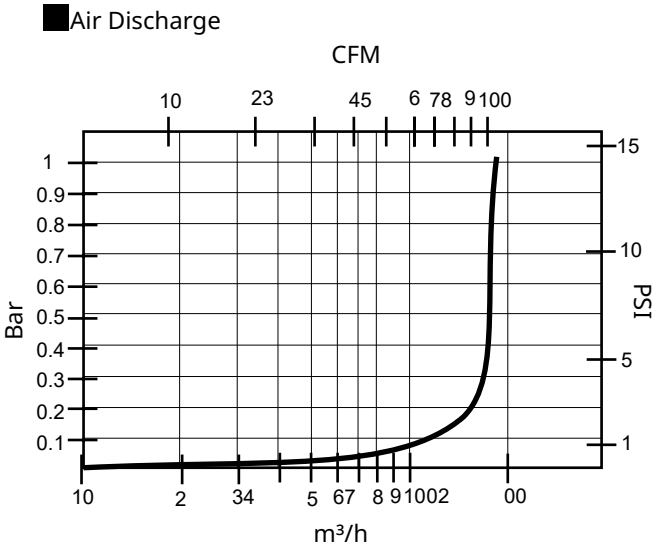
2" Single Effect (Kinetic) Air Valve





1/2" - 3/4" - 1" Single Effect (Kinetic) Air Valve





Non Slam Dynamic Air Release Valves

In a Non Slam Dynamic Air Release Valve; Air and water situated in the suction pipe begins to move at a high speed. When the water reaches the air release valve at a high speed the valve will suddenly close which will cause an impact on the system.

Non slam dynamic air valves slow down the high speed evacuation gradually. It does not reflect this problem on to the system.

In the case of a column break, the water columns are separated from each other to create a low pressure between them. During this time, the air sucks in high volume in normal suction cups.

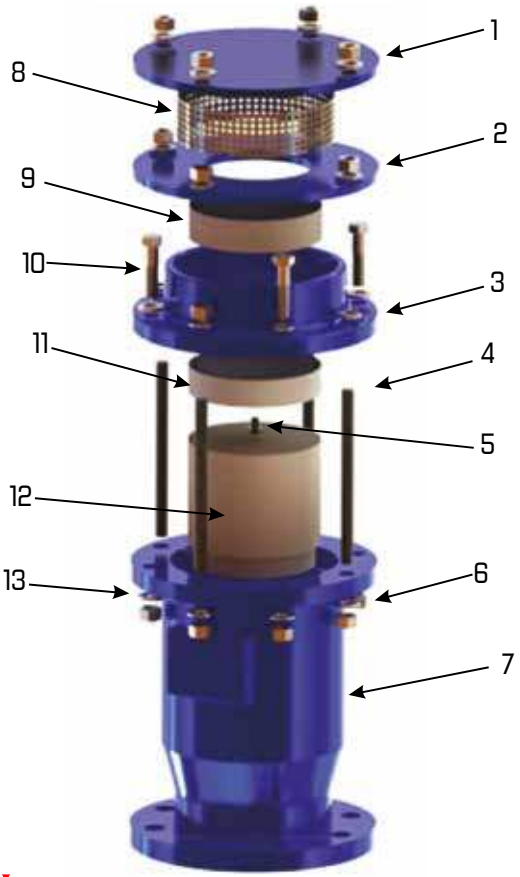
However, in our suction cup, there is a non-impact suction such as a pulse. Thus, moments are reduced while the columns are separated from each other. The momentum is lost and the columns return again. Standard suction cups will blow air out quickly.

Thus, the collision speed and impact of the columns increase. Unwrapped opening and closing suspends the water columns and reduces the energy of the columns as a pillow acts as the columns are opened and closed with some vacuum and air remaining. This solves the pulse problem

Order Information

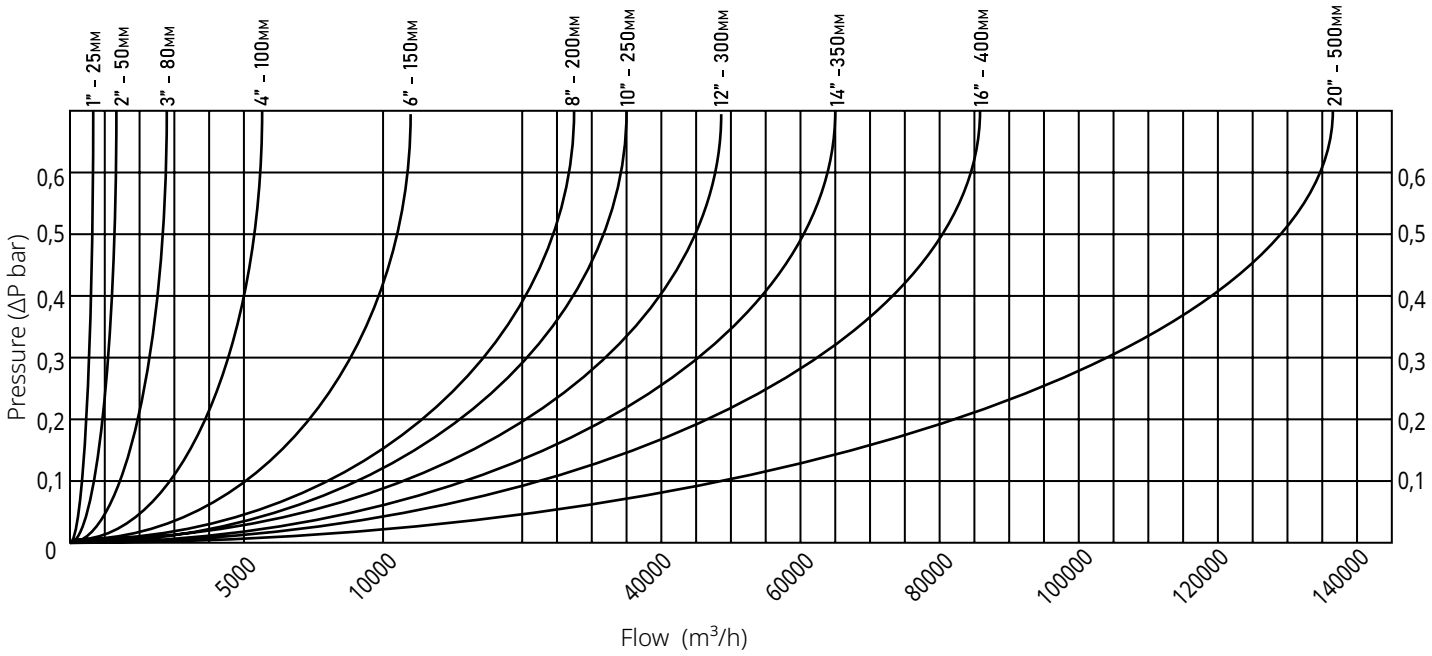
Please provide the following information in order

Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type

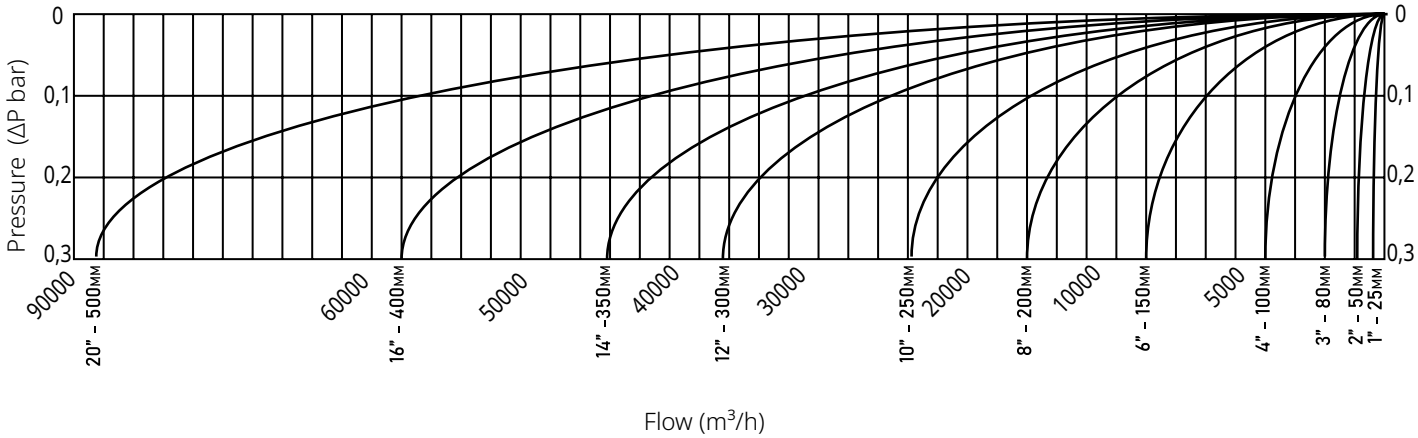


#	Material Name	Type of Material
1	Top Cover	ST-37
2	Cover	ST-37
3	Top Body	GGG40
4	Stud Bolt	8.8 Stainless Steel
5	Valve	Stainless Steel
6	Nut	8.8 Stainless Steel
7	Body	GGG40
8	Filter	Stainless Steel
9	3rd Float	HDPE
10	Bolt	8.8 Stainless Steel
11	2nd Float	HDPE
12	1st Float	HDPE
13	Washer	Stainless Steel

Nominal Air Release Capacity of Non-Pulse Dynamic Air Release Valve

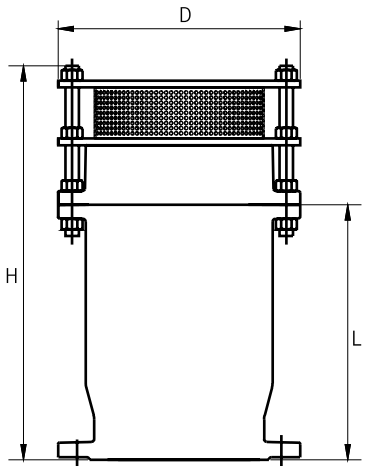


Nominal Air Intake Capacity of Non-Pulse Dynamic Air Relief Valve



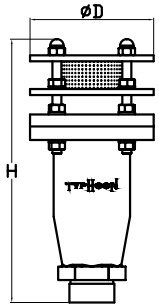
Flanged

DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg
2	50	6,50	165	8,11	206	12,91	328	32,30	14,650
2½	65	7,28	185	8,11	206	12,91	328	33,00	14,950
3	80	7,87	200	9,45	240	14,88	378	47,40	21,500
4	100	8,66	220	10,24	260	15,75	400	57,20	25,950
6	150	11,22	285	11,81	300	17,68	449	100,50	45,600
8	200	13,39	340	11,81	300	18,03	458	132,60	60,150
10	250	15,95	405	17,91	455	24,88	632	271,20	123,000
12	300	18,11	460	18,70	475	25,20	640	436,80	198,150



Threaded

DN		D		H		Weight	
inch	mm	inch	mm	inch	mm	lbs	kg
1"	25	4,50	115	10,16	258	12,10	5,50
1½"	40	4,50	115	10,16	258	13,23	6,00
2"	50	6,50	165	13,80	350	27,60	12,50



Full Open

Allows air to be absorbed or discarded at low pressure differentials

Non Slam Closed

High air pumping slows down intake and suction speeds.

Air Release

System air bubbles Away from the system.

Full Closed

System is sealed Fully closed when running It happens

The 1" Air Release Valves are designed to perform single specified function:

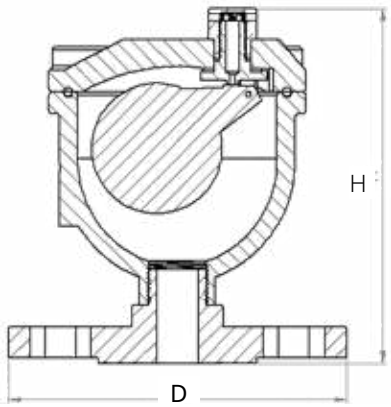
The Discharge of pressurized air pockets during the operation.

The 1" Air Valves that are installed especially in the pump stations decrease overall pumping costs by discharging small pressurized air pockets that are slowing down the water flow.

