BACK FLUSHING CONTROL VALVES

+Technical Specifications

tayfur su sistemleri

We **Care** Every Drop of **Water...**

That is why our company, which has been developing products in the field of water systems for over 20 years, offers increasingly efficient solutions every day. With our expertise and experience, we continue to develop innovative technologies for the proper control and sustainable use of water.

OUR PRODUCTION CAPACITY IS INCREASING!
OUR GOALS ARE BIGGER!

We have been wherever there is water since 2004.

Founded in Izmir by Tayfun Yazaroğlu, TAYFUR WATER SYSTEMS set out with the belief that water is the source of life. Beginning with the production of hydraulic control valves, this journey has now transformed into a strong and reliable brand offering innovative solutions across a wide range of areas, including irrigation, drinking water, firefighting and industrial systems.

In every project, while determining the direction of water, we are also shaping the sustainable infrastructure of the future. From production to project design, from installation to technical support, we work without compromising on high quality standards, with our state-of-the-art facilities and expert team. We aim to offer our customers not just products, but also trust, continuity and technical excellence.

TYPHOON branded products are developed entirely with our own production capabilities and local engineering expertise. These products stand out not only for their durability, but also for our philosophy of preserving the value of every drop. Thanks to our production processes that comply with international standards and our customer satisfaction-focused approach, we are proud to be recognised as a reliable business partner both domestically and globally.

Today, TAYFUR WATER SYSTEMS, a brand with roots in Izmir, continues on its path with the vision of being a symbol of quality, innovation, and trust wherever water is present.

Agricultural Irrigation Systems

The foundation of efficient agricultural production lies in delivering water at the right time, in the right quantity, and to the right location. Modern agricultural irrigation systems ensure both the efficient use of water resources and an increase in product quality and yield. The solutions developed in this context enable farmers to achieve a sustainable production structure independent of climatic conditions.

At TAYFUR WATER SYSTEMS, with our many years of engineering experience in the field of agricultural irrigation, we manufacture critical components such as hydraulic control valves, suction valves, backwash valves and meters to high quality standards. Each of our products saves energy by increasing the automation capabilities of the systems, prevents water wastage and minimises maintenance requirements. Thus, we offer reliable and long-lasting solutions for both small-scale businesses and large agricultural projects.

The products we develop are designed in accordance with international standards and tested to deliver maximum performance in challenging field conditions. At TAYFUR WATER SYSTEMS, our goal is to provide smart, durable, and sustainable systems for producers who value every drop. Because we believe that by determining the direction of water, we are shaping the future of agriculture.

Industrial Area Systems

Proper water management in industrial facilities is critical to the efficiency and sustainability of production processes. Every application, from pressurised lines to cooling circuits, fire systems to process lines, requires precise control and high durability. Therefore, the performance of equipment used in industrial systems is directly related to facility safety and operational continuity.

At TAYFUR WATER SYSTEMS, we manufacture products that play a critical role in industrial applications, such as hydraulic control valves, backwash valves, vacuum breakers, and meters, to high engineering standards. Our products adapt to harsh working conditions with their high pressure resistance, corrosion resistance, and long service life. By providing complete control over fluid management, they increase energy efficiency in systems and minimise maintenance times.

Designed to comply with international standards, our solutions are trusted across a wide range of applications, from factories to power plants, water treatment facilities to infrastructure projects. At TAYFUR WATER SYSTEMS, our goal is to make industrial water management smarter, safer and more sustainable, providing our customers with the assurance of uninterrupted operations.

Fire Systems

Fire safety is one of the most vital elements of every structure, from industrial facilities to public buildings, infrastructure projects to living spaces. The reliability of the equipment used in these systems is critical not only for the protection of the facility but also for the protection of human life.

As TAYFUR WATER SYSTEMS, we are a company specialising in the production of hydraulic control valves to ensure maximum safety in fire lines. Our products are designed to guarantee the fast, reliable and uninterrupted operation of fire systems. These valves, which stand out for their high pressure resistance, leak-proof performance and long service life, are tested in accordance with international standards and offered with quality assurance.

With our advanced engineering infrastructure and production experience, we produce solutions that can be used safely in various applications, from automatic sprinkler systems to fire pump stations. At TAYFUR WATER SYSTEMS, our goal is not just to manufacture products; it is to be part of systems that make a difference in fire safety, inspire confidence, and protect life.

Filter Automation

Water is a vital resource that must be managed with maximum efficiency during the filtration stage, as it is in many industrial and agricultural processes. Proper automation in filtration systems is critical in terms of energy savings, ease of maintenance, and system continuity. An effective filter automation system determines not only the quality of the water but also the lifespan and efficiency of the entire system.

At TAYFUR WATER SYSTEMS, we offer comprehensive solutions in the field of filter automation. Our products, such as hydraulic control valves, backwash valves and panels, bottom valves, and dirt traps, ensure precise flow management in automatic filter systems. Our products optimise the water filtration process while performing backwashing operations precisely and efficiently. This reduces the risk of clogging in systems, prevents energy losses, and extends maintenance intervals.

All our products stand out with their durable material construction, precise control capability, and long-lasting design. At TAYFUR WATER SYSTEMS, our goal is to provide our customers with smart, reliable, and sustainable automation solutions by maximising efficiency in filtration processes. Because we believe that water purity begins with system safety.

Back Flushing Control Valves

Backwash Control Valves are specialized hydraulic valves designed to provide highly efficient and reliable cleaning in filtration systems. These valves feature a 3-way control mechanism operated by line pressure or external pneumatic pressure and automatically manage filtration and backwash (backwash) modes in filtration systems. Thanks to the integrated diaphragm assembly, the valve provides control in both directions, directing water flow to the correct mode.

In filtration mode, the valve performs the cleaning function by forcing water through the filter elements. During the transition to backwash mode, the diaphragm assembly reverses direction, opening the discharge path and allowing water flow through the back of the filter. This mechanism prevents mixing of clean and dirty water and ensures maximum efficiency of the filter elements. This reduces the risk of filter clogging, extends maintenance intervals, and ensures continuous efficient system operation.

Backwash Control Valves are preferred in a wide range of applications, including industrial filtration systems, drinking water facilities, agricultural irrigation, and wastewater treatment systems. Thanks to their durable construction and precise diaphragm control, the valve provides long-lasting, pulse-free, and reliable performance. It provides high filtration efficiency with minimum intervention to system operators.

