tayfur
su sistemleri

# BACK FLUSHING CONTROL VALVES

TAYFUR WATER SYSTEMS

TYPHOON®

# We **Care** About Every Drop of **Water**

# STORY OF 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.

# 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.

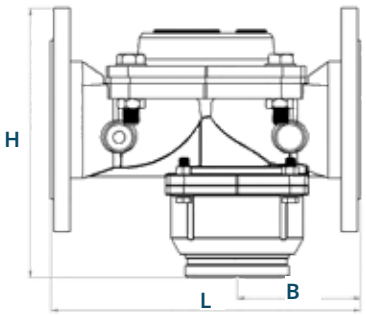
## Order Information

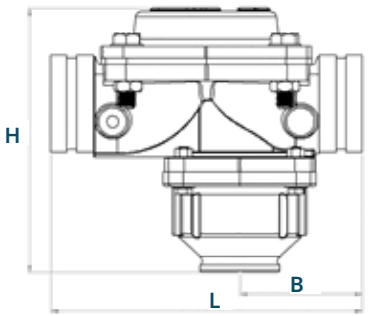
Please provide the following information in order

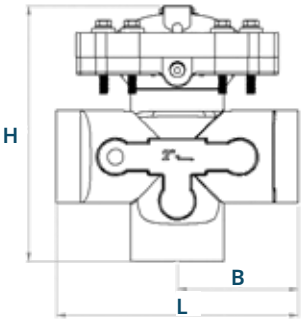
Maximum flow rate ..... $m^3/h$
Maximum mains / operating pressure ..... bar
Main pipeline diameter ..... mm
Valve connection type