Order Information

Please provide the following information in order

Maximum mains / operating pressure ..... bar
Main pipeline diameter .... mm
Valve connection type



Size (inch - DN)		D PN 10/16		H PN10/16		Weight
		inch	mm	inch	mm	kg
1"	Threaded	5,59	142	6,456	164,0	6,38
DN40	Flanged	5,91	150	7,697	195,5	7,00
DN50	Flanged	6,50	165	7,697	195,5	7,50
DN65	Flanged	7,28	185	7,697	195,5	9,70
DN80	Flanged	7,87	200	7,697	195,5	10,00
DN100	Flanged	8,66	220	7,697	195,5	11,00
DN150	Flanged	11,22	285	7,697	195,5	13,00

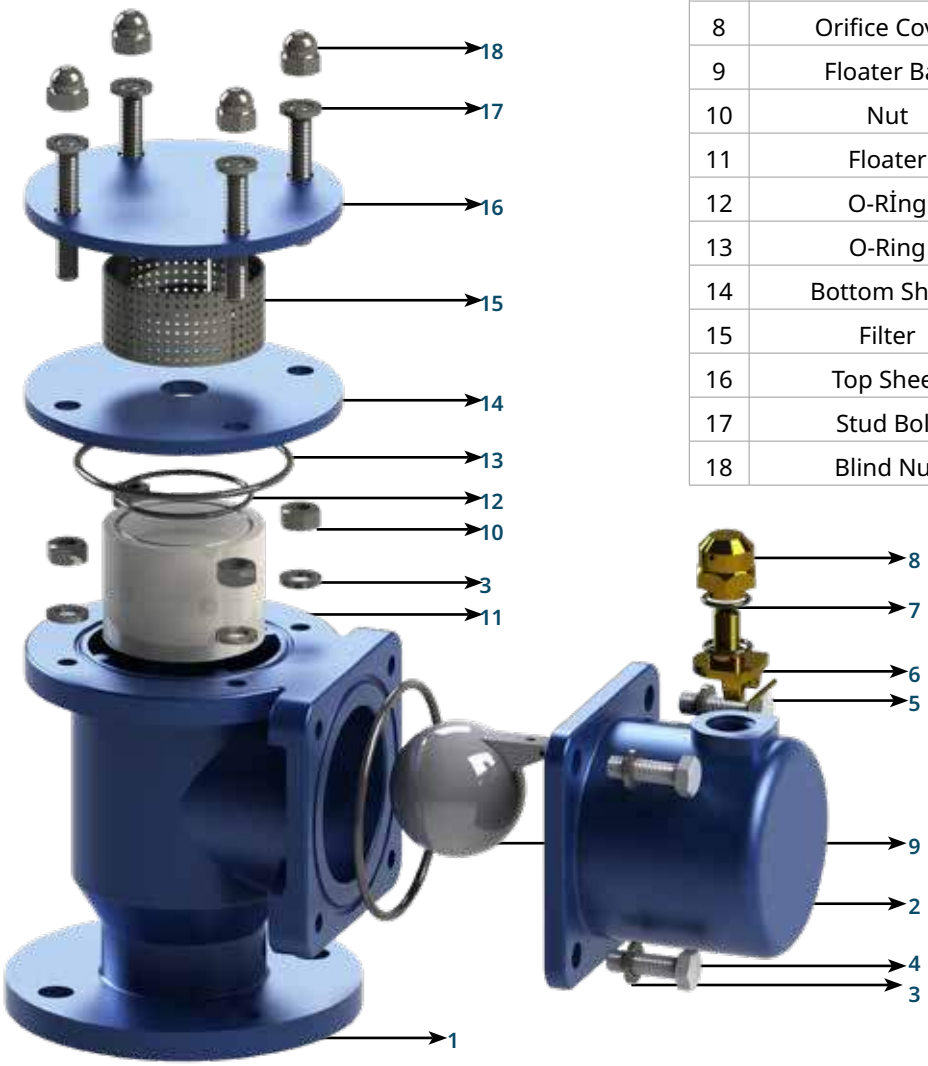
#	Material Name	Type of Material
1	Flanged	GGG40
2	Body	GGG40
3	O-Ring	NBR
4	Floater Ball	HDPE
5	Floater Pin	Brass
6	Orifice	Brass
7	Sealed Rubber	EPDM
8	Cover	GGG40
9	Inbus Bolt	Brass
10	Bolt	Stainless Steel

Order Information

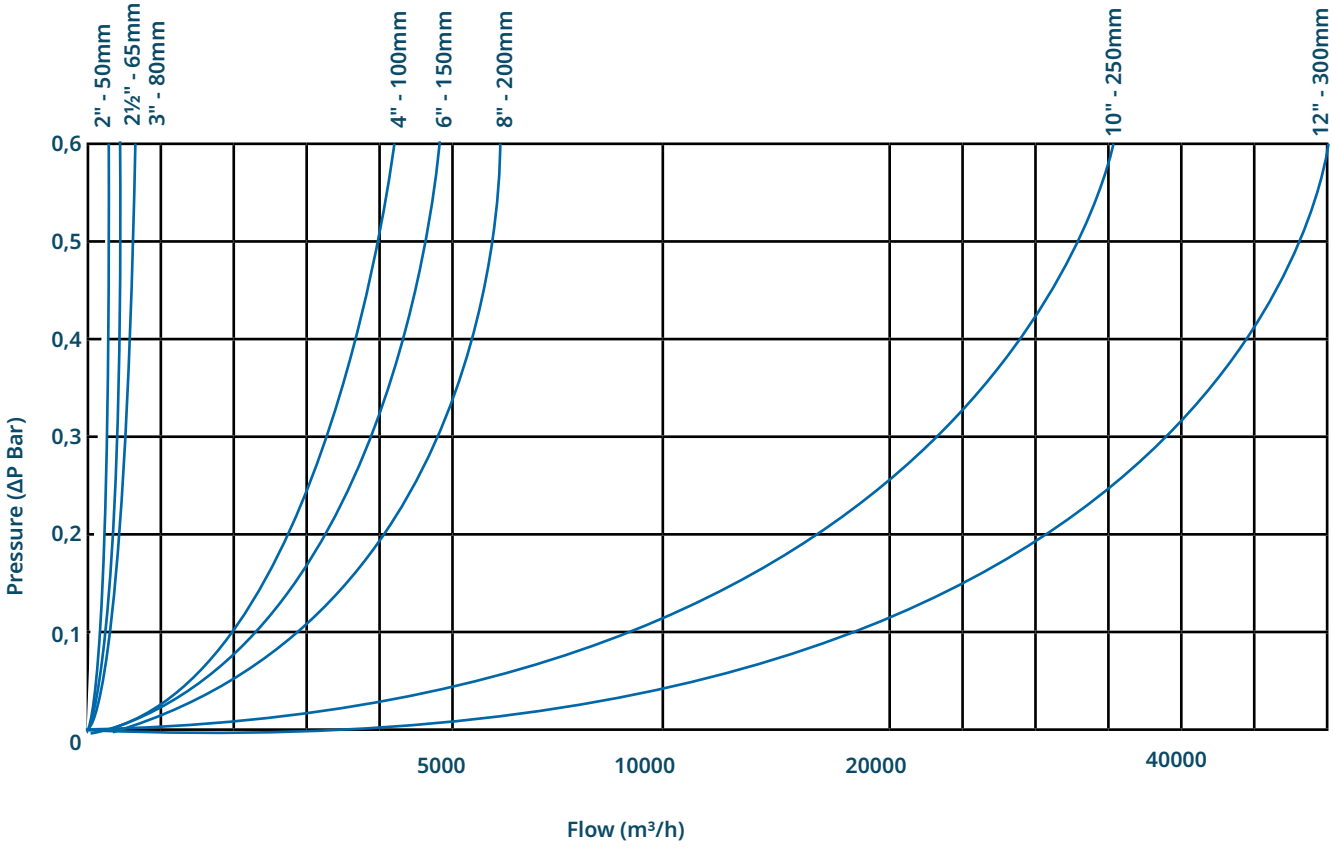
Please provide the following information in order

Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type

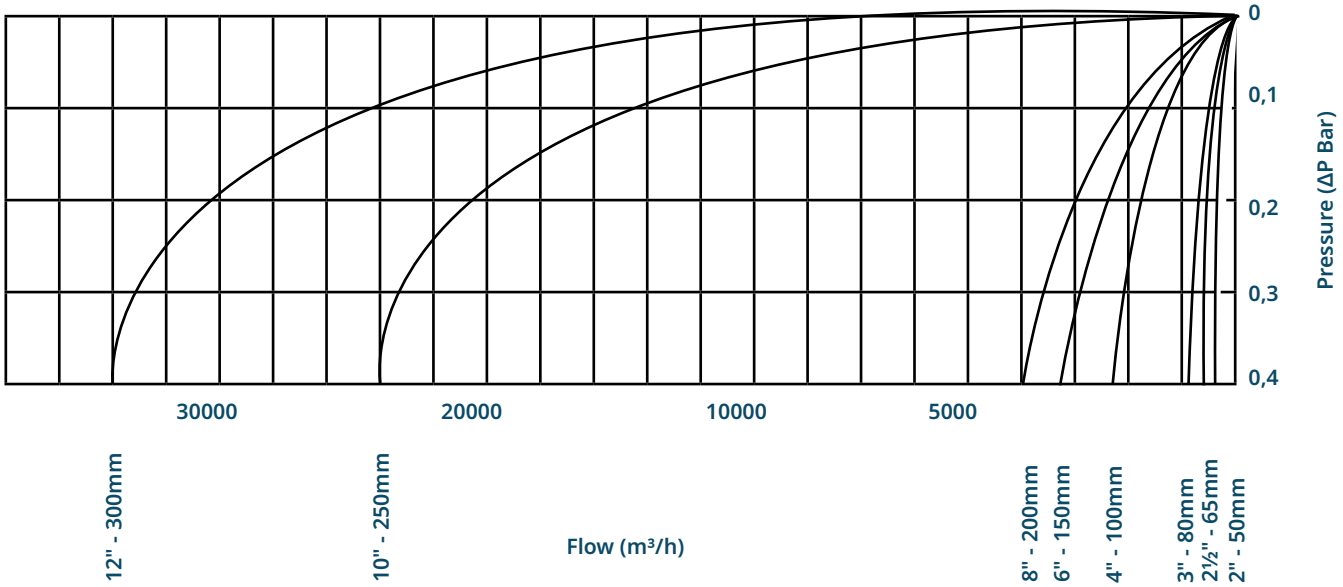
#	Material Name	Type of Material
1	Body	GGG40
2	Side Cover	GGG40
3	Washer	Stainless Steel
4	Nut	Stainless Steel
5	Floater Pin	Brass
6	Orifices	Brass
7	Sealed Rubber	EPDM
8	Orifice Cover	Brass
9	Floater Ball	PE-ABS-PC
10	Nut	Stainless Steel
11	Floater	Polietilen 6
12	O-Rİng	NBR
13	O-Ring	NBR
14	Bottom Sheet	ST37
15	Filter	AIS 302
16	Top Sheet	ST37
17	Stud Bolt	Stainless Steel
18	Blind Nut	Stainless Steel



