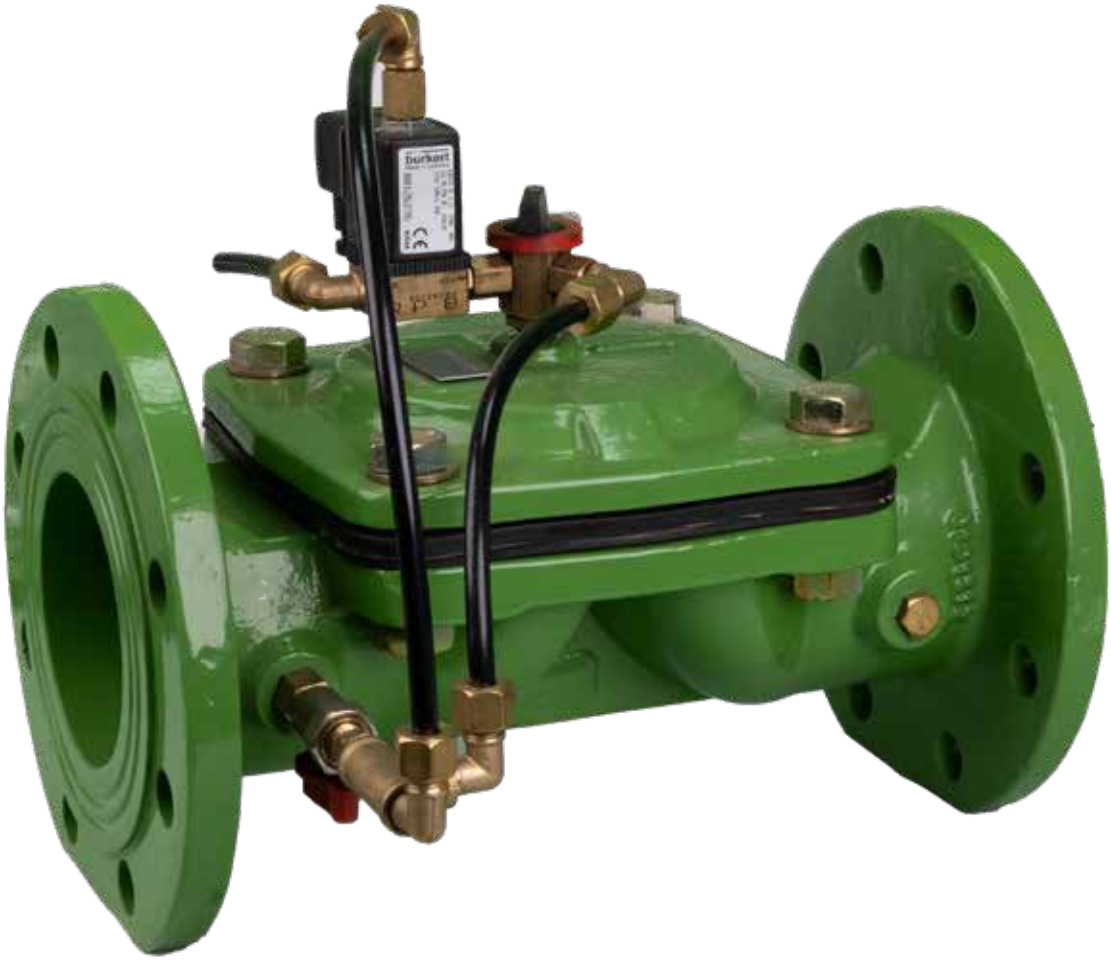
SOLENOID CONTROL VALVE

CATALOG



tayfur su sistemleri

TYPHOON®

tayfur
su sistemleri

TYPHOON®

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

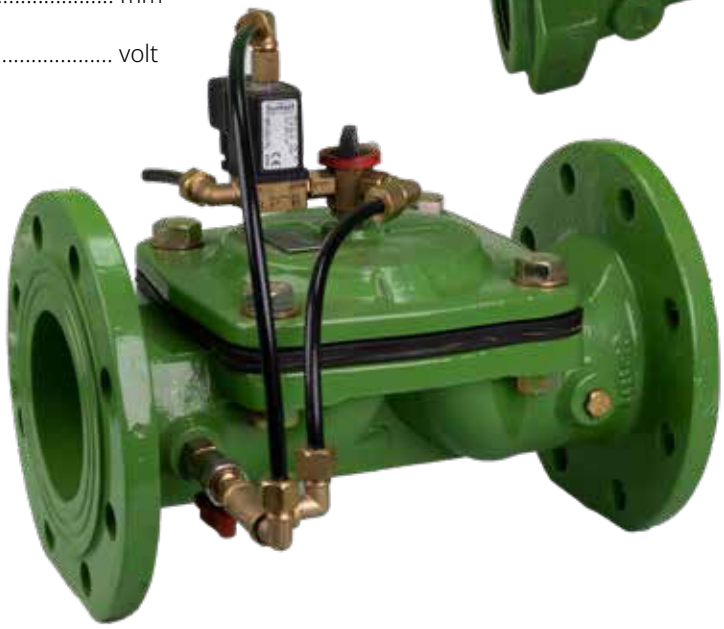
To be a leading, innovative, powerful and reputable enterprise in its sector.