| 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 |

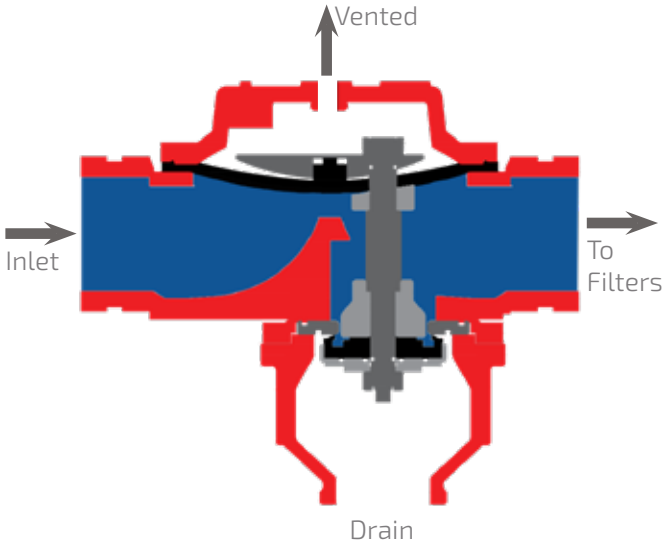


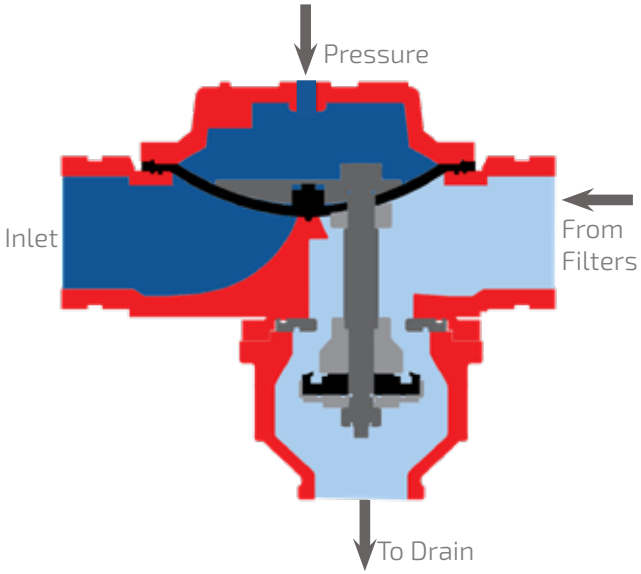



## Operating Principle

***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.



# BACK FLUSHING
# CONTROL VALVES

## 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

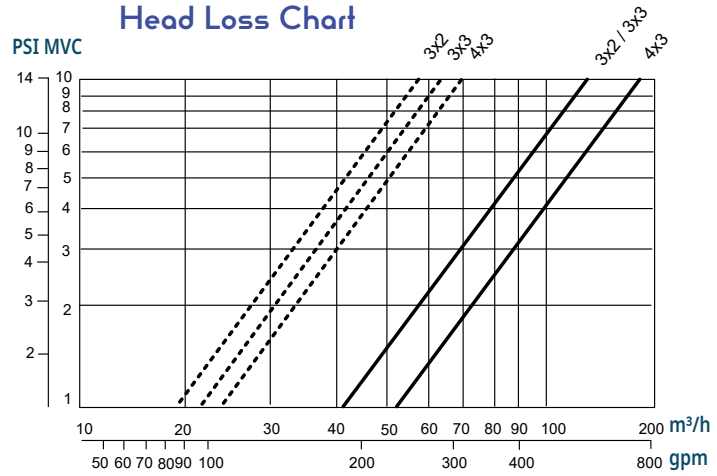
***Standard model:*** 0.7 - 10 bar / 10 - 150 psi