Nominal Air Release Capacity of Non-Pulse Dynamic Air Release Valve

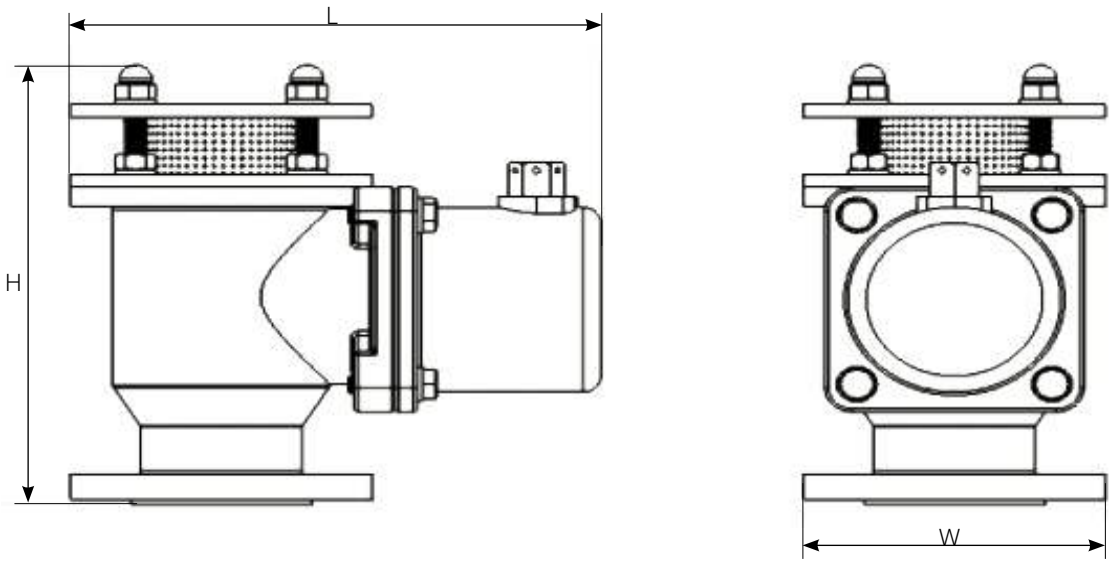


Nominal Air Intake Capacity of Non-Pulse Dynamic Air Relief Valve



Dimensions and Weights

DN		W		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	lbs	Kg
2"	50	6,496	165	11,378	289	11,06	281	31,9	14,5
2 1/2"	65	7,283	185	11,772	299	11,06	281	33,44	15,2
3"	80	7,874	200	13,15	334	13,31	338	57,64	26,2
4"	100	8,661	220	13,543	344	13,31	338	60,72	27,6
6"	150	11,22	285	16,102	409	15,20	386	83,6	38
8"	200	13,386	340	18,267	464	15,20	386	121	55
10"	250	15,95	405	22,44	570	26,97	685	286,6	130
12"	300	18,11	460	23,82	605	23,23	590	440,9	200



TYPHOON Single Chamber Air Release and Vacuum Valves are designed to perform two functions:

1. The venting of large volumes of air on the start-up of the system, while pipelines are failled.

2. The intake of large volumes of air on shut-of the system, while pipelines are being drained.

Operations

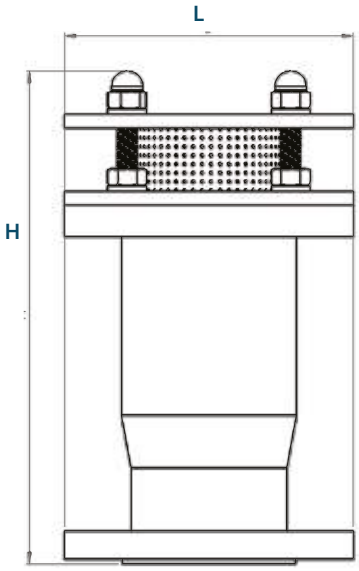
1. System is turned-on by a valve opening or a pump start:

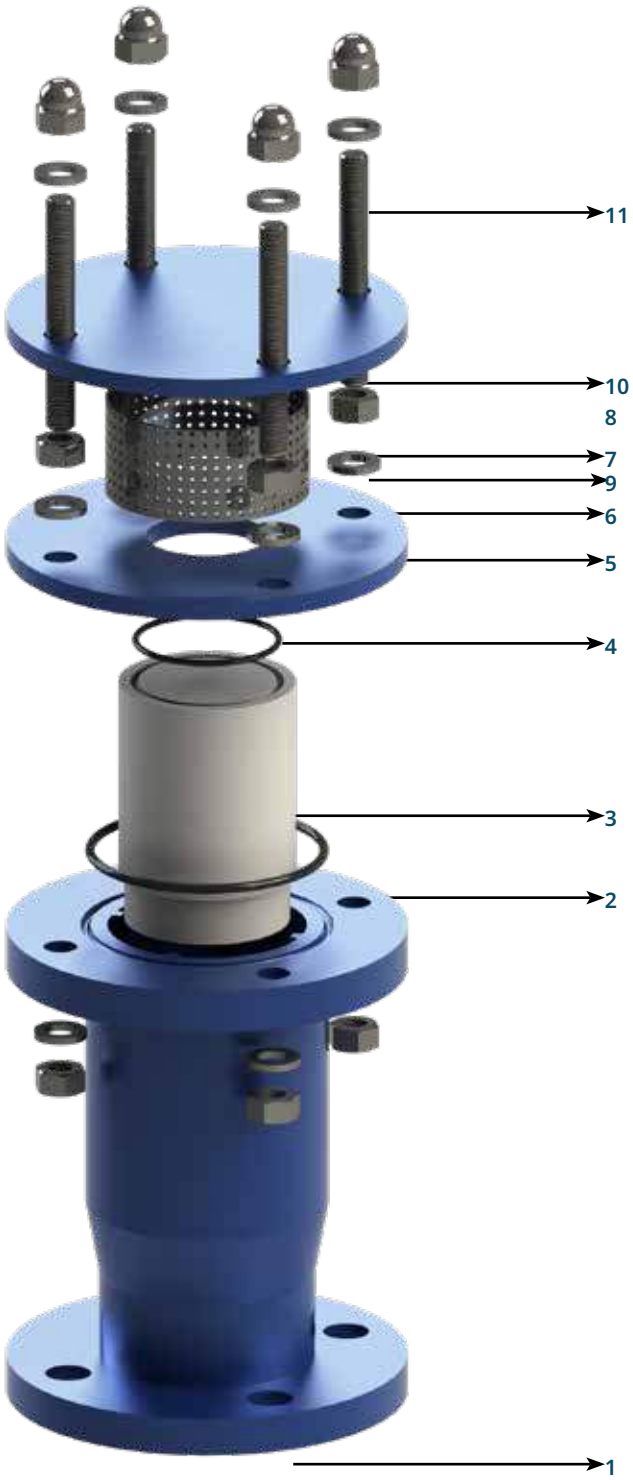
   a. Water moves along the pipeline, pushing air.
   b. The air is vented through the air valve.
   c. Water flows inside the air valve, causing the float to rise and seal the outlet.

2. System is turned-o! by a valve closing, pump shut-o! or by an electricty failure:

   a. Water drains and the level of water in the pipeline drops, causing vacuum inside the system.
   b. The “oat drops and opens the outlet of the valve.
   c. Air is let in the system.

Size (inch-DN)			L		H		Weight
inch	DN	Connection	inch	mm	inch	mm	kg
2	50	Flanged	6,496	165	110,83	281,5	11
2½	60	Flanged	7,283	185	11,122	282,5	12
3	80	Flanged	7,784	200	12,460	316,5	17
4	100	Flanged	8,661	220	13,327	338,5	20
6	150	Flanged	11,220	285	15,216	386,5	35
8	200	Flanged	13,386	340	15,216	386,5	46
10"	250	Flanged	17,52	445	26,97	685	120
12"	300	Flanged	20,55	522	23,23	590	190





#	Material Name	Type of Material
1	Valve Body	GGG40
2	O-Ring	NBR
3	Floater	Polyethylene
4	O-Ring	NBR
5	Bottom Flange	ST37
6	Filter	Stainless Steel
7	Washer	Stainless Steel
8	Nut	Stainless Steel
9	Top Flane	ST37
10	Stud Bolt	Stainless Steel
11	Capped Nut	Stainless Steel

Sewage - Air Release Valve

During the first start-up of the system, it allows the high amount of air in the pipeline to be quickly evacuated from the system. When the water reaches the waste water suction cup sphere, the double acting plastic suction cup float attached to the sphere lifts up and closes the outlet of the suction pad. Thus, due to the compressed air trapped inside, the waste water is closed before reaching the plastic suction cup. The sealing elements of the plastic suction pad continue to fulfill their function.

During the withdrawal or evacuation of the water in the pipeline, the pressure in the line is lower than atmospheric pressure. This situation, called vacuum effect, causes collapse and cavitation damage in pipes. The float attached to the waste water suction sphere goes down and prevents this problem by providing air flow to the pipeline from outside.

When the system is in service, that is, when the pipeline is under pressure, the low amount of air is dragged with water and collects in certain parts of the line. The accumulated compressed air is evacuated together with the water and the float connected to the sphere is partially opened. After evacuation, the float rises again and closes the suction cup outlet.

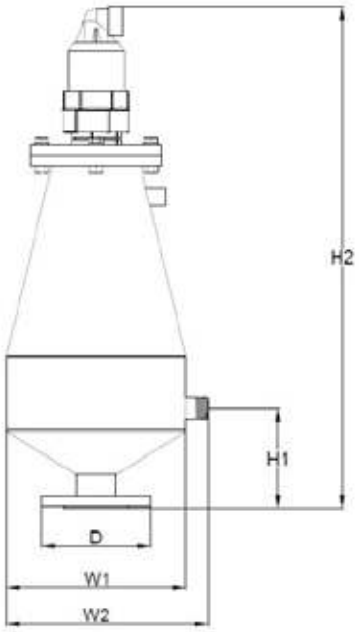
Thanks to the design of the waste water suction cup, it can work smoothly in the sewer networks by preventing the problems of standard suction pads such as clogging and damage in waste water. It is long-lasting thanks to the fact that its existing parts are stainless and can be easily cleaned with the ball valve on it.

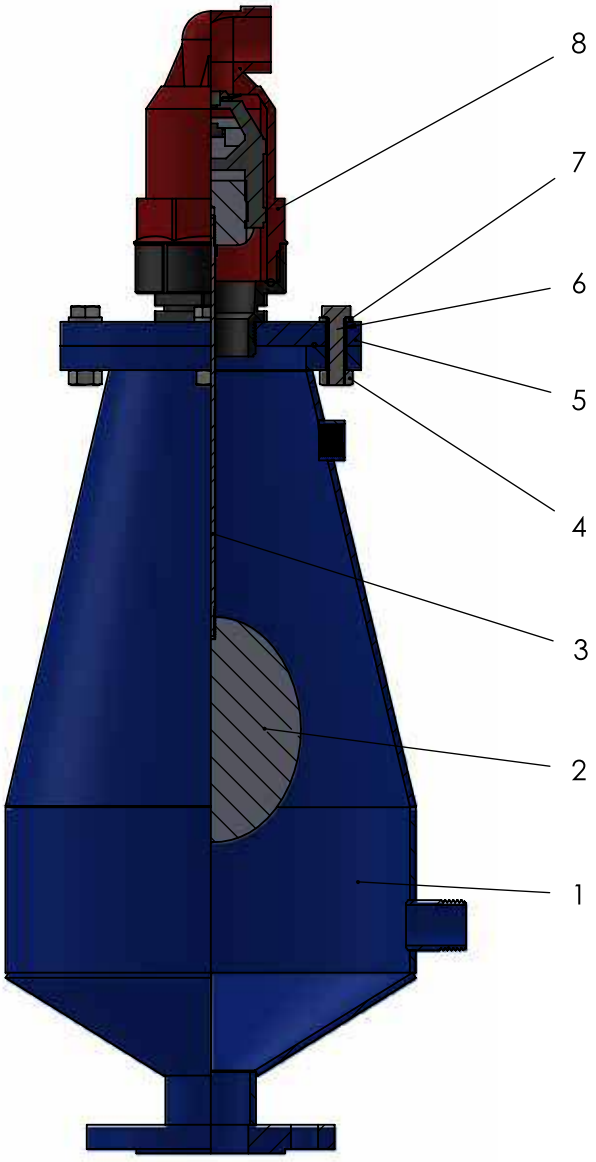
Order Information

Please provide the following information in order

Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type

Size inch / DN	D		W1		W2		H1		H2		Weight	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg
DN50	6,50	165	10,75	273	12,05	306	5,94	151	30,04	763	45,41	20,60
DN80	7,87	200	10,75	273	12,05	306	5,94	151	30,04	763	47,61	21,60
DN100	8,66	220	10,75	273	12,05	306	5,94	151	30,04	763	48,94	22,20
DN150	11,22	285	10,75	273	12,05	306	5,94	151	30,04	763	56,22	25,50
DN200	13,39	340	10,75	273	12,05	306	5,94	151	30,04	763	61,73	28,00





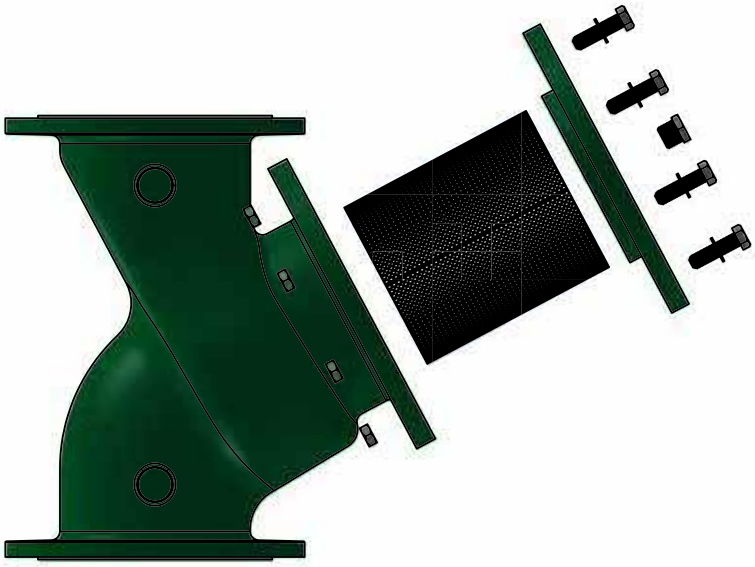
#	Material Name	Type of Material
1	Body	ST 37
2	Sewage - Air Release Valve Globe	Stainless Steel
3	Shaft	Stainless Steel
4	Nut	8.8 Coated Steel
5	Cover	ST37
6	Bolt	8.8 Coated Steel
7	Washer	8.8 Coated Steel
8	2” Double CHamber Air Valve	Plastic

Strainer

Y Type strainer is mounted in front of pump counter control valve and sensitive devices. The main function of the valve is to hold particles such as leaves, wood, chips, pebbles in the water. These particklles which can disrupt costly equipment are collected in the filter of the strainer.