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.

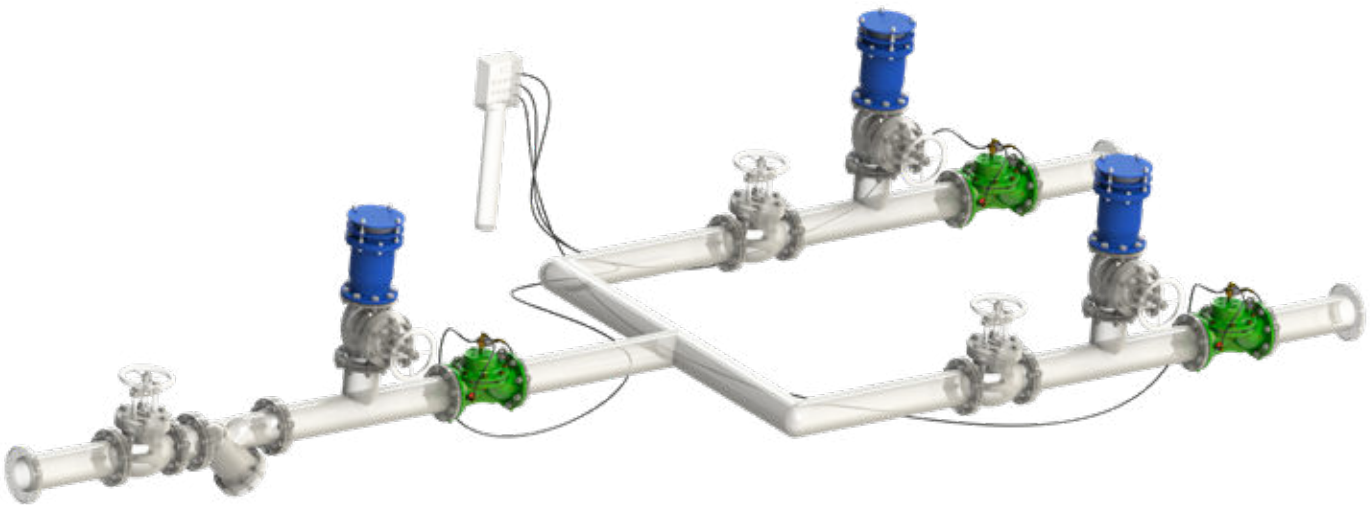
Opening/Closing process may be realized easily thanks to manual control on solenoid pilot valve. Depending on desire, 24V AC 50Hz/60Hz or 12V DC, 9V DC LATCH and 12V DC latch normally open (N.O.) or normally closed (N.C.) solenoid coils may be used on main valve.