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

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

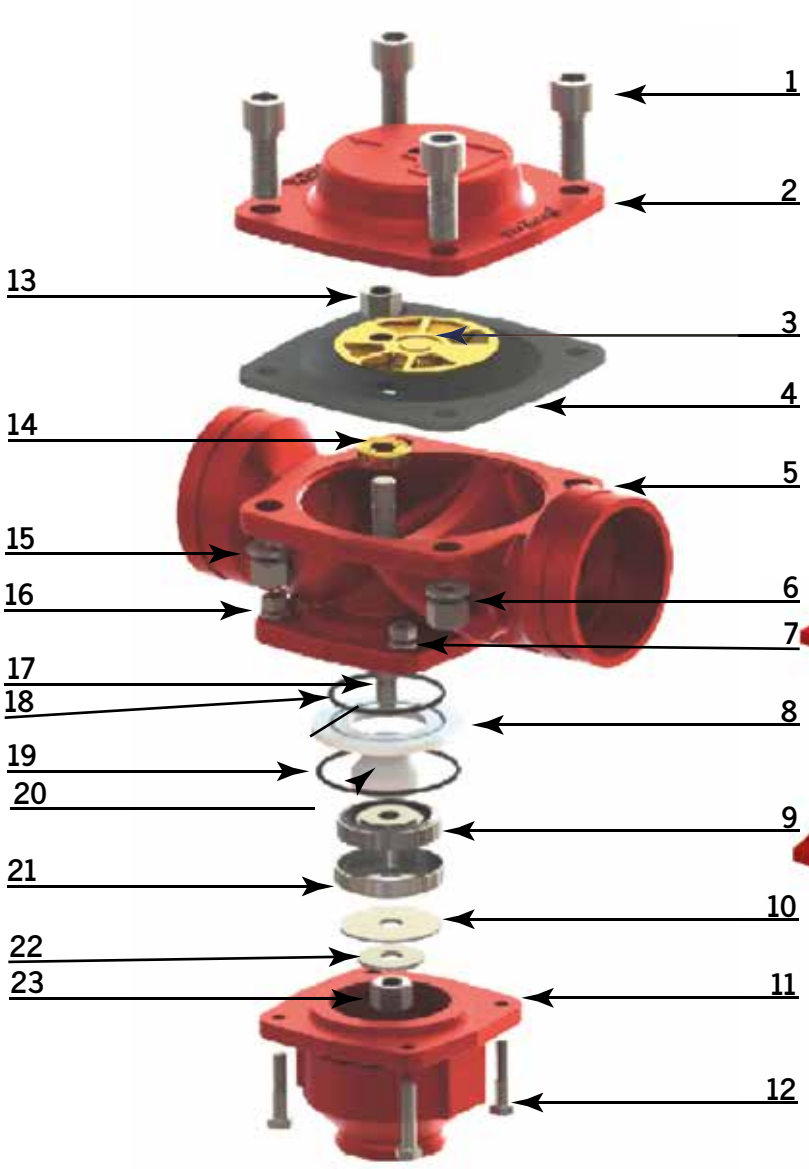


## Head Loss Chart




TYPHOON

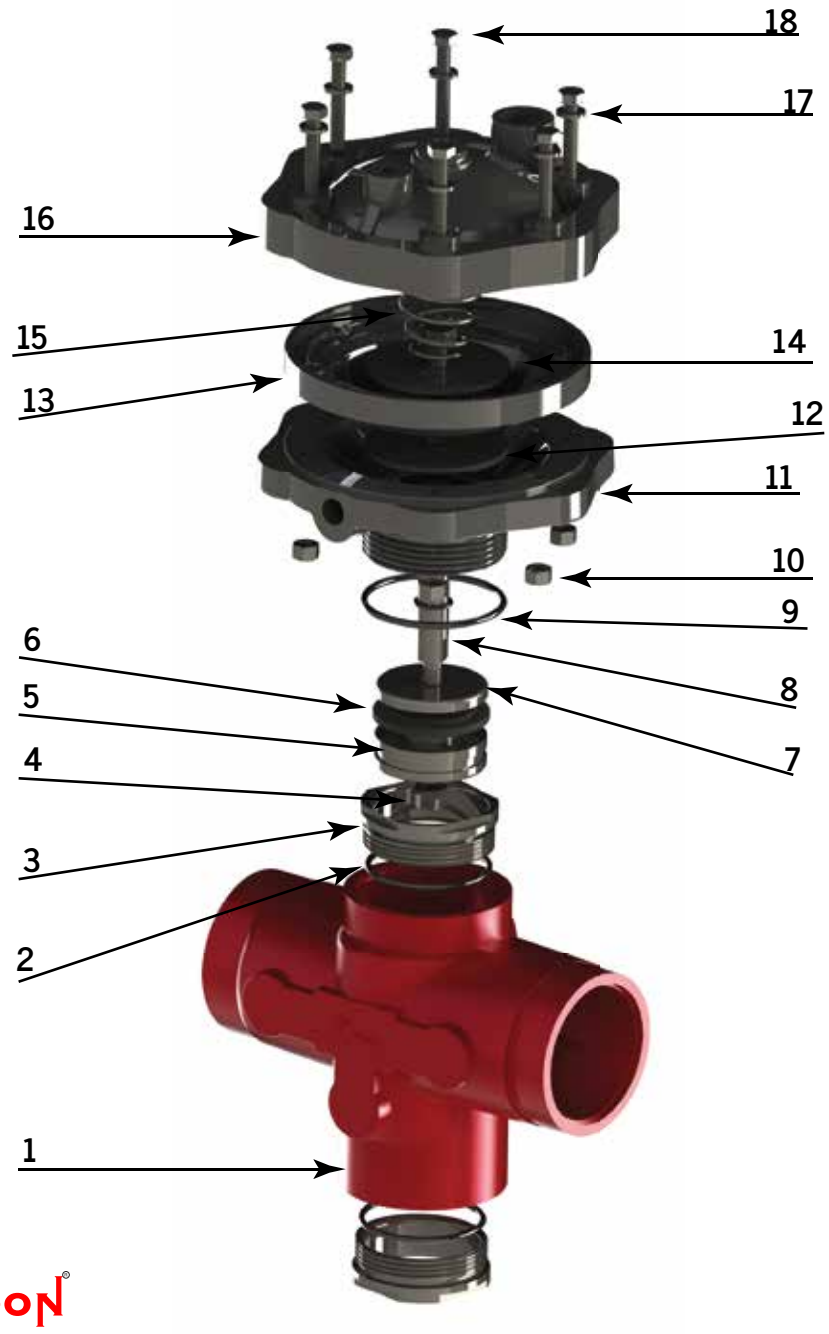
| # | Material Name | Type of Material |
|---|---|---|
| 1 | Bolt | 8.8 Coated Steel |
| 2 | Cover | GG25 - GGG40 |
| 3 | Diaphragm Wedge | Brass |
| 4 | Diaphragm | Natural Rubber |
| 5 | Body | GG25 - GGG40 |
| 6 | Nut | 8.8 Coated Steel |
| 7 | Nut | 8.8 Coated Steel |
| 8 | Disk | HDPE |
| 9 | Rubber | 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 |