If the pressure diffrence between the inlet and outlet manometers is high, harmful particles can be discharged by opening the drain plug.

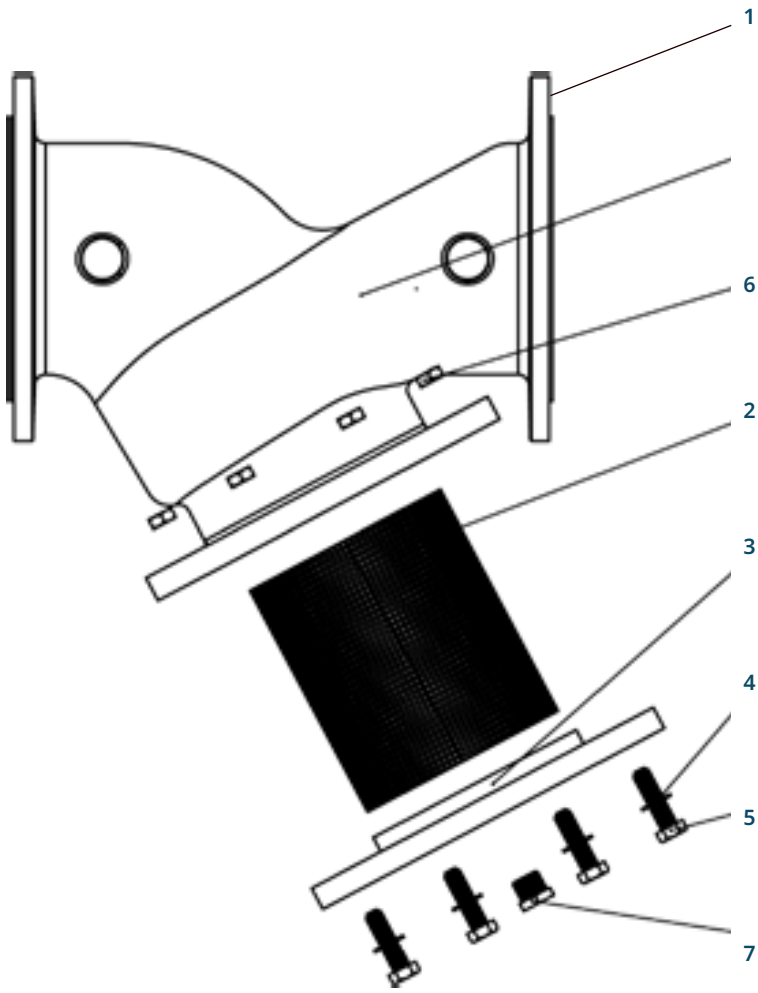
Thanks to its Y-Type design, it has a large dirt holding capacity and low pressure loss



Nominal Size
DN50 - 65 - 80 - 100 - 150 - 200

Nominal Pressure
PN10 - 16 - 25

#	Material Name	Type of Material
1	Body	GGG40
2	Filter	AIS 302
3	Cover	GGG40
4	Washer	A2
5	Bolt	A2
6	Nut	A2
7	Blind cap	A2



Back Flushing Control Valves

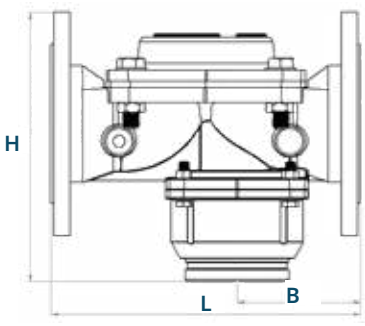
Back Flushing Control Valves are 3-way control valves that operate with line pressure or an external pneumatic pressure in filtration systems. The valve operates in the filtration and back flushing mode in coordination with the filter elements in the system. The diaphragm valve assembly of the valve works in two directions. The valve opens the evacuation path by changing the direction of the valve as it moves into the back flushing mode in the filtration mode. In this way, the cleanliness of the filter elements is best cleared by preventing contamination of clean water with dirty water in the system.

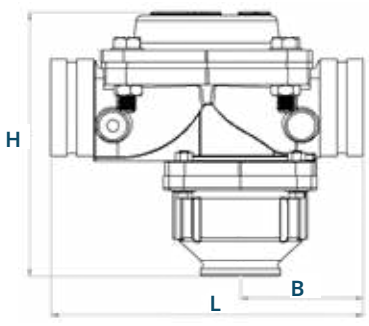
Order Information

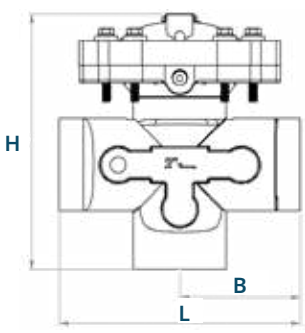
Please provide the following information in order

Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type

Models	H		B		L		Weight	
	inch	mm	inch	mm	inch	mm	lbs	kg
Victaulic 3x2	9,68	246	4,49	114	11,42	290	35,16	15,95
Victaulic 4x3	9,68	246	5,04	128	12,48	317	33,44	17,25
Flanged 3x2	9,68	246	4,49	114	11,42	290	57,64	22,45
Flanged 4x3	9,68	246	5,04	128	12,48	317	60,72	25,00
Victaulic-Threaded 2x2	7,48	190	3,54	90	7,08	180	83,6	3,80







Hydraulic Performance

Model		57/58	
Size		3x2	4x3
In filtration mode recommended max. stream	m^3/h	90	160
	gpm	400	705
Back wash mode Recommended Max. stream	m^3/h	40	90
	gpm	180	400
In filtration mode flow rate factor	Kv (metric)	130	160
	Cv (US)	150	185
Back rinse mode flow rate factor	Kv (metric)	58	70
	Cv (US)	67	81

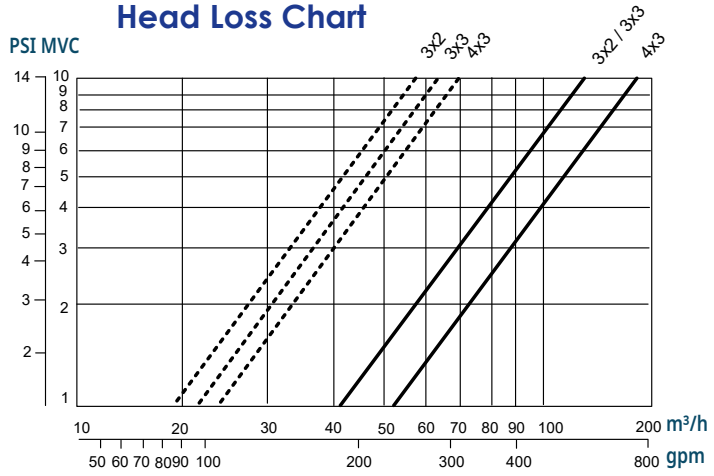
Operating Pressure Range

Standard model: 0.7 - 10 bar / 10 - 150 psi

High-Pressure Model: 1 - 16 bar / 15 - 250 psi

Maximum operating temperature: 60°C (140°F)