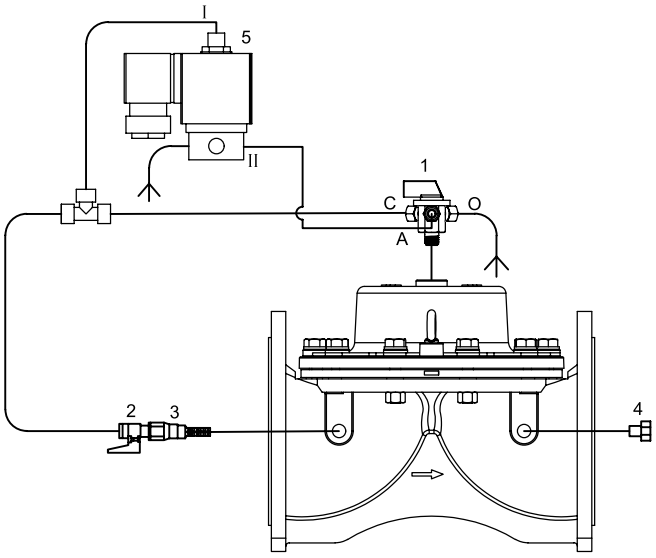
Order Information

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



Burkert 24V AC Installation / Adjustment



1 Three Way Mini Ball Valve
2 Mini Ball Valves
3 Finger Filter
4 End Caps
5 Solenoid Pilot

Assemble

• After connect the in-line finger filter that is numbered “3” and the mini ball valve that is numbered “2” to the inlet of the valve , which the connection is provided to the outlet
(named as “I”) and the outlet (named as “C) of the 3way valve with copper or plastic pipe.
• The outlet of solenoid pilot that is numbered “II” , is connected to the auto outlet (named as “A” 3way valve .
• The end-cap that is numbered as “4” is connected to the outlet of the valve.
• Valve nominal diameter must equal to or one size smaller than line diameter.
• Assemble the valve into the direction of the arrow a shown onto the valve.
• Usage of the isolation valves (butterfly or gate valves) , air release valves , quick relief valve and strainers recommended on the pipeline.
• In the period of pressure reducing , the cavitation risk is dangerous for the body of valve. Adjust the outlet pressure value according to the cavitation schema and apply to our Company.

Adjust

• Connect the cables of the solenoid pilot for valve which is shown numbered “5” to the control device in accordance with required as available.
• Run the pump or open the main valve in the network of line and give the water to the system.
• Open the mini ball valve that is numbered “2” which is placed inlet of the valve.. Then turn the three-way selector valve as shown numbered “1” to the “Auto” position on the valve.

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.

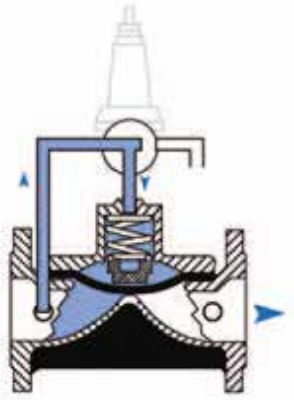
TYPHOON hydraulic control valves, in-line drinking water pump, agricultural irrigation, fire systems, filtration, industrial, etc. designed for use in areas.

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.

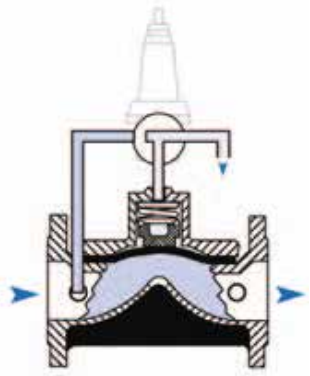
Valve Closing Mode

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.



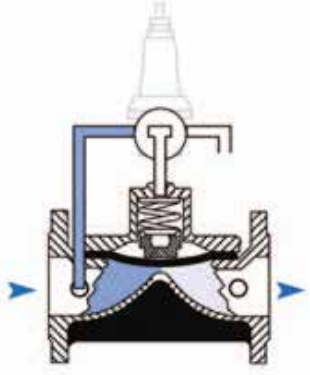
Valve Opening Mode

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

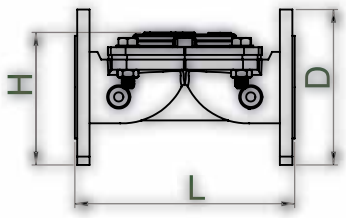
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
Valve Diameter	2	50	2½	65	3	80	4	100	5	125	6	150	8	200	10	250	12	300
Kv m³/h @ 1bar	88		88		174		187		187		419		1139		1698		2276	
Cv gmp @ 1psi	102		102		201		216		216		484		1316		1961		2629	

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

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)

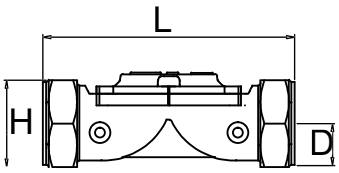
Cv = 1,155Kv
ΔP : Pressure Loss (bar, psi)
G : The specific gravity of water(Water=1.0)