TYPHOON

# BACK FLUSHING
# CONTROL VALVES




| # | 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 |

# 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.

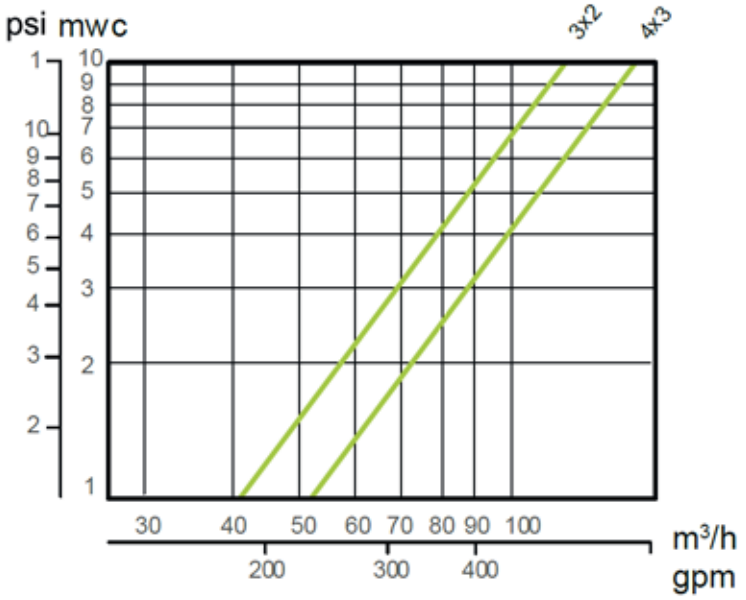
## Order Information

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



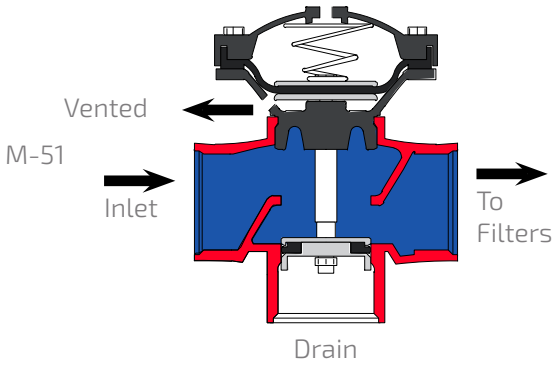
## Head Loss Chart

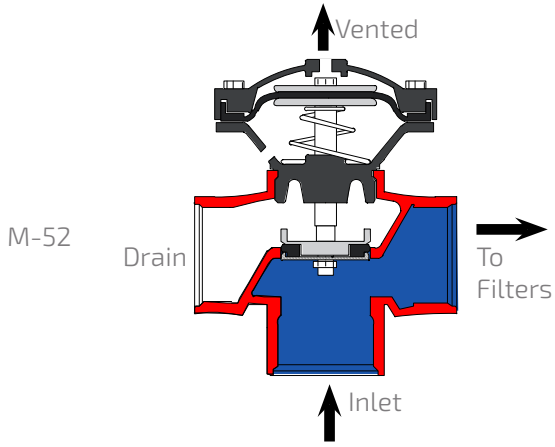



TYPHOON

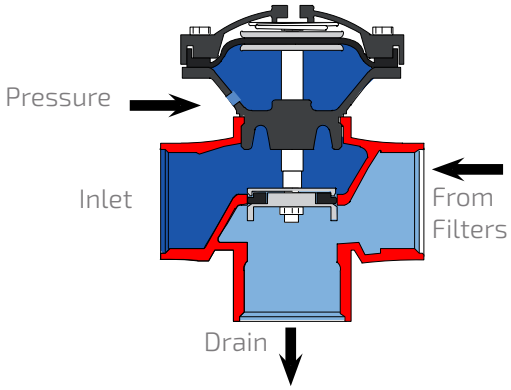
## Operating Principle

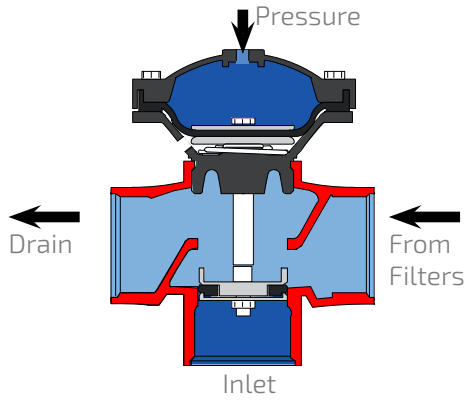
Filtration Mode
Control chamber is de-pressurized
The valve is in filtration mode