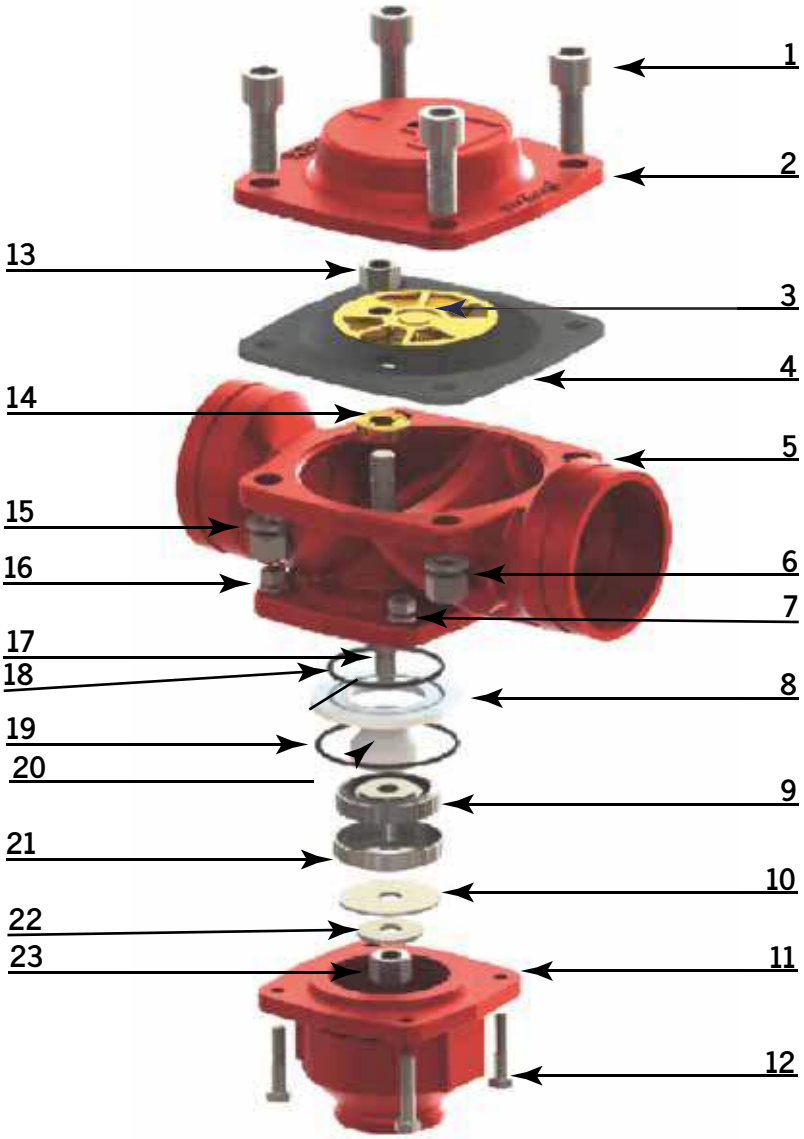
Head Loss Chart



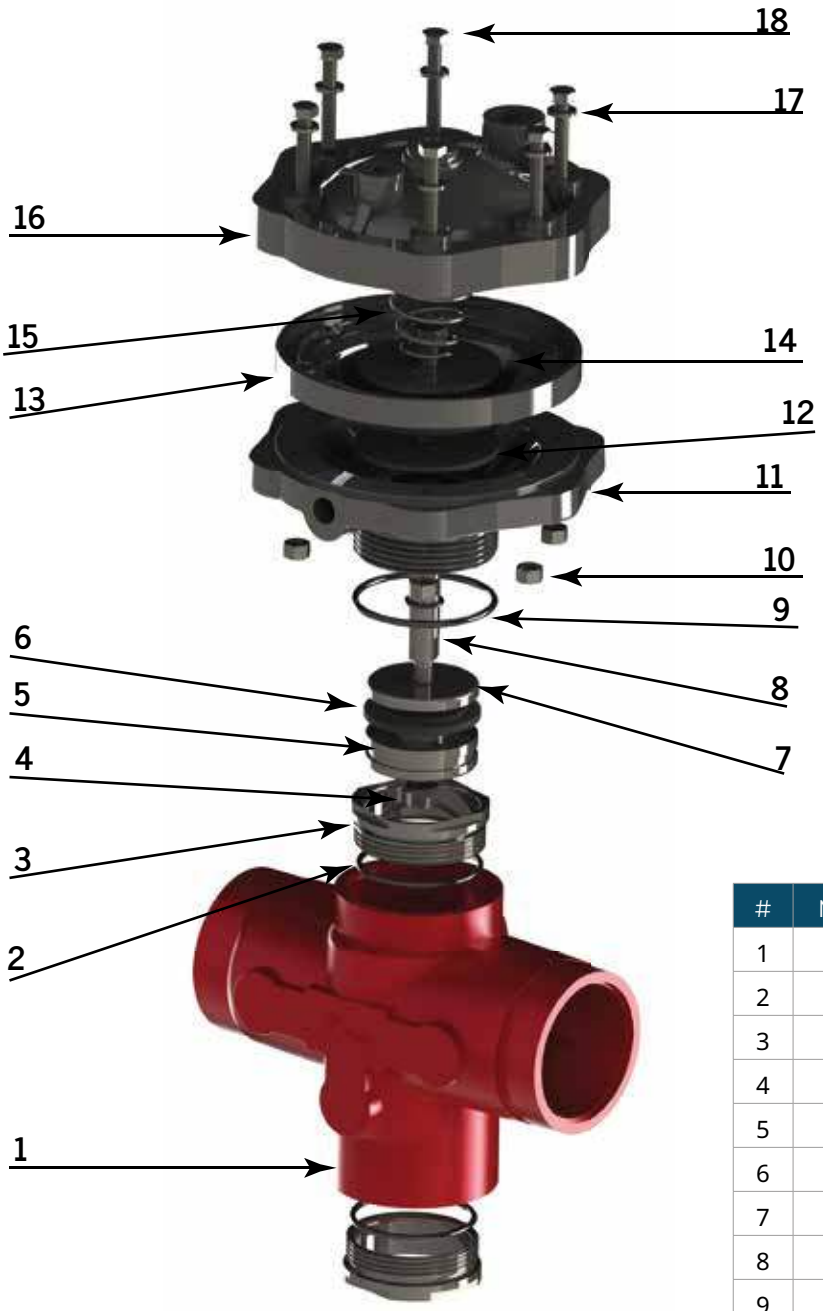
Flushing Mode - - - - - - - - - - -

Filtration Mode ———————

TYPHOON



#	Material Name	Type of Material
1	Bolt	8.8 Coated Steel
2	Cover	GG25 - GGG40
3	Diaphragm Wedge	Brass
4	Diaphragm	Natural Rubber
5	Body	GG25 - GGG40
6	Nut	8.8 Coated Steel
7	Nut	8.8 Coated Steel
8	Disk	HDPE
9	Rubber	EPDM
10	Washer (A)	HDPE
11	Bottom Cover	GG25-GGG40
12	Bolt	8.8 Coated Steel
13	Nut	8.8 Coated Steel
14	Washer	Brass
15	Washer	Coated Steel
16	Washer	Coated Steel
17	Shaft	Coated Steel
18	O-Ring	NBR
19	O-Ring	NBR
20	Material Adapter	HDPE
21	Rubber Container	Stainless Steel
22	Washer (B)	Stainless Steel
23	Nut	8.8 Coated Steel



#	Material Name	Type of Material
1	Body	GGG40
2	O-Ring	NBR
3	Bearings	Stainless Steel
4	Nut	8.8 Coated Steel
5	Bottom Dish	Stainless Steel
6	Rubber	EPDM
7	Top Dish	Stainless Steel
8	Shaft	Stainless Steel
9	O-Ring	NBR
10	Nut	8.8 Coated Steel
11	Bottom Cover	Glass Reinforced polyamide
12	O-Ring	NBR
13	Diaphragm	Natural Rubber
14	Diaphragm Discs	Stainless Steel
15	Coil	Stainless Steel
16	Cover	Glass Reinforced polyamide
17	Washer	8.8 Coated Steel
18	Bolt	8.8 Coated Steel

Plastic Back Flushing Control Valves

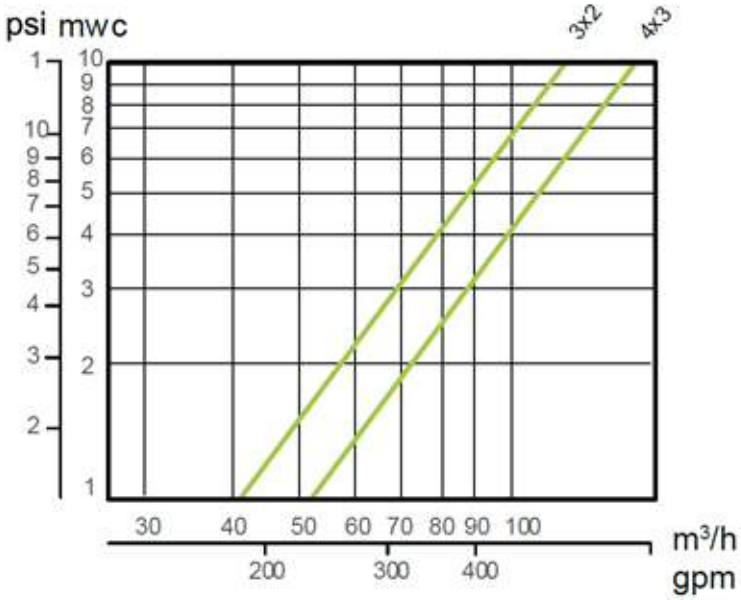
Back Flushing Control Valves are 3-way control valves that operate with line pressure or an external pneumatic pressure in filtration systems. The valve operates in the filtration and back flushing mode in coordination with the filter elements in the system. The diaphragm valve assembly of the valve works in two directions. The valve opens the evacuation path by changing the direction of the valve as it moves into the back flushing mode in the filtration mode. In this way, the cleanliness of the filter elements is best cleared by preventing contamination of clean water with dirty water in the system.

Order Information

Please provide the following information in order

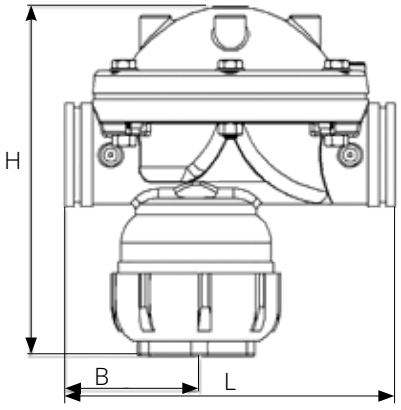
Maximum flow rate ..... m^3/h
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type

Head Loss Chart

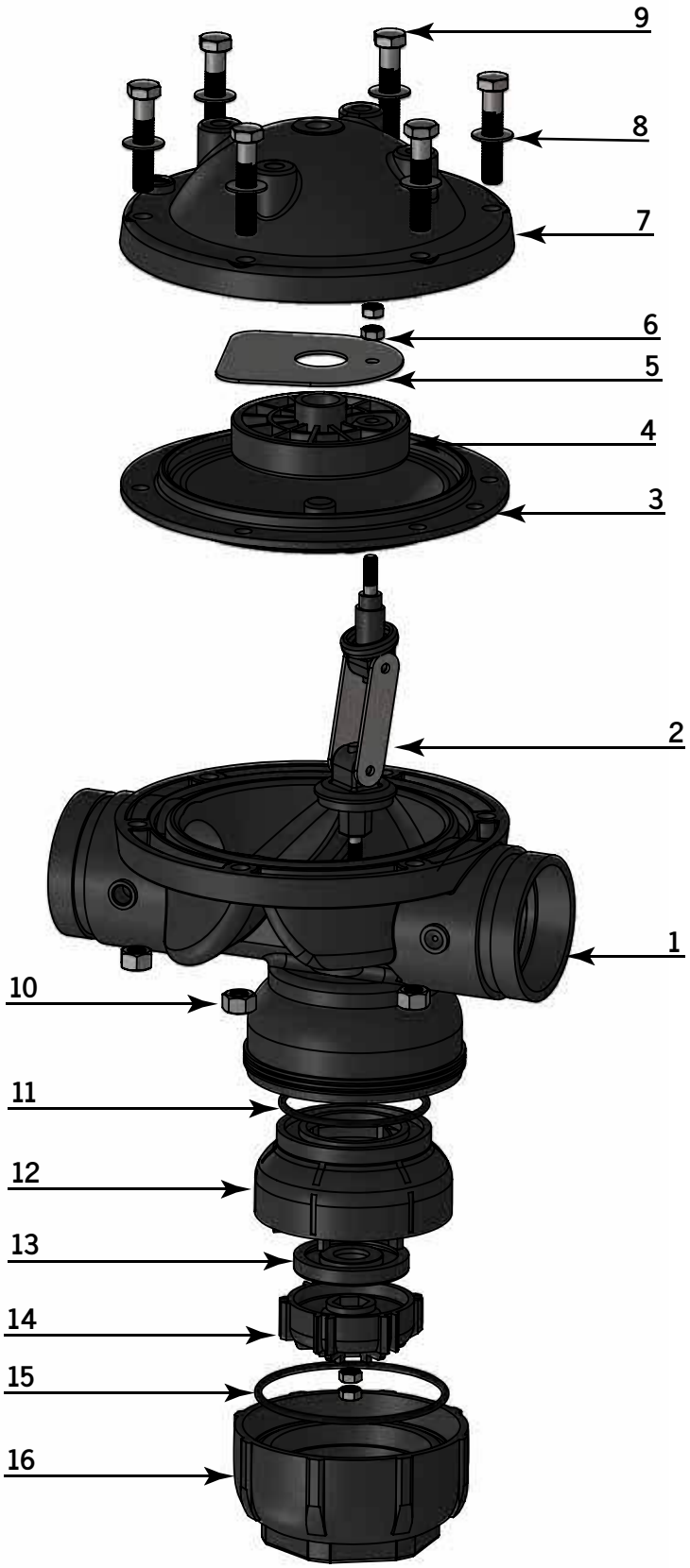


Flushing Mode - - - - - - - - - - - -

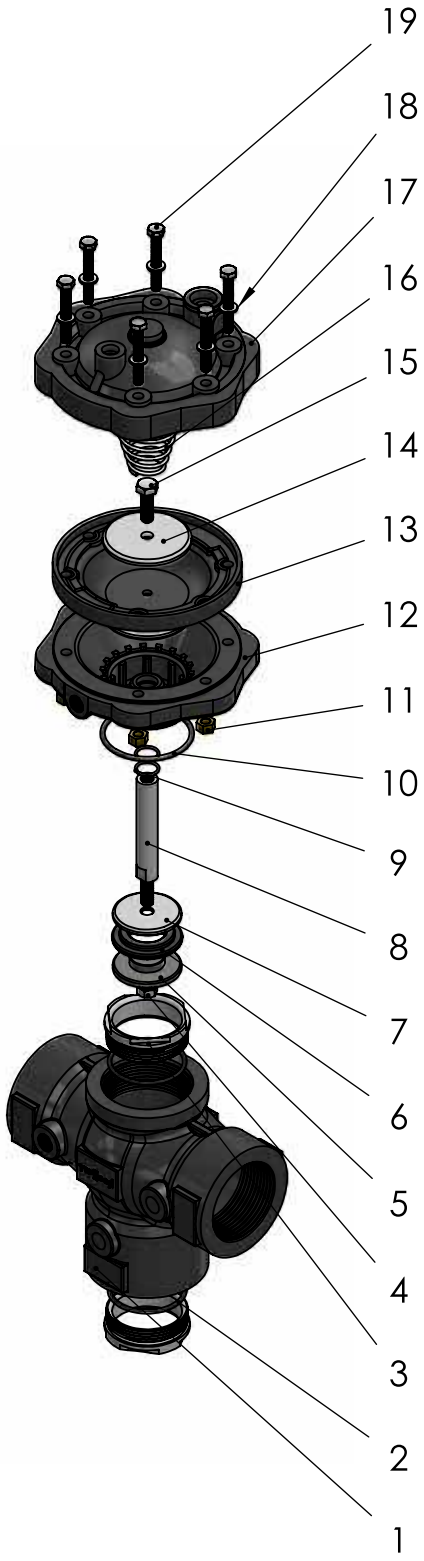
Filtration Mode ————————



Model	H		B		L		Weight	
	inch	mm	inch	mm	inch	mm	lbs	kg
Victaulic 3x2	11,90	292	5,04	128	12,20	310	11,02	5,00
Victaulic 4x3	11,50	292	3,04	128	12,20	310	11,02	5,00