Flanged



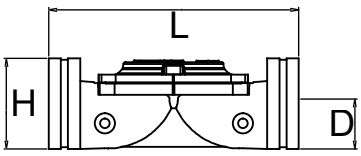
DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
2	50	6,50	165	8,66	220	5,87	149	17,60	8,00
2½	65	7,28	185	8,66	220	6,06	154	21,60	9,80
3	80	7,87	200	11,26	286	6,81	173	38,80	17,46
4	100	8,66	220	12,99	330	6,81	173	46,47	29,08
5	125	9,84	250	14,49	368	8,35	212	62,30	28,25
6	150	11,22	285	15,51	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



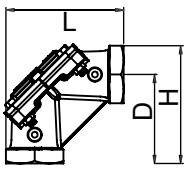
DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
3/4	20	0,9	23	5,2	132	2	50	2,2	1
1	25	0,9	23	5,2	132	2	50	2,2	1
1¼	32	1,35	34	6,8	173	3,6	92,3	6,3	2,85
1½	40	1,35	34	6,8	173	3,6	92,3	5,8	2,65
2	50	1,65	41,5	7,3	186	4,4	112	9	4,1
2½	65	1,8	46	8,9	226	4,6	118	11,7	5,3
3	80	2,05	52,5	12,5	318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

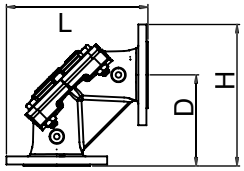
Victaulic



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



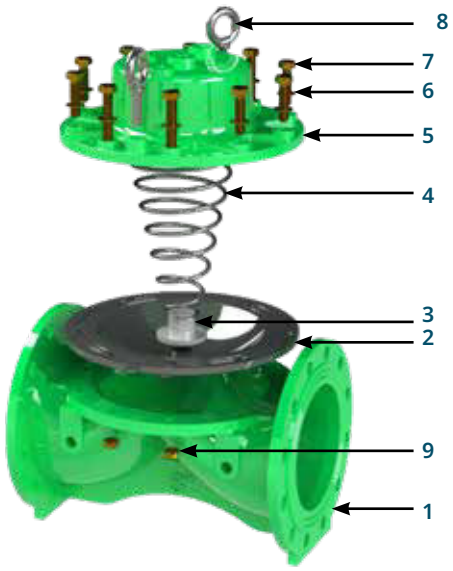


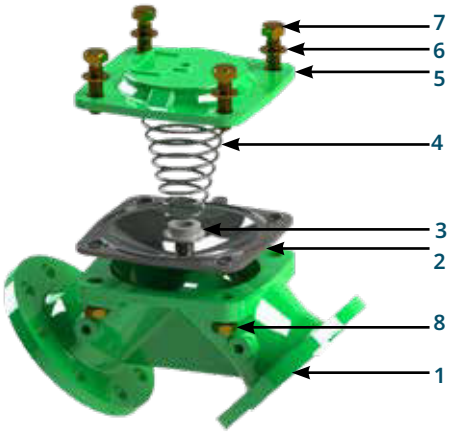
	DN		D		L		H		Weight	
	inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
Threaded	2	50	4,4	112	6,05	154	6,05	154	9,47	4,3
	3	80	7,1	180	9,45	240	9,45	240	29,3	13,3
Flanged	2	50	4,4	112	7,44	189	7,44	189	19,07	8,65
	3	80	7,1	180	10,95	278	10,95	278	39,02	17,7
	4	100	7,48	190	12	305	12	305	60,19	27,3
	6	150	9,05	230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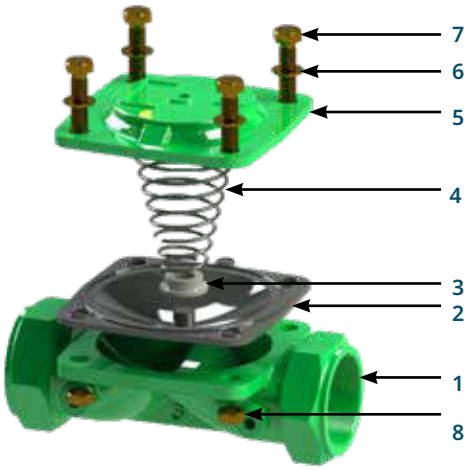
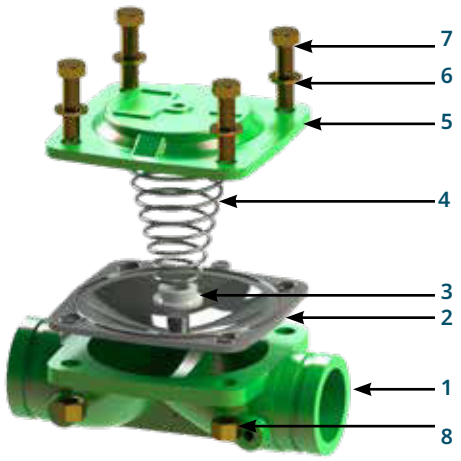
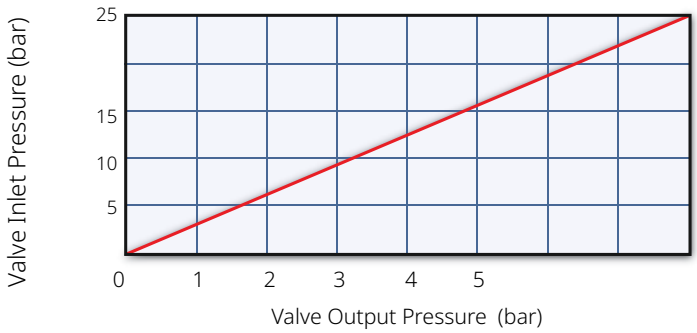