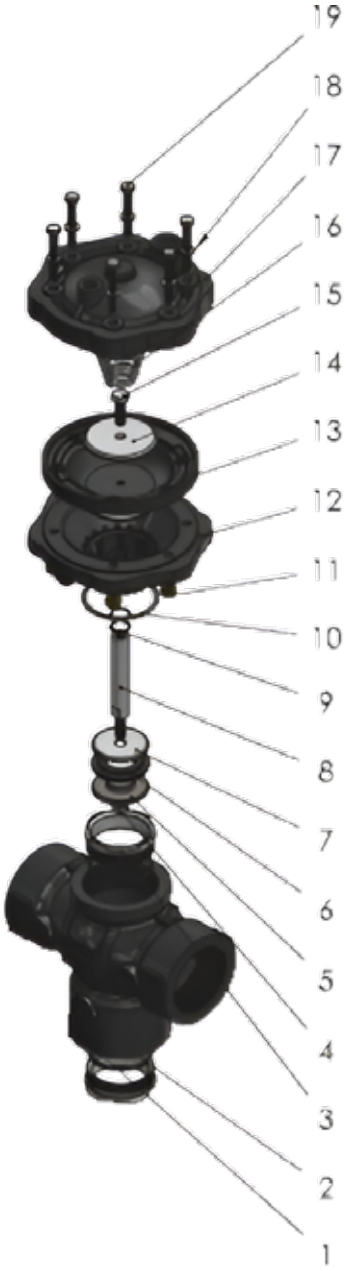




Back Flushing Mode
Control chamber pressurized -
The valve is in flushing mode



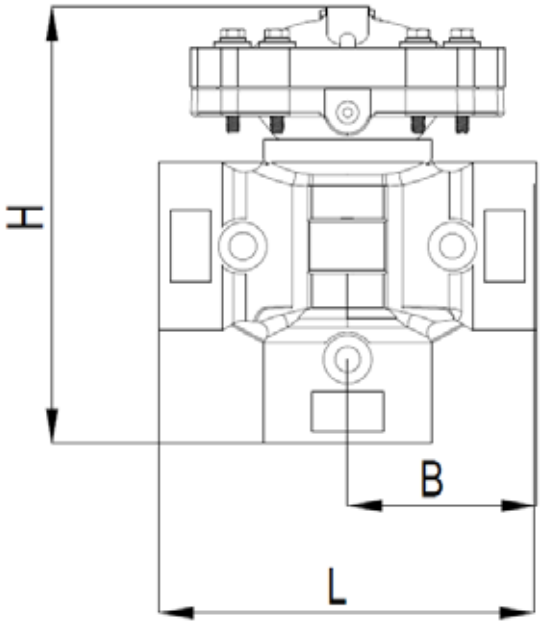



## 2x2 Plastic



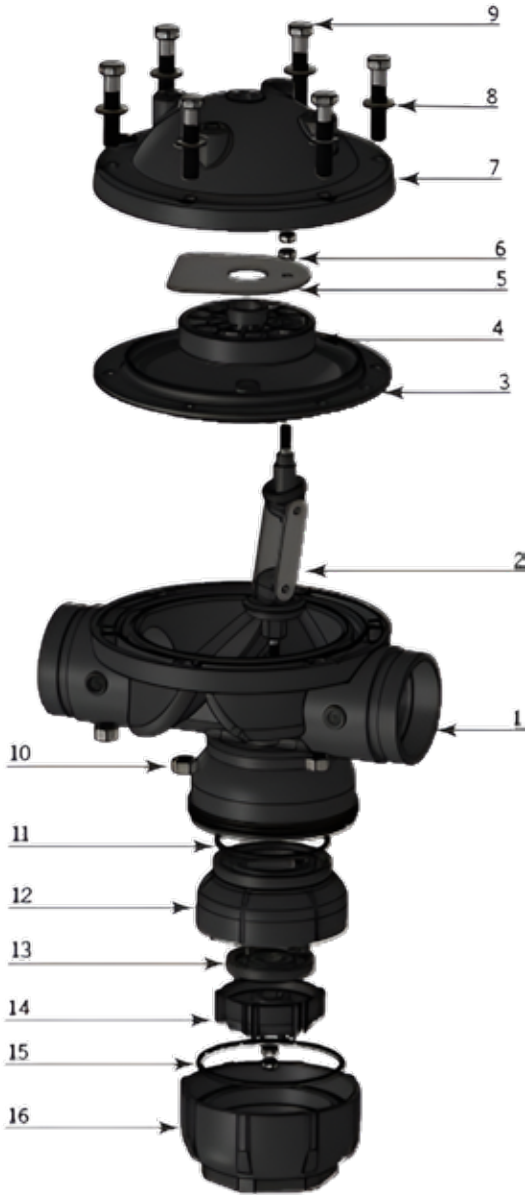

| # | Material Name | Type of Material |
|---|---|---|
| 1 | Body | GRP |
| 2 | Bearing O-Ring | NBR |
| 3 | Bearing | Stainless Steel |
| 4 | Nut | Stainless Steel |
| 5 | Buttom Bowl | HDPE |
| 6 | Seal | EPDM |
| 7 | Top Bowl | HDPE |
| 8 | Shaft | Stainless Steel |
| 9 | Shaft-o-ring | NBR |
| 10 | 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 |