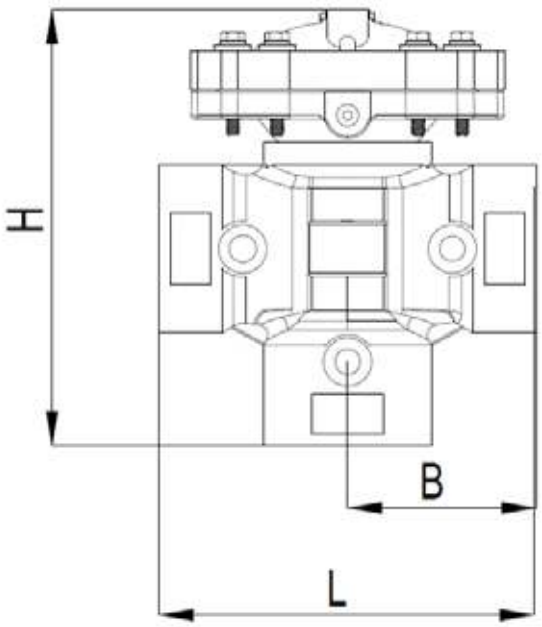


#	Material Name	Type of Material
1	Body	Glass Reinforced polyamide
2	Jolint	Stainless Steel
3	Diaphragm	Natural Rubber
4	Diaphragm Support	Glass Reinforced polyamide
5	Diaphragm Support Plate	Stainless Steel
6	Nut	8.8 Coated Steel
7	Bonnet	Glass Reinforced polyamide
8	Washer	8.8 Coated Steel
9	Bolt	8.8 Coated Steel
10	Nut	8.8 Coated Steel
11	O-Ring	NBR
12	Seat	Glass Reinforced polyamide
13	Rubber Sealing	EPDM
14	Plug	Glass Reinforced polyamide
15	O-Ring	NBR
16	Adapter	Glass Reinforced polyamide

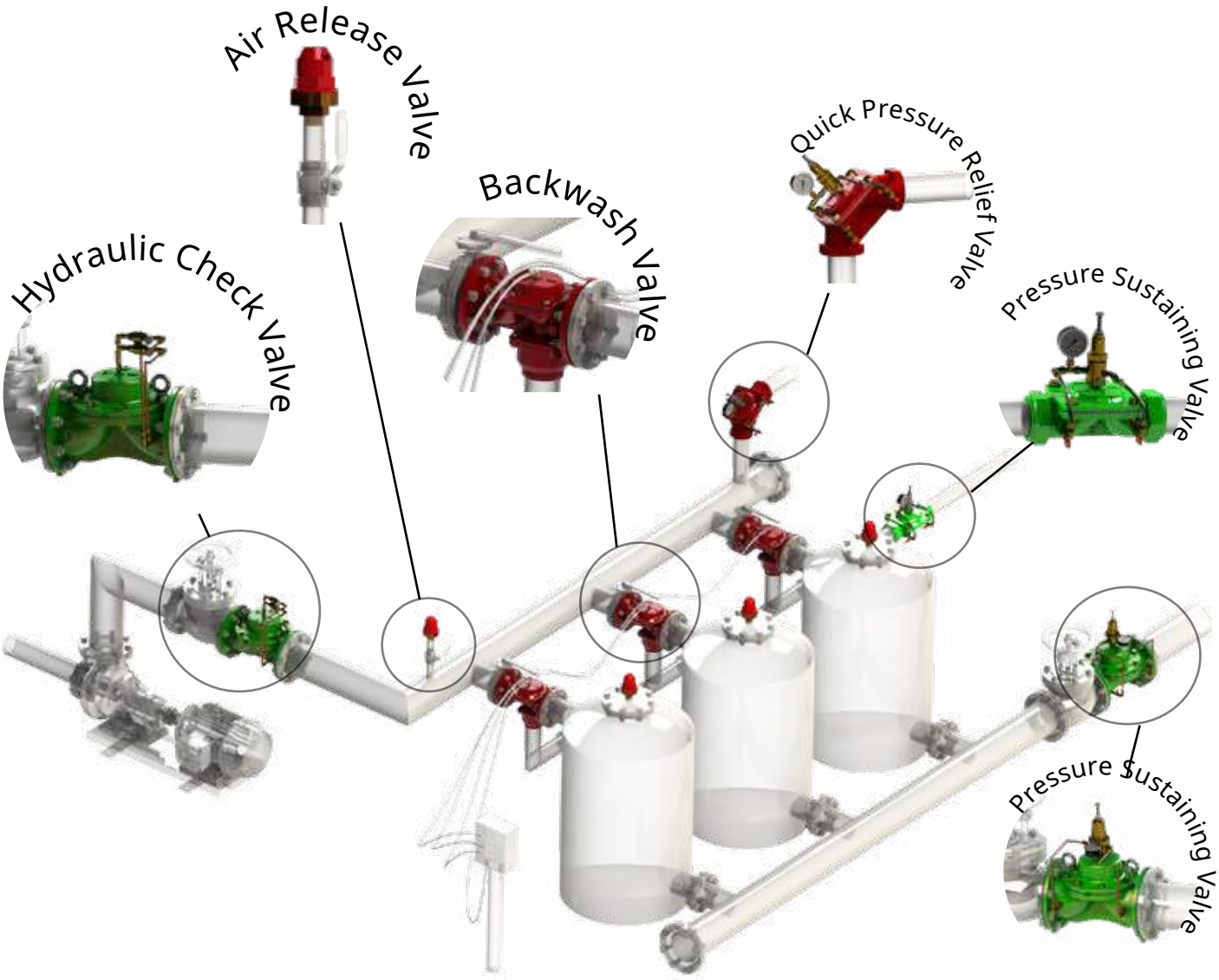


#	Material Name	Type of Material
1	Body	GRP
2	Bearing O-Ring	NBR
3	Bearing	Stainless Steel
4	Nut	Stainless Steel
5	Buttom Bowl	HDPE
6	Seal	EPDM
7	Top Bowl	HDPE
8	Shaft	Stainless Steel
9	Shaft-o-ring	NBR
10	Cover- o-ring	NBR
11	Nut	Brass
12	Buttom Cover	GRP
13	Diaphgram	Naturel Rubber
14	Diynamic Disc	Stainless Steel
15	Shaft Bolt	Stainless Steel
16	Spring	SST 302
17	Cover	GRP
18	Washer	Stainless Steel
19	Bolt	Stainless Steel

Model	H		B		L		Weight	
	inch	mm	inch	mm	inch	mm	lbs	kg
2x2 Threaded	8,15	207	3,5	89	7	178	4,41	2
2x2 Victaulic	8,15	207	5,04	128	10,07	256	4,63	2,1



Application Example



AC Type – 1-2-3 Internal With DP

- Ideal for 1, 2 and 3 station filters
- Start reverse flushing with internal DP
- Can initiate reverse rinsing by DP or time
- Simple setpoint selection with DIP switches
- Manual operation capability
- 24VAC energy input

DC Type – 1-2-3 Internal With DP

- Ideal for 1, 2 and 3 station filters
- Start reverse flushing with internal DP
- Can initiate reverse rinsing by DP or time
- Simple setpoint selection with DIP switches
- Manual operation capability
- With 9VDC and 12VDC energy input

Pressure Differential Device (DP)

- Simple pressure adjustment with DIP switcher
- 12VDC and 24VAC connection models according to the power supply
- Ability to set differential pressure range up to 2 bars
- Ability to test sensor outputs
- Alarm capability with LED indicators

AC Type – 2/10 External Without DP

- Possibility to use up to 2-10 filter stations
- Easy programming thanks to the rotating switches on the panel
- 9-12VDC LATC. with energy input
- Washing cycle from 10 minutes to 24 hours
- Washing time from 10 seconds to 24 hours
- Waiting time between stations from 5 seconds to 40 seconds
- Ability to alarm in infinite loop problems
- Manual, only DP or DP with time adjustment capability

DC Type – 2/10 External Without DP (2 Wiered)

- Possibility to use up to 2-10 filter stations
- Easy programming thanks to the rotary switches on the panel
- 9-12VDC LATC. Energized
- Wash cycle from 10 minutes to 24 hours
- Washing time from 10 seconds to 24 hours
- Stand-by time between 5 and 40 seconds
- Ability to alarm on infinite loop problems
- Manual, only DP or DP with time adjustment

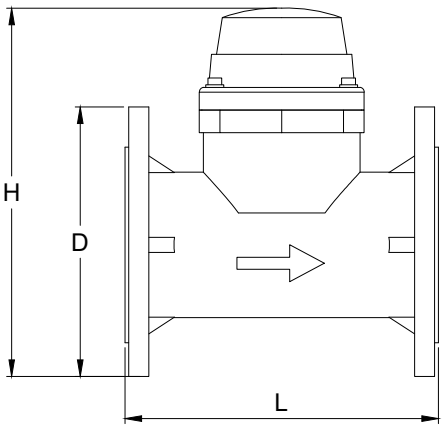
#	Material Name	Description
1	Protection Board	Plastic
2	Control Panel	24VAC input / 12VDC input latch powered
3	Pressure Differential Device	24VAC input / 12VDC input latch powered
4	Nipple Adaptor	1/4" / 1/4" hose connection
5	Solenoid Valve	AC/DC powered, 1/8" female
6	T Fitting	1/8" male / 8mm hose connection
7	Elbow Fitting	1/8" male / 8mm hose connection

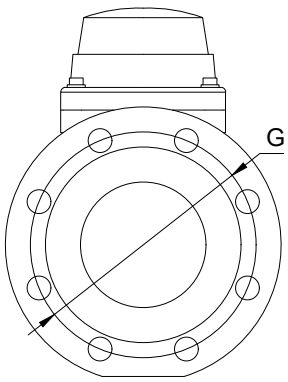
Agricultural Woltman Type Water Meter

- Eco-friendly, long-lasting counter
- Industrial use
- Use in agricultural fields
- Suitability for drinking water installations
- The body is GGG40 Ductile Iron Casting protected with electrostatic paint higher than 200 microns.
- MID approved and certified
- First-class materials and production technology
- Protective, durable body for outdoor and climatic conditions
- Wide and dynamic measuring range
- Accurate water flow measurement with very low pressure losses
- 2 years warranty

DN50-DN300 100lt - 1000lt With Pulse

Size	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300
L	200	200	225	250	250	300	350	450	500
H	250	260	284	296	324	354	401	459	511
D	165	185	200	220	250	285	340	405	460
G	125	145	160	180	210	240	295	355	410
nXM	4xM10	4xM10	8xM10	8xM10	8xM10	8xM10	12xM10	12xM10	12xM10