Order Information

Please provide the following information in case of order

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

DC Type 2/10 internal DP (2-Wire)

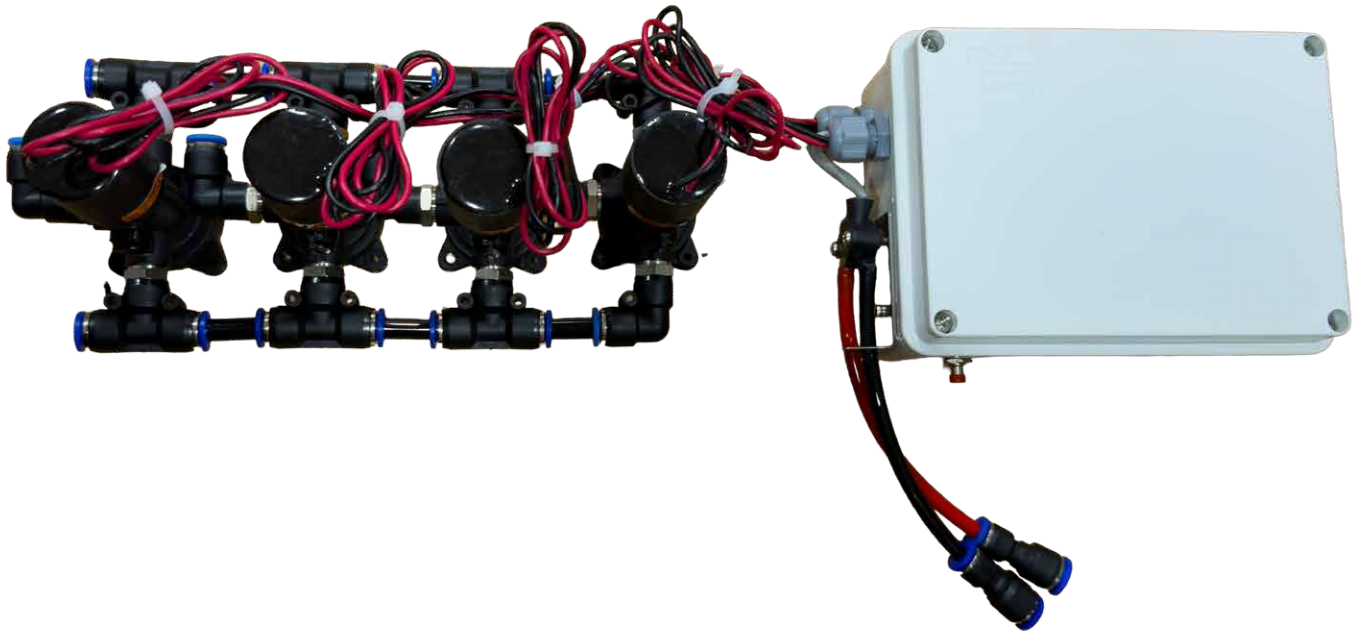
- Option to use up to 2-10 filter stations
- Easy programming/memory thanks to the digital display on the device
- 6 V DC power input
- Washing cycle from 1 minute to 120 hours
- Washing time from 5 seconds to 999 seconds
- Waiting time between stations from 5 seconds to 99 seconds
- Alarm feature in case of infinite cycle problems
- Manual operation, DP only, or timed operation with DP
- Operating temperature between 0-60 degrees
- 9V DC - 12V DC Solenoid coil output

DC Type 2/10 internal DP (2-Wire)

- Option to use up to 2-10 filter stations
- Easy programming/memory thanks to the digital display on the device
- 6 V DC power input
- Washing cycle from 1 minute to 120 hours
- Washing time from 5 seconds to 999 seconds
- Waiting time between stations from 5 seconds to 99 seconds
- Alarm feature in case of infinite cycle problems
- Manual operation, DP only, or timed operation with DP
- Operating temperature between 0-60 degrees
- Remote control feature via our mobile application thanks to Bluetooth connection

DC Type 2/10 internal DP (2-Wire)

- Up to 2-4 filter stations can be used.
- Programmable/Memorized
- 6 V DC power input
- Washing cycle from 1 minute to 120 hours
- Washing time from5 seconds to 360 seconds
- Wait time between stations from 5 seconds to 20 seconds
- Alarm feature in case of infinite cycle problems
- Manual button, timed operation with only DP or in combination with DP
- Operating temperature between 0-60 degrees



AC Type 1-2-3 Internal DP

- Ideal for use with 1, 2 and 3 station filters
- Ability to initiate backwashing with internal DP
- Ability to initiate backwashing based on DP or time
- Simple set point selection via DIP switches
- Manual operation capability
- 220V AC power input

DC Type 1-2-3 Internal DP

- Ideal for use with 1, 2 and 3 station filters
- Ability to initiate backwashing with internal DP
- Ability to initiate backwashing based on DP or time
- Simple set point selection via DIP switches
- Manual operation capability
- 6V DC and 12V DC power inputs

Differential Pressure Device (DP)

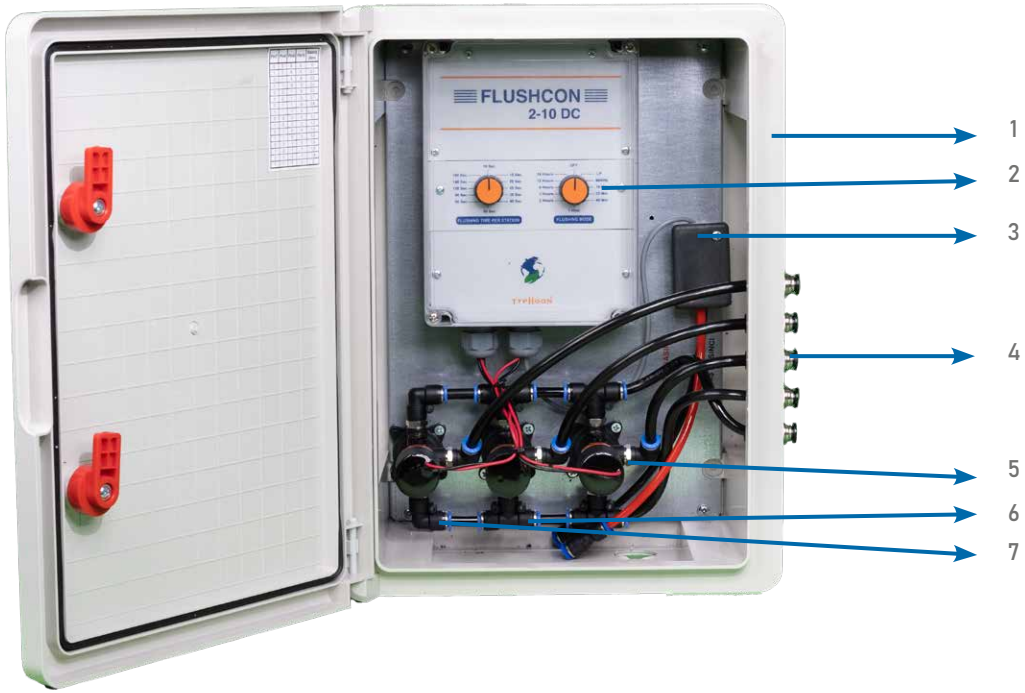
- Simple setting point selection with DIP switches
- Connection models for 220V AC and 6V DC power supply
- Ability to set a differential pressure range up to 2 bar
- Ability to trigger an alarm via LED indicators