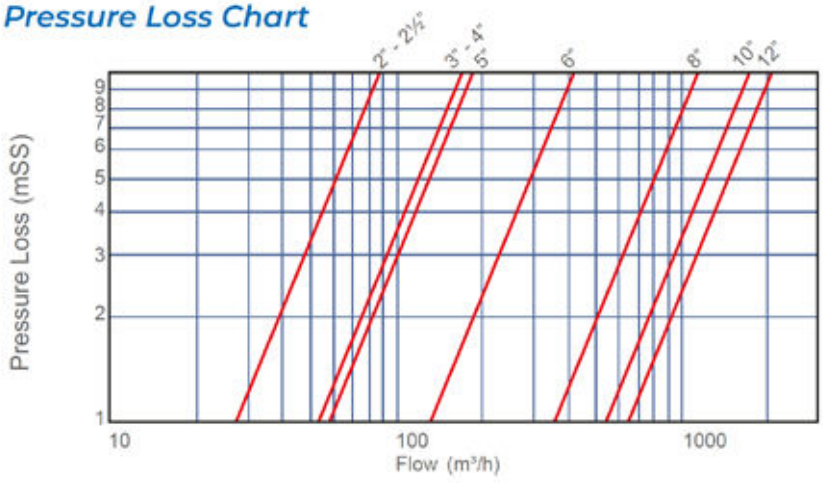
Technical Specifications

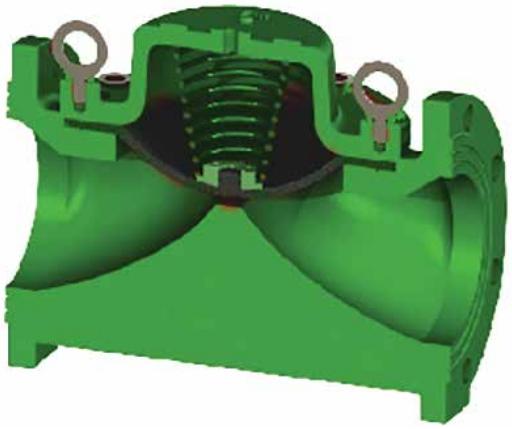
Operating Pressure	Standard	0,7 - 16 bar (10 - 240 psi)
	Low Pressure Range	0,5 - 10 bar (7,5 - 160 psi)
	High Pressure Range	0,7 - 25 bar (10 - 360 psi)
Temperature	Minimum Operating Temp.	- 10 °C (14 °F) DIN 2401/2
	Maximum Operating Temp.	80 °C (176 °F) DIN 2401/2
Connection	Flanged	DIN 2501, ISO 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





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
Moračka Put BB 85310 Budva/Montenegro

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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

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