

PRESSURE REDUCING & SUSTAINING CONTROL VALVE

TYPHOON

TAYFUR WATER SYSTEMS



We Care About Every Drop of Water

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.



PRESSURE REDUCING & SUSTAINING 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.

Order Information

Please provide the following information in order

Maximum flow rate	m³/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





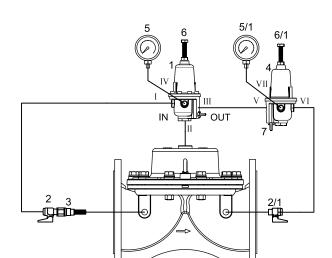
PRESSURE REDUCING & SUSTAINING CONTROL VALVE

Assemble

- After connecting the finger filter number 3 and the mini ball valve number 2 to the valve inlet, connection to the "I" outlet of the pressure stabilizer pilot is provided with the help of copper or plastic pipes.
- "II" outlet of the pressure stabilizing pilot is entered to the valve cover with the necessary fittings.
- "III" outlet of the pressure stabilizing pilot is connected to the "V" outlet of the pressure reducing valve.
- A mini ball valve numbered 2/1 is connected to the valve outlet. From here, a connection to the "IV" outlet of the pressure reducing pilot is provided. Finally, a manometer is connected to the "IV" output of the pressure stabilizing pilot and to the "VII" output of the pressure reducing pilot.
- Valve nominal diameter must be the same as line diameter or one nominal diameter smaller.
- Mount the valve in the direction of the arrow indicated on it.
- It is recommended to use isolation valves (butterfly or gate valves etc.), air relief valve, quick pressure relief control valve (QR) and strainer valves in line-mounting of the valve.
- The risk of cavitation during pressure drop is dangerous for the valve body. Adjust the outlet pressure value you want to adjust by referring to the cavitation chart or contact our company.



- Start the pump or deliver water to the system by opening the main valve on the network.
- Open ball valve indicated with "2" and close ball valve indicated with "2/1".
- Adjust the desired upstream pressure value by looking at the pressure gauge with the adjustment bolt on the pressure sustaining pilot valve indicated with "1". After determining the set point, tighten the contra nut.
- Adjust the pressure reducing pilot valve indicated with "4" by looking at the pressure gauge thanks to the adjustment bolt "6" on it. The manometer on the pressure reducing pilot valve shows the valve downstream pressure value.
- When you turn the adjustment bolt of both pilot valves clockwise, the pressure value will increase and when you turn it in the opposite direction, the pressure value will decrease.
- After determining the desired pressure point in both pilot valves, open the ball valve indicated with "2/1" and deliver water to the system. During the normal operation of the valve, the inlet manometer will show the valve upstream pressure value and the outlet manometer will show the zero value. To see the downstream pressure value, close the "2/1" ball valve.



- 1. Pressure Sustaining Pilot
- 2. Mini Ball Valves
- 3. Finger Filter
- 4. Pressure Reducing Pilots
- 5. Manometer
- 6. Pressure Adjustment Bolts
- 7. Needle Valve



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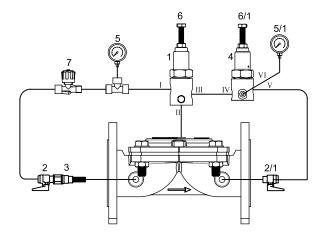
PRESSURE REDUCING & SUSTAINING CONTROL VALVE

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Adjust

- Start the pump or deliver water to the system by opening the main valve on the network.
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- 1. Pressure Sustaining Pilot
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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** Pressure Reducing + 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





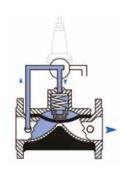






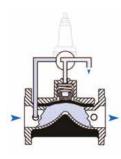
Working Principles

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.



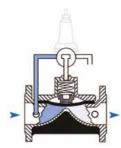
Valve Closing Mode

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



Conn	Connection Material		Во	ody	Transmition Pressure				
Flor	Flanged GGG40		Globe		F	PN10 - PN16 - PN25			
Available Diameters									
mm	50	65	80	100	125	150	200	250	300
inch	2	21/2	3	4	5	6	8	10	12



Conn	nnection Material		Во	ody	Transmition Pressure			
Thre	Threaded GGG40		Globe		PN10 - PN16 - PN25			
Available Diameters								
mm	20	25	32	40	50	65	80	
inch	3/4	1	11/4	11/2	2	21/2	3	