AC Type 2/10 DP Excluded

- Can be used with up to 2-10 filter stations
- Easy programming thanks to rotatable switches on the device
- 220V AC power input
- Washing cycle from 10 minutes to 24 hours
- Washing time from 10 seconds to 180 seconds
- Station-to-station waiting time from 5 seconds to 40 seconds
- Ability to trigger an alarm in case of infinite loop issues
- Can be operated manually, only with DP, or with DP and time-controlled

DC Type 2/10 DP Excluded (2-Wire)

- Can be used with up to 2-10 filter stations
- Easy programming thanks to rotatable switches on the device
- 6 V DC power input
- Washing cycle from 10 minutes to 24 hours
- Washing time from 10 seconds to 180 seconds
- Station-to-station waiting time from 5 seconds to 40 seconds
- Ability to trigger an alarm in case of infinite loop issues
- Can be operated manually, only with DP, or with DP and time-controlled

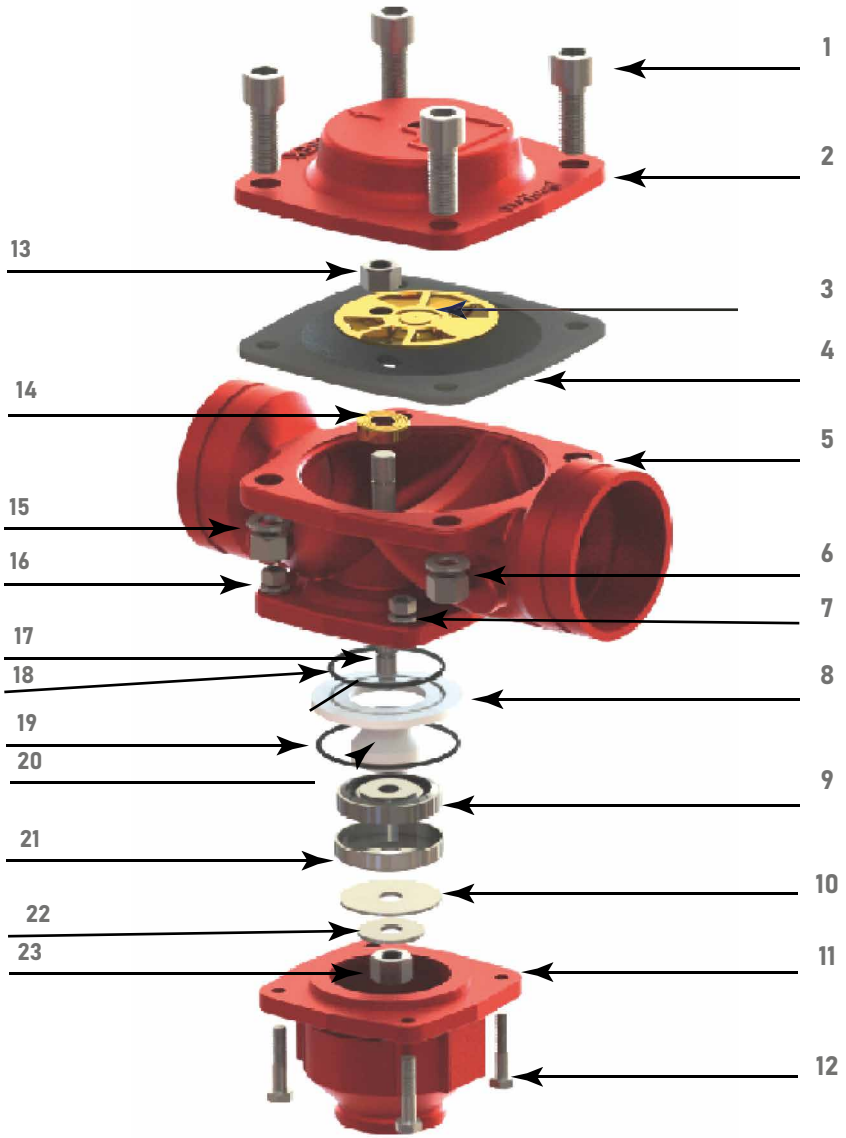


Main Components

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

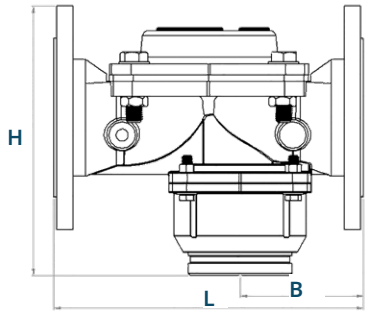
Main Components

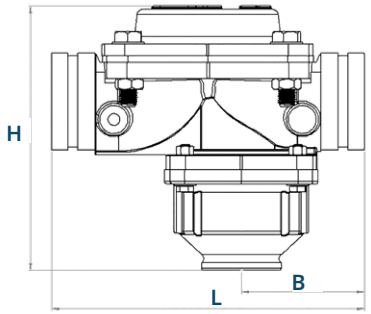
#	Material Name	Material Type
1	Bolt	8.8 Coated Steel
2	Cover	GG25 - GGG40
3	Diaphragm Mounting	Brass
4	Diaphragm	Natural Rubber
5	Body	GG25 - GGG40
6	Nut	8.8 Coated Steel
7	Nut	8.8 Coated Steel
8	Disc	HDPE
9	Rubber	EPDM
10	Washer (A)	HDPE
11	Bottom Cover	GG25-GGG40
12	Bolt	8.8 Coated Steel
13	Nut	8.8 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	Shaft Mounting	HDPE
21	Cup	Stainless Steel
22	Washer (B)	Stainless Steel
23	Nut	8.8 Coated Steel