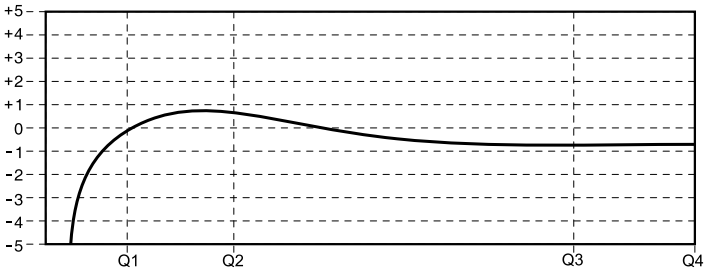


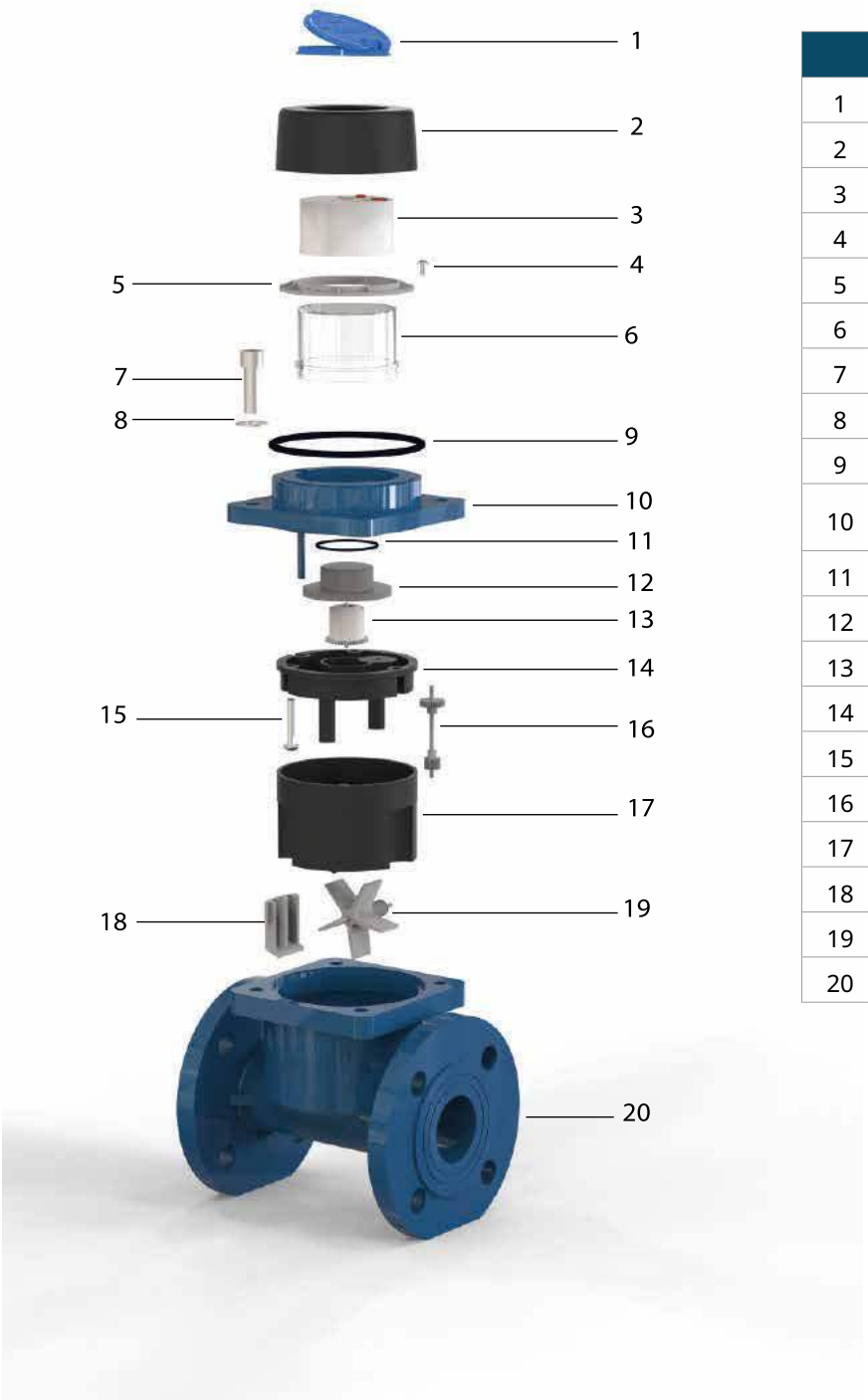


Technicial Specifications

Nominal diameter	DN	mm	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300
	Size	inch	2"	2½"	3"	4"	5"	6"	8"	10"	12"
Maximum flow rate	Q_4		≤78,8	≤78,8	≤125	≤200	≤313	≤500	**≤788**	**≤1250**	**≤2000**
Continuous flow rate	Q_3		≤63	≤63	≤100	≤160	≤250	≤400	**≤630**	**≤1000**	**≤1600**
Pass flow	Q_2		≥2,52	≥2,52	≥4,0	≥6,40	≥10	≥16,0	**≥25,2**	**≥40,0**	**≥64,0**
Minimum flow rate	Q_1		≥1,57	≥1,57	≥2,50	≥4,00	≥6,25	≥10,00	**≥15,7**	**≥25,0**	**≥40,0**
Measuring range (R)	Q_3 / Q_1		≤40								
Transition flow rate	Q_2 / Q_1		1,6								
Overload flow	Q_4 / Q_3		1,25								
Accuracy class	-		±5%								
Acceptable error rate at low flow	(MPE_I)		Water temperature 30°C se ± %2 Water temperature> 30°C se ± %3								
Acceptable error rate at high flow	(MPE_U)		T30 & T50								
Temperature class	T		MAP16								
Water pressure class	Bar		ΔP 10								
Pressure loss class	-		ΔP 25	ΔP 10							
Reading range	m³		999,999					9,999,999			
Read device resolution	m³		0,001					0,01			
Flow profile precision class	-		U10D5								
Connection style	-		H (Horizontal)								
Horizontal length of the meter	mm		200	200	225	250	250	300	350	450	500
magnetic switch power supply	U_{max} / I_{max}		max 24V / 0,01A								
Magnetic switch K-Factor	impulse / L		0,001 & 0,0001								

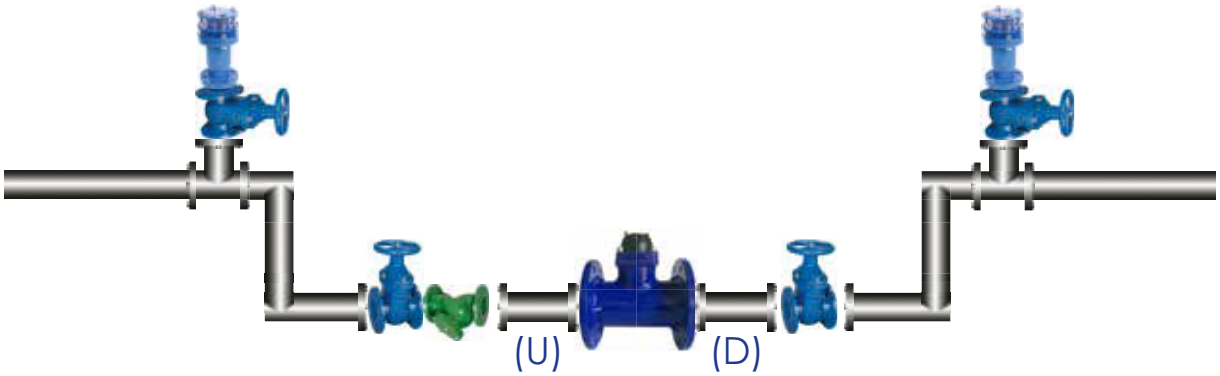
Error Graph





PARTS	
1	Cover
2	Retaining Ring
3	Mechanism and Indicator
4	Pivot
5	Plate
6	Glass cover
7	Screw
8	Gasket
9	O-Ring
10	Flange Cover GGG40 Ductile Iron Casting
11	O-Ring-2
12	Gear Plate
13	Gear Wheel
14	Top Support
15	Screw
16	Mechanical Transmission
17	Sub-Support
18	Regulation Spindle
19	Propeller
20	Body GGG40 Ductile Iron Casting

Counter Application Example for 50 -300 mm



Assembly Table

Inlet Valve Pipe Diameter (mm)	Inlet Valve Diameter (mm)	Filter Diameter (mm)	Meter Inlet Pipe Diameter (mm)	Meter Inlet Pipe Length (U) 10xDN (mm)	Meter Diameter (mm)	Meter Outlet Pipe Diameter (mm)	Meter Inlet Pipe Length (D) 5xDN (mm)	Outlet Valve Diameter (mm)
50	50	50	50	500	50	50	250	50
65	65	65	65	650	65	65	325	65
80	80	80	80	800	80	80	400	80
100	100	100	100	1000	100	100	500	100
125	125	125	125	1250	125	125	325	125
150	150	150	150	1500	150	150	750	150
200	200	200	200	2000	200	200	1000	200
250	252	250	250	2500	250	250	1250	250
300	300	300	300	3000	300	300	1500	300

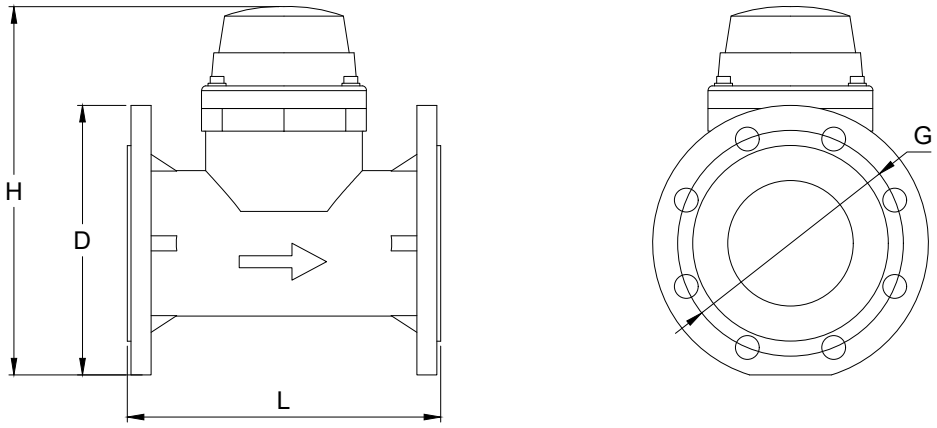
Agricultural Woltman Type Water Meter

Plastic Body

- Eco-friendly, long-lasting counter
- Industrial use
- Use in agricultural fields
- Suitability for drinking water installations
- Le corps est en polyamide de fibre de verre renforcé composite
- MID approved and certified
- First-class materials and production technology
- Protective, durable body for outdoor and climatic conditions
- Wide and dynamic measuring range
- Accurate water flow measurement with very low pressure losses
- 2 years warranty

DN50 ve DN65 10lt With Pulse
DN80 ve DN100 100lt With Pulse

Size	DN50	DN65	DN80	DN100
L	200	200	225	250
H	250	260	284	296
D	165	185	200	220
G	125	145	160	180
nXM	4xM10	4xM10	8xM10	8xM10