)
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Conne	Connection Material		Во	dy	Transmition Pressure			
Victaulic		GGG40		Globe		PN10 - PN16 - PN25		
Available Diameters								
mm	50	65	80	100	150	200		
inch	2	21/2	3	4	6	8		



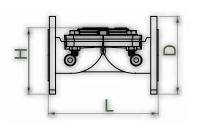
Conn	Connection Material		Во	dy	Transmition Pressure				
	Flanged / GGG40		Globe		PN10 - PN16 - PN25				
	Available Diameters								
mm	50	80	100	150					
inch	2	3	4	6					

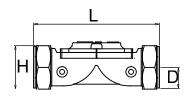


HYDRAULIC CONTROL VALVES

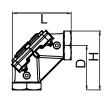
Sizes and Weights

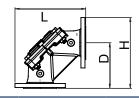
	D	Ν)	L		ŀ	ŀ	We	igh l
	inch	mm	inch	mm	inch	mm	inch	mm	Lbs	K ₉
	2	50	6,50	165	8,66	220	5,87	149	17,60	8,00
	2 ^{1/2}	65	7,28	185	8,66	220	6,06	154	21,60	9,80
ρə	3	80	7,87	200	11,26	286	6,81	173	38,80	17,46
Flanged	4	100	8,66	220	12,99	330	6,81	173	46,47	29,08
正	5	125	9,84	250	14,49	368	8,35	212	62,30	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



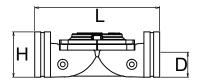


	D	Ν)		_	ŀ	1	We	igh l
	inch	mm	inch	mm	inch	mm	inch	mm	Lbs	K ₉
	3/4	20	0,90	23,0	5,2	132	2,0	50,0	2,2	1,00
ρəρ	1	25	0,90	23,0	5,2	132	2,0	50,0	2,2	1,00
Threaded	11/4	32	1,35	34,0	6,8	173	3,6	92,3	6,3	2,85
루	1 1/2	40	1,35	34,0	6,8	173	3,6	92,3	5,8	2,65
	2	50	1,65	41,5	7,3	186	4,4	112,0	9,0	4,10
	2 ^{1/2}	65	1,80	46,0	8,9	226	4,6	118,0	11,7	5,30
	3	80	2,05	52,5	12,5	318	5,0	127,0	26,4	12,00





اد دا د د	DN		D		L		Н		Weight	
Angled	inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
P	2	50	4,4	112	6,05	154	6,05	154	9,47	4,3
ρο	3	80	7,1	180	9,45	240	9,45	240	29,30	13,3
Threaded										
-	2	50	4,40	112	7,44	189	7,44	189	19,07	8,65
) 6 e	3	80	7,10	180	10,95	278	10,95	278	39,02	17,7
Flanged	4	100	7,48	190	12,00	305	12	305	60,19	27,3
ш.	6	150	9,05	230	14,92	379	14,92	379	106,26	48,2



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	inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg	
	2	50	1,18	30	7,24	190	3,11	79,0	8,60	3,9	
ij	2 ^{1/2}	65	1,46	37	8,90	218	3,74	95,0	9,92	4,5	
Victaulic	3	80	1,77	45	11,42	290	3,70	94,0	13,00	5,9	
>	4	100	2,26	57,5	12,48	317	4,19	106,5	13,6	6,2	
	6	150	3,30	84	17,87	392	5,24	133,0	66,00	30	
	8	200	4,53	115	21,40	544	13,10	332,0	143,30	65	

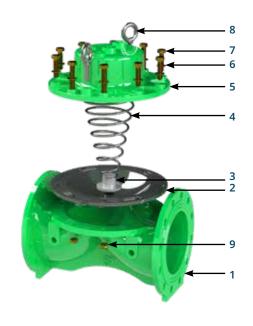


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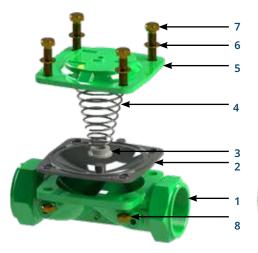
Main Parts

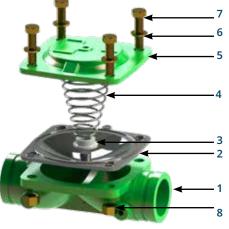
Flanged

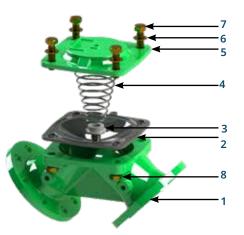
Nr.	Material Name	Type Of Material
1	Body	GGG40
2	Diaphragm	Natural Rubber
3	Spring Seat	Polyamide
4	Spring	SST 302
5	Cover	GGG40
6	Washer	8.8 Coated Steel
7	Bolt	8.8 Coated Steel
8	Lifting Eyebolts	8.8 Coated Steel
9	Nut	8.8 Coated Steel