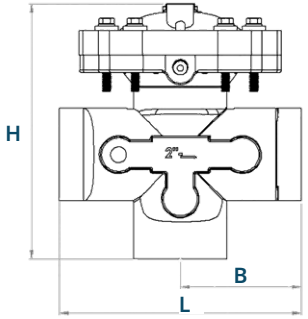


Dimensions and Weights

Model	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







Working Pressure Range

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

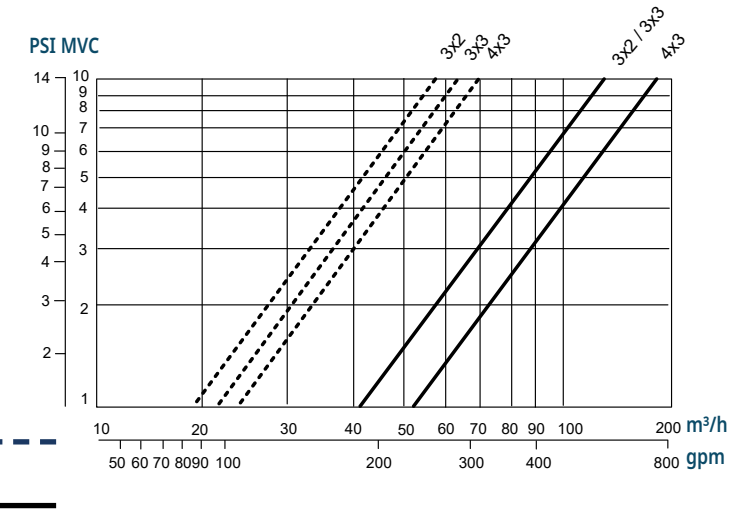
High Pressure Model : 1 - 16 bar / 15 - 250 psi

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

Hydraulic Performance

Measurement		3x2	4x3
In filtration mode recommended maximum flow	m^3/h	90	160
	gpm	400	705
Rear wash mode Recommended max. flow	m^3/h	40	90
	gpm	180	400
In filtering mode flow rate factor	Kv (metric)	130	160
	Cv (US)	150	185
Backwash mode Flow rate factor	Kv (metric)	58	70
	Cv (US)	67	81

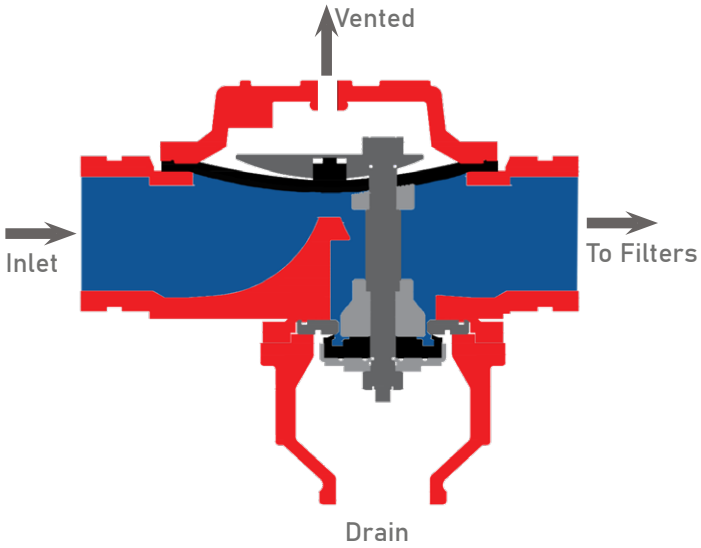
Pressure Loss Table



Operating Principle

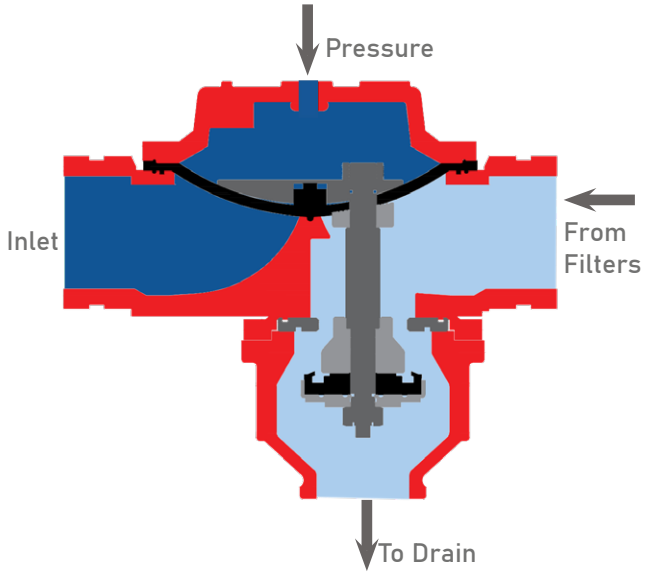
Filtration Mode

De-pressurized command - control chamber vents to atmosphere: The valve allows straight flow. Bottom drain plug is closed.