# BACK FLUSHING
# CONTROL VALVES



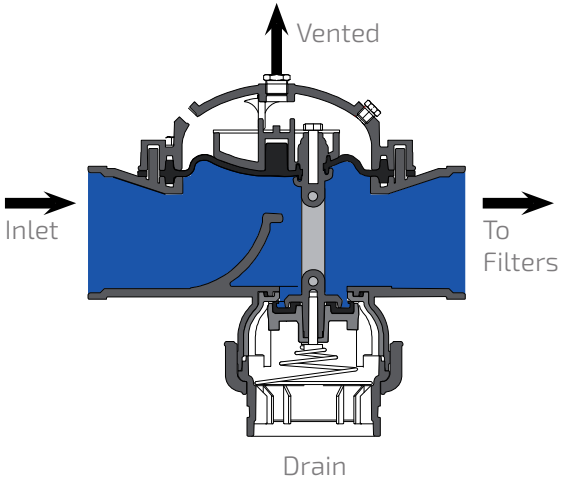



| # | Material Name | Type of Material |
|---|---|---|
| 1 | Body | Glass Reinforced polyamide |
| 2 | Jolint | Stainless Steel |
| 3 | Diaphragm | Natural Rubber |
| 4 | Diaphragm Support | Glass Reinforced polyamide |
| 5 | Diaphragm Support Plate | Stainless Steel |
| 6 | Nut | 8.8 Coated Steel |
| 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 |

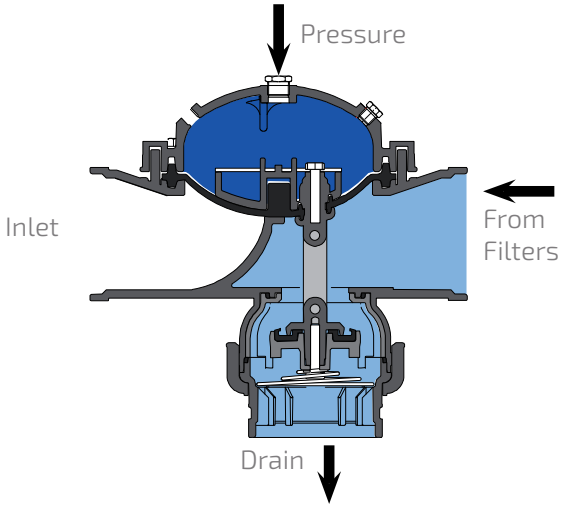
# BACK FLUSHING CONTROL VALVES

## Operating Principle

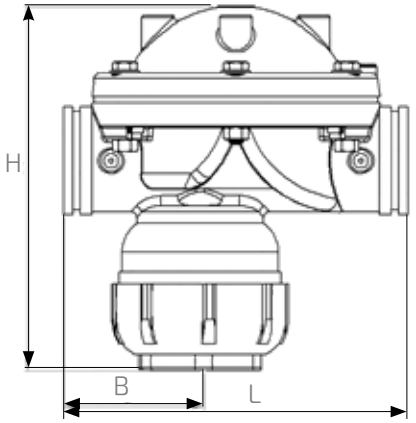
Filtration Mode
De-pressurized command - control chamber vents to atmosphere: The valve allows straight flow. Bottom drain plug is closed.