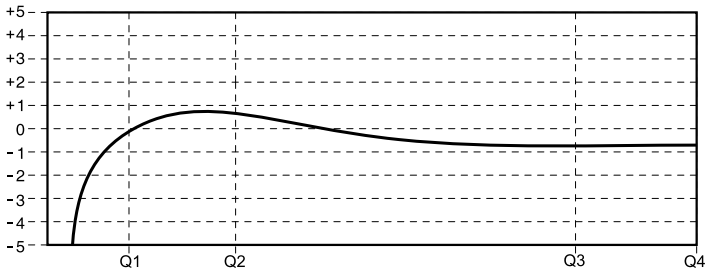
Technicial Specifications

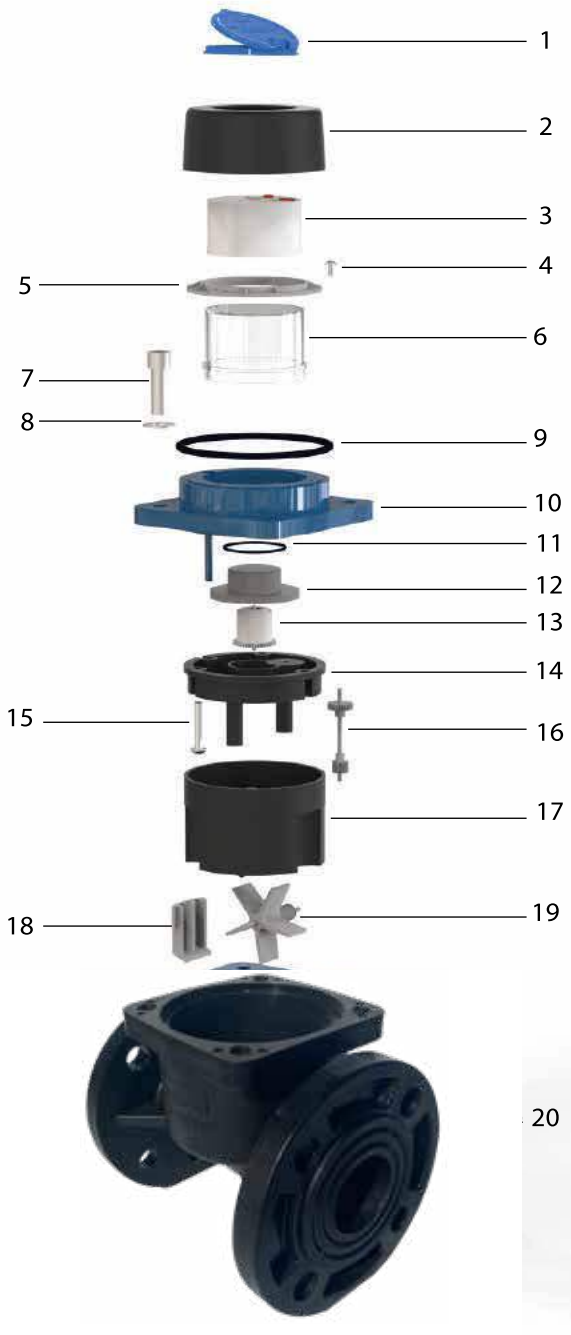
Nominal diameter	DN / Size	mm / inch	DN50 / 2"	DN65 / 2½"	DN80 / 3"	DN100 / 4"				
Maximum flow rate	Q_4		≤78,8	≤78,8	≤125	≤200				
Continuous flow rate	Q_3		≤63	≤63	≤100	≤160				
Pass flow	Q_2		≥2,52	≥2,52	≥4,0	≥6,40				
Minimum flow rate	Q_1		≥1,57	≥1,57	≥2,50	≥4,00				
Measuring range (R)	Q_3 / Q_1		≤40							
Transition flow rate	Q_2 / Q_1		1,6							
Overload flow	Q_4 / Q_3		1,25							
Accuracy class	-		±5%							
Acceptable error rate at low flow	(MPE_l)		Water temperature 30°C se ± %2 Water temperature> 30°C se ± %3							
Acceptable error rate at high flow	(MPE_u)		T30 & T50							
Temperature class	T		MAP16							
Water pressure class	Bar		ΔP 10							
Pressure loss class	-		ΔP 25	ΔP 10						
Reading range	m^3		999,999				9,999,999			
Read device resolution	m^3		0,001				0,01			
Flow profile precision class	-		U10D5							
Connection style	-		H (Horizontal)							
Horizontal length of the meter	mm		200	200	225	250	250	300	350	450	500
magnetic switch power supply	U_{max} / I_{max}		max 24V / 0,01A							
Magnetic switch K-Factor	impulse / L		0,001 & 0,0001							

Agricultural Woltman Type Water Meter

Plastic Body

Error Graph

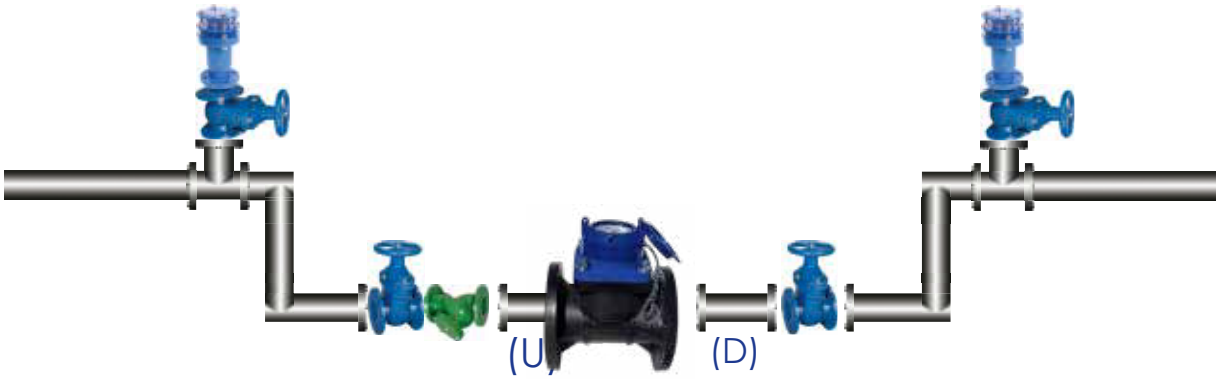




PARTS	
1	Cover
2	Retaining Ring
3	Mechanism and Indicator
4	Pivot
5	Plate
6	Glass cover
7	Screw
8	Gasket
9	O-Ring
10	Flange Cover composite reinforced glass fiber polyamide
11	O-Ring-2
12	Gear Plate
13	Gear Wheel
14	Top Support
15	Screw
16	Mechanical Transmission
17	Sub-Support
18	Regulation Spindle
19	Propeller
20	Body composite reinforced glass fiber polyamide

Plastic Body

Counter Application Example for 50 -100 mm



Assembly Table

Inlet Valve Pipe Diameter (mm)	Inlet Valve Diameter (mm)	Filter Diameter (mm)	Meter Inlet Pipe Diameter (mm)	Meter Inlet Pipe Length (U) 10xDN (mm)	Meter Diameter (mm)	Meter Outlet Pipe Diameter (mm)	Meter Inlet Pipe Length (D) 5xDN (mm)	Outlet Valve Diameter (mm)
50	50	50	50	500	50	50	250	50
65	65	65	65	650	65	65	325	65
80	80	80	80	800	80	80	400	80
100	100	100	100	1000	100	100	500	100

Pressure Reducing Pilot

1/4 Needle Valve Brass

Pressure Sustaining Pilot

3 Way Mini Valve

Solenoid 3 Way 24V AC

Solenoid DC Latch 3 Way

Finger Filter (Brass-Plastic)

1/4" x 8mm Male Branch TE

1/4" x 8mm Elbow

1/4" x 8mm Nipple

1/4" Nipple

8 x 8mm Nipple

1/4" x 8mm Manometer Base

1/8" x 8mm Male Branch TE

1/8" x 8mm Elbow

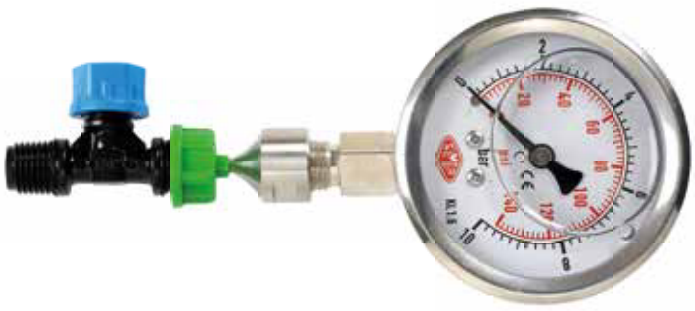
1/8" x 8mm Nipple

1/8" Nipple

1/8" x 1/4" Nipple

1/4" Manometer Base

Manometer Needle



Certificates

CERTIFICATE

CERTIFICATE OF CONFORMITY

Manufacturer / Üretici
TAYFUR SU SİSTEMLERİ MAKİNE MÜHENDİSLİK SANAYİ VE TİCARET ANONİM ŞİRKETİ
Address / Adres
KARACAOĞLAN MAHALLESİ 6172 SOKAK NO:19 A BORNOVA / İZMİR / TÜRKİYE

Product Description / Ürün Tanımı
HYDRAULIC CONTROL VALVES / HİDROLİK KONTROL VANALARI

Product Types / Ürün Tipleri
TYPHOON SERIES
MANUAL HYDRAULIC CONTROL VALVE / PRESSURE REDUCING CONTROL VALVE
PRESSURE REDUCING AND PRESSURE SUSTAINING CONTROL VALVE
PRESSURE SUSTAINING CONTROL VALVE / PRESSURE REDUCING AND SOLENOID CONTROL VALVE
SOLENOID CONTROL VALVE / QUICK RELIEF CONTROL VALVE / FLOAT LEVEL CONTROL VALVE
ELECTRIC FLOAT LEVEL CONTROL VALVE / DIFFERENTIAL FLOAT LEVEL CONTROL VALVE
PUMP CONTROL VALVE / DEEP WELL PUMP CONTROL VALVE / SURGE ANTICIPATING VALVE
HYDRAULIC CHECK VALVE / Y TYPE HYDRAULIC CONTROL VALVE
QUICK PRESSURE RELIEF CONTROL VALVE
BACKFLUSHING CONTROL VALVES; VICTAULIC 3x2 -VICTAULIC 4x3 -FLANGE 3x2 – FLANGE 4x3- VICTAULIC & THREADED 2x2

Product Features / Ürün Özellikleri
Basınçlar / Pressures: PN10-PN16 -PN25
Max.Çalışma sıcaklığı / Max.Operating Temperature: 60°C-80°C
Çaplar / Diameters : DN20(3/4") den DN300(12") e kadar
Üretim Standartları / Production Standards : TS EN 558-1 Esas Seriler 48 FTF-CTF
Vana Boyu / Valve Length : TS ISO 7005-2 , TS EN 558-1
Flanş Ölçüleri / Flange Dimensions: TS ISO 5208 – ISO 7005/2 – EN 1092/2 – BS 40504 -BS 10E- ANSI
Basınç Testleri: Gövde Test Basıncı / Pressure Tests : Body Test Pressure : 1,5 x PN
Sızdırmazlık Test Basıncı / Sealing Test Pressure: 1,1 x PN
Genel Tasarımlar / General Designs: TSEN 1074-1-2-5

Product Brand / Ürünün Markası
TYPHOON

Directives and Regulations / Direktif ve Yönetmelikler
2014/68/EU Pressure Equipment Directive / 2014/68/EU Basınçlı Ekipmanlar Direktifi

It has been accepted by the company that the applicable requirements of the 2014/68 / EU Pressure Equipment Directive have been fulfilled and its responsibility has been taken for the products defined above. The products defined above have been checked by internal production controls carried out by the organization. If there is a change in the product, this declaration will not be accepted and will lose its validity.

Yukarıda tanımları verilmiş olan ürünlerin için 2014/68/EU Basınçlı Ekipmanlar Yönetmeliğinin uygulanabilen gerekliliklerinin yerine getirildiği ve sorumluluğunun alınmış olduğu firma tarafından kabul edilmiştir. Yukarıda tanımları verilmiş olan ürünler, iç üretim kontrollerinin kuruluş tarafından yapıldığı kontrol edilmiştir. Üründe bir değişiklik olduğu takdirde bu beyan kabul edilmeyecek ve geçerliliğini yitirecektir.

CERTIFICATE NUMBER: IDS.CE.2024.19095.1

Certificate Date : 16.02.2024
Validity Date : 16.02.2025

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Manufacturer / Üretici
TAYFUR SU SİSTEMLERİ MAKİNE MÜHENDİSLİK SANAYİ VE TİCARET ANONİM ŞİRKETİ

Address / Adres
KARACAOĞLAN MAHALLESİ 6172 SOKAK NO:19 A BORNOVA / İZMİR / TÜRKİYE

Product Description / Ürün Tanımı
FILTER BACKWASH CONTROL DEVICES / FİLTRE TERS YIKAMA KONTROL CİHAZLARI

Product Types / Ürün Tipleri
AC Tip – 1-2-3 Dahili DP
DC Tipi – 1-2-3 Dahili DP
AC Tipi – 2-4-6 DP Hariç
DC Tipi – 2-4-6 DP Hariç
AC Tipi – 2/10 DP Hariç
DC Tipi – 2/10 DP Hariç (2 Kablolu)
Basınç Fark Cihazı (DP)

Product Brand / Ürünün Markası
FLUSHCON

Directives and Regulations / Direktif ve Yönetmelikler
2006/42/EC Machinery Safety Directive / 2006/42/AT Makine Emniyet Direktifi
2014/35/EC Low Voltage Directive / 2014/35/AT Alçak Gerilim Yönetmeliği

Harmonized Standards / Harmonize Standartlar
EN ISO 120100:2010, EN 60204-1:2018

It has been accepted by the company that the applicable requirements of the 2006/42/EC Machinery Safety Directive have been fulfilled and its responsibility has been taken for the products defined above. The products defined above have been checked by internal production controls carried out by the organization. If there is a change in the product, this declaration will not be accepted and will lose its validity.

Yukarıda tanımları verilmiş olan ürünlerin için Makine Emniyet Direktifinin uygulanabilen gerekliliklerinin yerine getirildiği ve sorumluluğunun alınmış olduğu firma tarafından kabul edilmiştir. Yukarıda tanımları verilmiş olan ürünler, iç üretim kontrollerinin kuruluş tarafından yapıldığı kontrol edilmiştir. Üründe bir değişiklik olduğu takdirde bu beyan kabul edilmeyecek ve geçerliliğini yitirecektir.

CERTIFICATE NUMBER: IDS.CE.2024.19094.1

Certificate Date : 16.02.2024
Validity Date : 16.02.2025

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*Every factory is a fortress

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