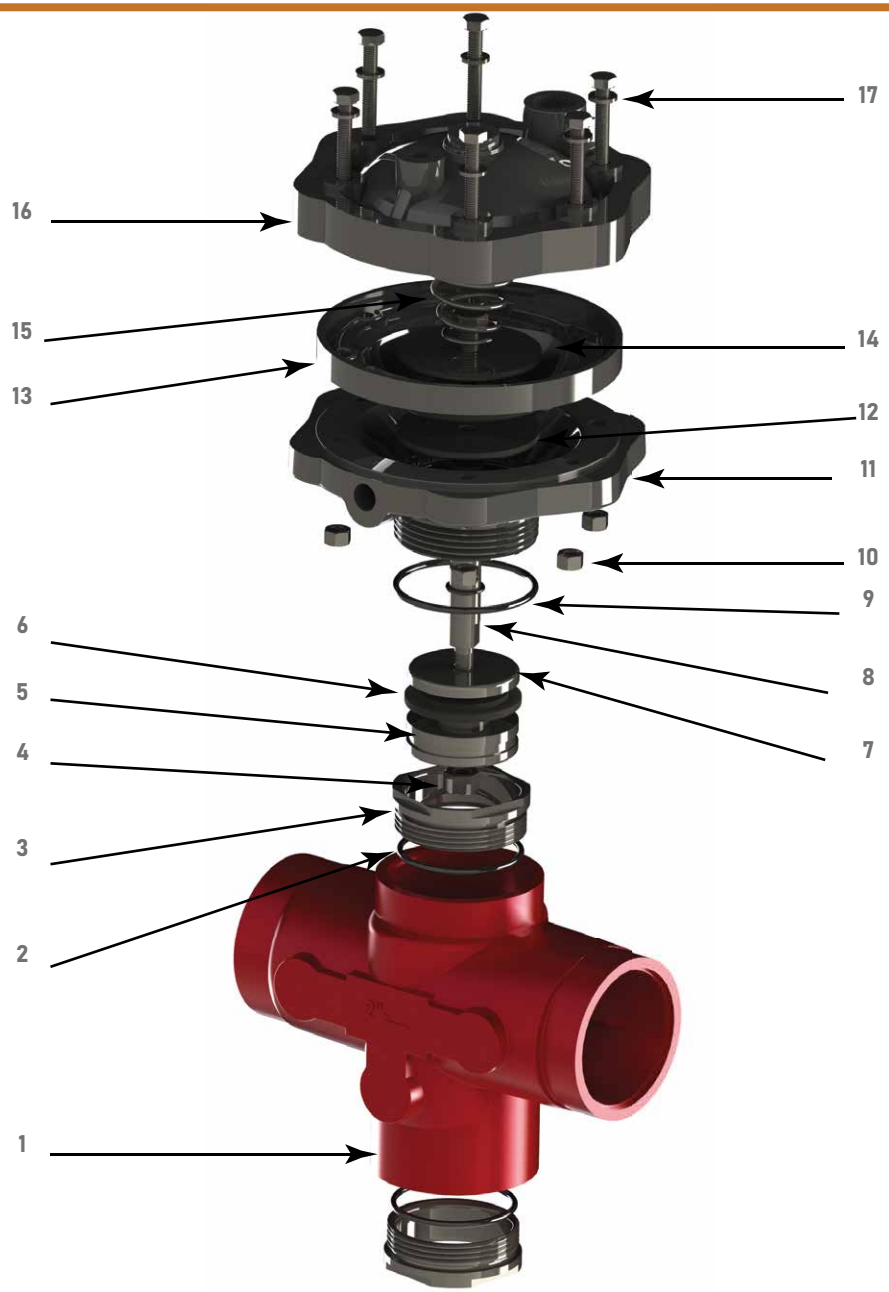
Back Flushing Mode

Pressure command - control chamber is pressurized: The valve inlet port is closed by the diaphragm and the bottom port opens to allow flow from the filter, out to the drain.



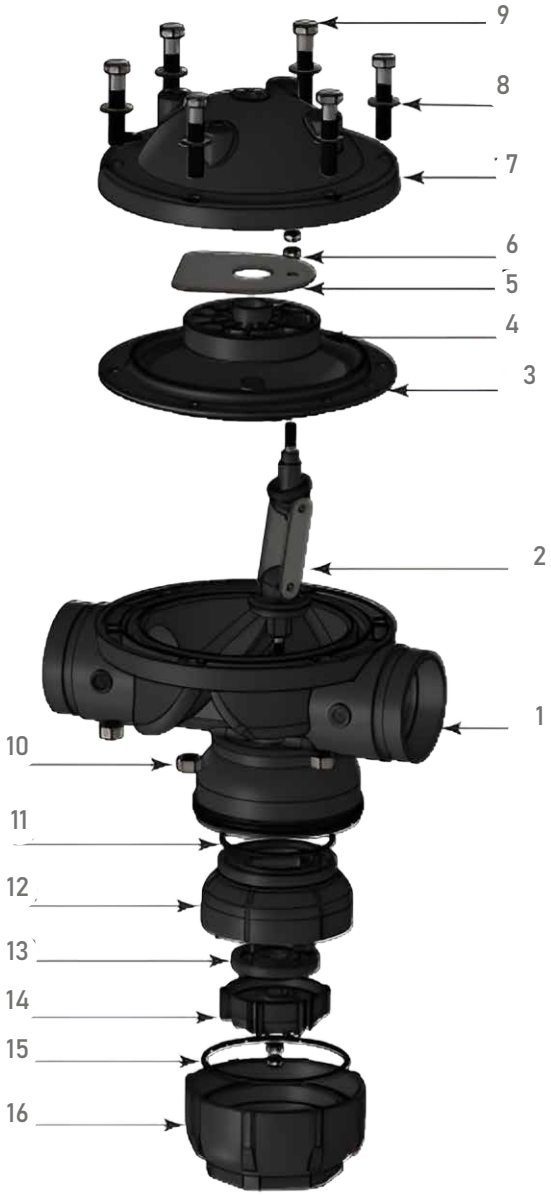
Main Components

#	Material Name	Material Type
1	Body	GGG40
2	O-Ring	NBR
3	Bushing	Stainless Steel
4	Nut	8.8 Coated Steel
5	Lower Cup	Stainless Steel
6	Rubber	EPDM
7	Upper Cup	Stainless Steel
8	Shaft	Stainless Steel
9	O-Ring	NBR
10	Nut	8.8 Coated Steel
11	Lower Cover	Glass Reinforced Polyamide
12	O-Ring	NBR
13	Diaphragm	Natural Rubber
14	Diaphragm Discs	Stainless Steel
15	Spring	Stainless Steel
16	Cover	Glass Reinforced Polyamide
17	Washer	8.8 Coated Steel
18	Bolt	8.8 Coated Steel

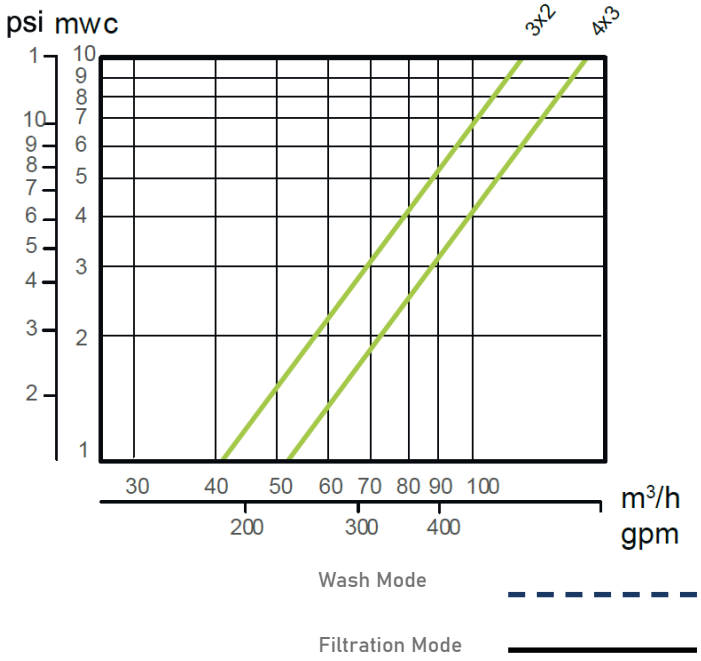


Main Components

#	Material Name	Material Type
1	Body	Glass Reinforced Polyamide
2	Joint	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	Cover	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	Lower Cup	Glass Reinforced Polyamide
13	Rubber Seal	EPDM
14	Upper Cup	Glass Reinforced Polyamide
15	O-Ring	NBR
16	Adapter	Glass Reinforced Polyamide