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 |



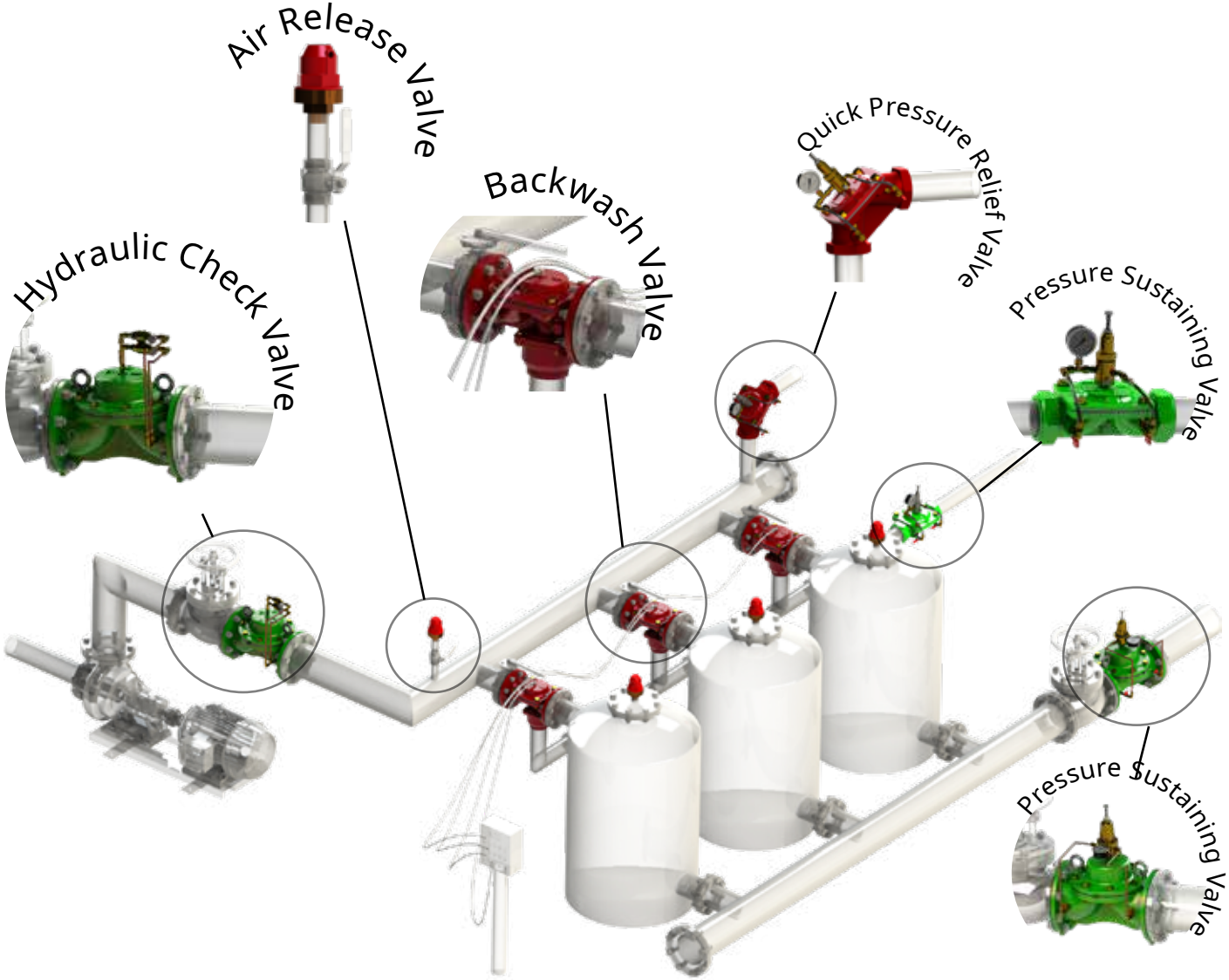



TYPHOON

# BACK FLUSHING
# CONTROL VALVES







# BACK FLUSHING CONTROL VALVES

## 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

# BACK FLUSHING CONTROL VALVES


| # | 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 |

# BACK FLUSHING
# CONTROL VALVES






# 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**

**International Documenting System Doo.**
**Budva / Montenegro**

**Authorised by**
**Vladimir Vučić SEKULIC**

CE

INTERNATIONAL DOCUMANTING SYSTEM DOO

## 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**
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**

**International Documenting System Doo.**
**Budva / Montenegro**

**Authorised by**
**Vladimir Vučić SEKULIC**

CE

INTERNATIONAL DOCUMANTING SYSTEM DOO




# EXHIBITIONS





tayfur
su sistemleri

Kemalpaşa OSB Mahallesi Kuzey Sanayi
Caddesi Dış Kapı No:13
Kemalpaşa / İzmir

+90 232 458 49 99
+90 232 458 57 67

www.tayfursu.com.tr | info@tayfursu.com.tr

TYPHOON®

# Her Fabrika Bir Kaledir*

M. Atatürk

*Every factory is a fortress