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Threaded - Victaulic - Angled

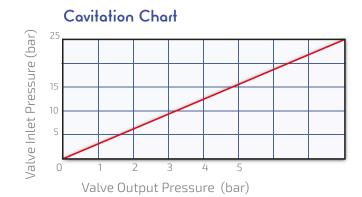
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HYDRAULIC CONTROL VALVES

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	Ероху						
	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							

Pressure Loss Chart (SSW) 8807 66 5 4 3 2 100 Flow (m³/h) 1000



Hydraulic Performance

	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
Valve Diameter	2	50	2 ^{1/2}	65	3	80	4	100	5	125	6	150	8	200	10	250	12	300
Kv m3/h @ 1bar	8	8	8	8	17	74	18	37	18	37	4	19	11:	39	16	98	22	276
Cv gmp @ 1psi	10)2	10)2	21	01	2	16	2	16	48	34	13	16	19	61	26	29

Kν(**C**ν) = **Q**. √**G**/Δ**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 $(m^3/h, gpm)$

Cv = 1.155Kv

ΔP: Pressure Loss (bar, psi)

G: The specific gravity of water(Water=1.0)





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CERTIFICATES







ISO 9001:2015

Kalike foneten Sistemi standardnin pertiarina syen bir yönetim systemi kunfufuni es uygulediğin onsylansık ülere ventinişer (to cetil) hit Geleliy Hanagemeni System in accordance erle standardıcılaşıyası

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Kasacoğları Makines (377 Sekak No.19 A Barasası / Bran / Yurkiye

Hamufacture and sales of plastic & casting hydraulic control valves, casting & plastic Bacis-Husb-ing control valves, non-slam dynamic & plastic air release valves, foot valves, single chamber / double function air valves, strainer, serwage – air heibase valve, plitse back - husb-ing control devices and bracs

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TAYFUR SU SÍSTE VE TÍCARET AN ONÍM ŞÎRKETÎ Karandûn Marabes 6172 Bosak North A Bonowa / Épite / Turoye

DOKUM HIDROLÍK KONTROL VANALARI, PLASTÍK HIDROLÍK KONTROL VANALARI, PÓKÚM GERÍ YLKAMA VANALARI, PLASTÍK GERÍ YIKAMA VANALARI, DÓKÚM DARBOSÍZ DÍMANÍK VANTUZLAR, PLASTÍK VANTUZLAR, DIP RIJOPLERI, TRK / ÇIFT PONKSTYCKU NAVA VANALARI, PÍŠLÍK TUTUCULAR, PĚS SU MÁVA TANLÍYE VANALARI, FÍLÍTRE TERS YIKAMA

MANUFACTURE AND SALES OF PLASTIC & CASTING HYDRAULIC CONTROL
VALVES, CASTING & PLASTIC BACK-FLUSHING CONTROL VALVES, MOHSLAN
DYNAMIC & PLASTIC AIR RELEASE VALVES, FOOT VALVES, STRICLE
RELEASE VALVE, FLITTE BACK-FLUSHING CONTROL DEVICES AND BRASS
QUICK COUPLING VALVES

ISO 14001:2015

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TAYFUR SU SISTEMLER! MAKINE MÜHENDISLİK ŞA AYİ
VE TİCARET ANDNİM ŞİRKETİ
VARCAQQIAN MANIRA 6172 SONAN NO.19 A BONGONA (İBYRI / TAYAYA

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MARUFACTURE AND SALES OF PLASTIC & CASTING HYDRAULIC CONTROL VALVES, CASTING & PLASTIC BACK-FUSHING CONTROL VALVES, NON-SLAM DYNAMIC & PLASTIC AR RELEASE VALVES, FOOT VALVES, SINGLE CHAMBER / DOUBLE FUNCTION AIR VALVES, STRATHER, SEWAGE — AIR REPLEASE VALVES, FUTER AIR PLASES

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interestion into diagram Oneys system Cerestion of Approval Special (2024-02-16

TOC Condition Management (2). The inclination of the condition of the cond



EXHIBITIONS











ТүрНоор

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

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

/w.tayfursu.com.tr | info@tayfursu.com.t

TYPHOON