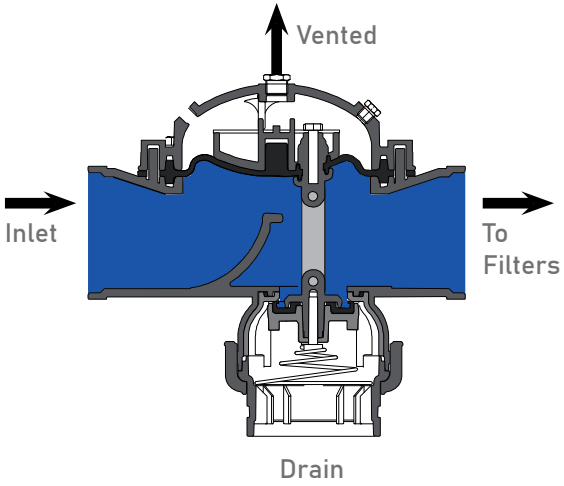


Pressure Loss Table

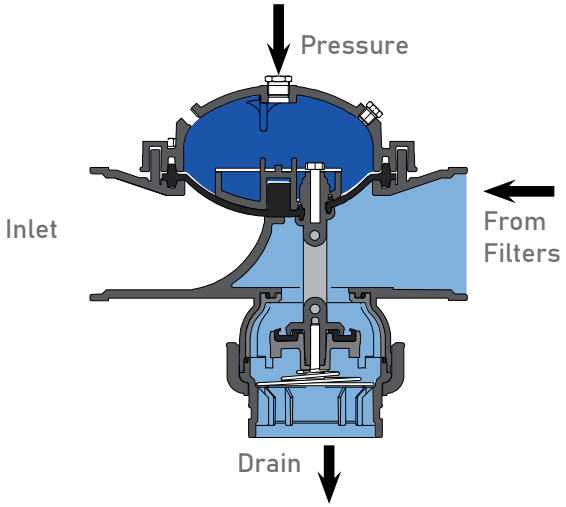


Operating Principle

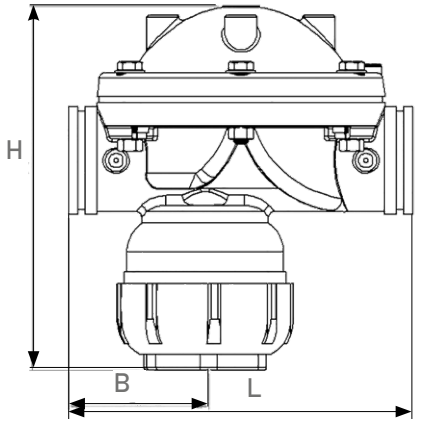
Filtration Mode
De-pressurized command - control chamber vents to atmosphere: The valve allows straight flow. Bottom drain plug is closed.



Back Flushing Mode
Pressure command - control chamber is pressurized: The valve inlet port is closed by the diaphragm and the bottom port opens to allow flow from the filter, out to the drain.



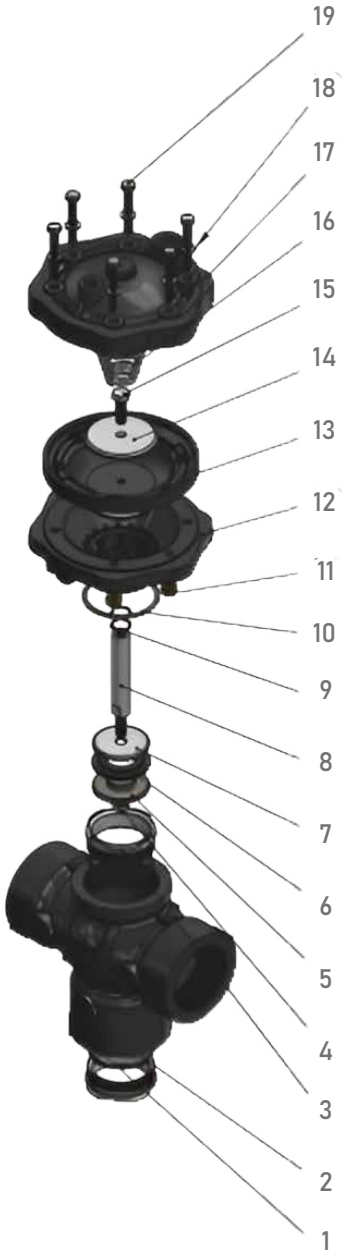
Model	H		B		L		Weight	
	inch	mm	inch	mm	inch	mm	lbs	kg
Victaulic 3x2	11,90	292	5,04	128	12,20	310	11,02	5,00
Victaulic 4x3	11,50	292	3,04	128	12,20	310	11,02	5,00



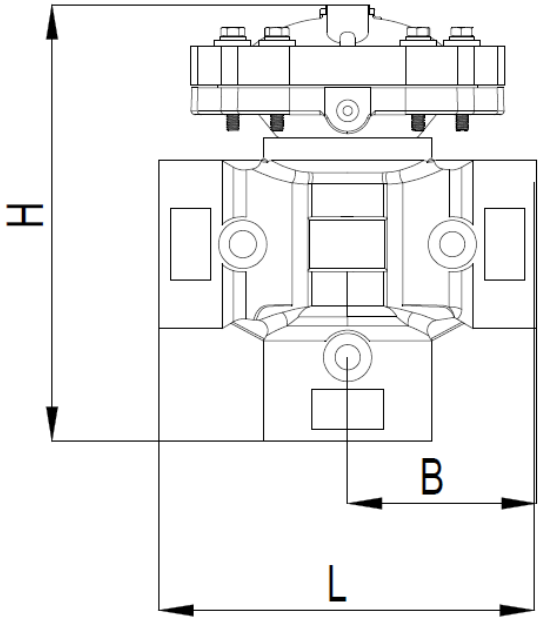
Technical Specifications

Main Components

#	Material Name	Material Type
1	Body	Glass Reinforced Polyamide
2	Bushing O-Ring	NBR
3	Bushing	Stainless Steel
4	Nut	Stainless Steel
5	Lower Cup	HDPE
6	Sealing Rubber	EPDM
7	Upper Cup	HDPE
8	Shaft	Stainless Steel
9	Shaft - O-Ring	NBR
10	Cover - O-Ring	NBR
11	Nut	Brass
12	Lower Cover	GRP
13	Diaphragm	Natural Rubber
14	Diaphragm Support	Stainless Steel
15	Shaft Bolt	Stainless Steel
16	Spring	SST 302
17	Cover	GRP
18	Washer	Stainless Steel
19	Bolt	Stainless Steel

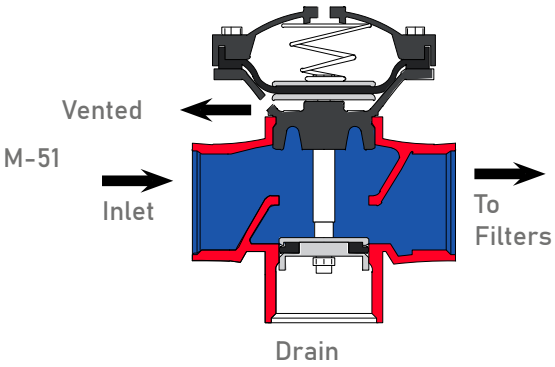


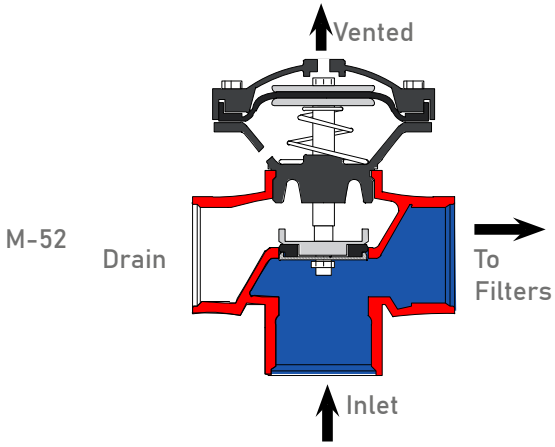
Model	H		B		L		Weight	
	inch	mm	inch	mm	inch	mm	lbs	kg
2x2 Threaded	8,15	207	3,5	89	7	178	4,41	2
2x2 Victaulic	8,15	207	5,04	128	10,07	256	4,63	2,1



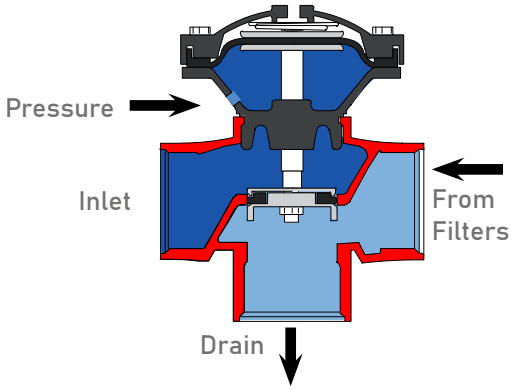
Operating Principle

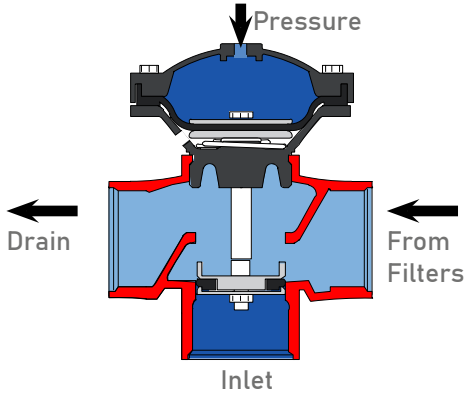
Filtration Mode
Control chamber is de-pressurized
The valve is in filtration mode



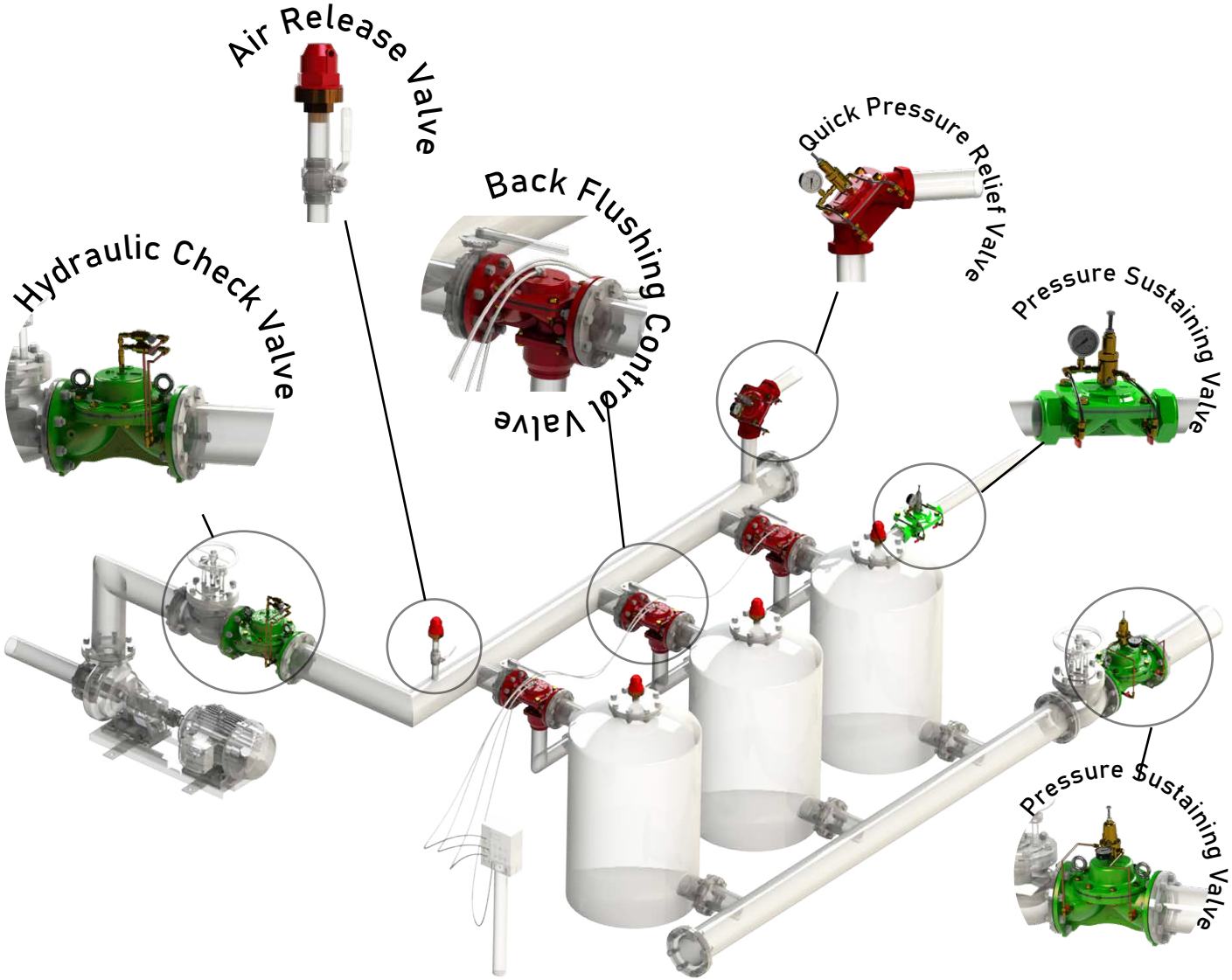


Back Flushing Mode
Control chamber pressurized -
The valve is in flushing mode





Back Flushing Control Valves



Back Flushing Control Valves

Certificates

CERTIFICATE

CERTIFICATE OF CONFORMITY

Manufacturer / Üretici

TAYFUR SU SISTEMLERI MAKINE MÜHENDISLIK SANAYI VE TICARET ANONIM ŞIRKETI

Address / Adres

KEMALPAŞA OSB MAHALLESI KUZEY SANAYI CAD. NO:13 KEMALPAŞA / İZMİR / TÜRKİYE

Product Description / Ürün Tanımı

FILTER BACKWASH CONTROL DEVICES / FILTRE TERS YIKAMA KONTROL CIHAZLARI

FLUSHCON

Certificate First Issue Date : 16.02.2023

Certificate Validity Date : 07.02.2025

Certification Expiry Date : 16.02.2026

Authorised by

FQC

SERTİFİKA

(CERTIFICATE)

TAYFUR SU SİSTEMLERİ MAKİNE MÜHENDİSLİK SANAYİ VE TİCARET ANONİM ŞİRKETİ

ISO 9001:2015

FQC

SERTİFİKA

(CERTIFICATE)

TAYFUR SU SİSTEMLERİ MAKİNE MÜHENDİSLİK SANAYİ VE TİCARET ANONİM ŞİRKETİ

ISO 10002:2018

insperla

UYGUNLUK SERTİFİKASI

CERTIFICATE OF COMPLIANCE

Sertifika No.
Certificate No. : 25-1042-1074-01

Sertifika Sahibi Adı ve Adresi / Name and Address of Certificate Owner : Tayfur Su Sistemleri Makine Mühendislik San. ve Tic. A.Ş. Kemalpaşa Osb Mah. Kuzey Sanayi Cad. No: 13 Kemalpaşa/ İZMİR

Üretici Adı ve Adresi / Name and Address of Manufacturer : Tayfur Su Sistemleri Makine Mühendislik San. ve Tic. A.Ş. Kemalpaşa Osb Mah. Kuzey Sanayi Cad. No: 13 Kemalpaşa/ İZMİR

Ürün Adı / Product Name : Basınç Düşürücü ve Basınç Tutucu Kontrol Vanası; Basınç Tutucu Kontrol Vanası / Basınç Düşürücü ve Solenoid Kontrollü Vana; Solenoid Kontrollü Vana / Hızlı Tahliye Vanası / Şamandıralı Seviye Kontrol Vanası; Elektrikli Şamandıralı Seviye Kontrol Vanası / Diferansiyel Şamandıralı Seviye Kontrol Vanası; Pompa Kontrol Vanası / Derin Kuyu Pompa Kontrol Vanası / Darbe Önleyici Vana; Hidrolik Çek Valf / Y Tipi Hidrolik Kontrol Vanası

Ticari Marka / Trademark : TYPHOON

Ürün Tipi/Model(ler) / Product Type/Model(s) : -Basınç Sınıfı: PN 10, Nominal Çaplar: DN 50, DN 65, DN 80, DN 100, DN 125, DN 150, DN 200, DN 250, DN 300, DN 350, DN 400, DN 500; -Basınç Sınıfı: PN 16, Nominal Çaplar: DN 50, DN 65, DN 80, DN 100, DN 125, DN 150, DN 200, DN 250, DN 300, DN 350, DN 400, DN 500; -Basınç Sınıfı: PN 25, Nominal Çaplar: DN 50, DN 65, DN 80, DN 100, DN 125, DN 150, DN 200, DN 250, DN 300

Uygulanan Standart/lar / Applied Standard/s : EN 1074-1:2000, EN 1074-5:2001

Onay Dayanağı / Base of Attestation : Muayene ve Test Raporu - 25-1042-RP-01-00

INSPERLA yukarıda uygunluk değerlendirmesi için sunulan ürünün EN 1074-1:2000, EN 1074-5:2001 standardına uygun olduğunu firmanın, tanımlı olan ürüne ilişkin sunduğu teknik dokümantasyon ve referans inceleme raporu ile onaylar. Bu uygunluk sertifikası imalatçının uygunluk beyanı düzenleme ve ürünün bağlı bulunduğu yönetmeliklere uyma zorunluluğunu ortadan kaldırmaz. Bu uygunluk sertifikası imalatçının isteğine bağlı düzenlenmiştir.

The INSPERLA confirms that the product presented above for conformity assessment complies with the EN 1074-1:2000, EN 1074-5:2001 standard with the technical documentation and reference review report submitted by the company for the defined product. This certificate of conformity does not eliminate the manufacturer's obligation to issue a declaration of conformity and comply with the regulations to which the product is subject. This certificate of conformity has been issued at the request of the manufacturer.

Sertifika Yayın Tarihi / Certificate Issue Date : 03.06.2025

Sertifika Geçerlilik Tarihi / Certificate Expiry Date : 02.06.2026

Genel Müdür / General Manager

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Sayfa 1 /

CERTIFICATE

CERTIFICATE OF CONFORMITY

TYPHOON

Certificate First Issue Date : 16.02.2023

Certificate Validity Date : 07.02.2025

Certification Expiry Date : 16.02.2026

Authorised by

FQC

SERTİFİKA

(CERTIFICATE)

TAYFUR SU SİSTEMLERİ MAKİNE MÜHENDİSLİK SANAYİ VE TİCARET ANONİM ŞİRKETİ

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