DIFFERANTIAL FLOAT LEVEL CONTROL VALVE

CATALOG









TYPHOON



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.

Differential Float Level Control Valve

Hydraulic Control Valves

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.

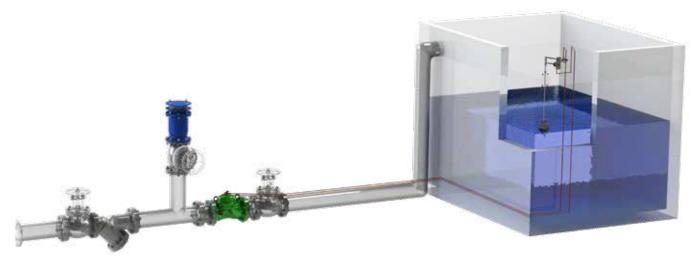
Order Information

Please provide the following information in order

- Maximum flow rate m³/h
 Maximum mains / operating pressure bar
- Main pipeline diametermm
- Valve connection type
- Desired level control range-m

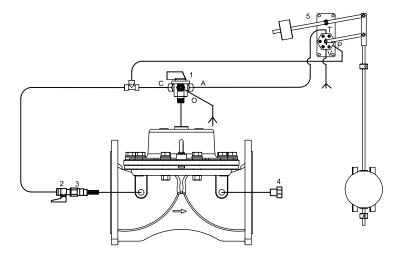






Differential Float Level Control Valve

Hydraulic Control Valves



- 1 Three Way Selector Valve
- 2 Mini Ball Valve
- 3 In-Line Finger Filter
- 4 End Cap
- 5 Differential Level Pilot Valve

Assemble

- After connected 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 inlet (named as "C") of the closed positioned 3way valve and the inlet of the differential pilot (named as "P") with copper or plastic pipe.
- The outlet (named as "A") of the 3way valve is connected to the outlet of differential pilot (named as "T")
- The end-cap that is numbered "4" is connected to the outlet of valve.
- Valve nominal diameter has to be same as the line diameter or one size smaller than line diameter.
- Mount valve in the direction of the arrow as shown onto the valve.
- Usage of the isolation valve (butterfly valves , gate valves etc) , air release valves ,

Quick pressure relief control valve and strainers is recommended at assemble of the valves onto the pipeline.

• In the period of pressure reducing, the cavitation risk is dangerous for the body of valve. Adjust the wanted outlet pressure value according to the cavitation schema and apply to our Company.

Adjust

- Mount and fix the valve as differential float pilot which is shown as numbered "5" according to the level of Water in reservoir / tank.
- Mount the pipe of hydraulic pressure signal which is given with valve to the 3way selector valve according to the instruction as given hereunder

Auto "T" Close "P" Drain "V"

• Open the mini ball valve that is shown as numbered "2"



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

Hydraulic Check Valve











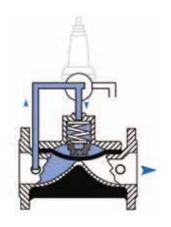
HD

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.

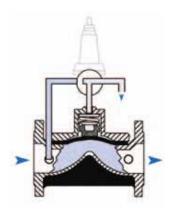
Valve Closing Mode

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.



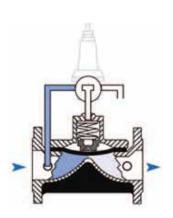
Valve Opening Mode

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

Flanged

Conne	Connection Material		erial	Во	dy	Transmition Pressure				
Flan	Flanged GGG40		Glo	be	PN10 - PN16 - PN25					
				Available I	Diameters					
mm	50	65	80	100	125	150	200	250	300	
inch	2	21/2	3	4	5	6	8	10	12	



Threaded

_				2 2 3 3 3								
	Connection Material		Во	dy	Transmition Pressure							
	Threa	aded	ed GGG40		Globe		PN10 - PN16 - PN25					
					Available I	Diameters						
	mm	20	25	32	40	50	65	80				
	inch	3/4	1	11/4	1½	2	2½	3				



Victaulic

					VICIO	<u> </u>			
Conn	ection	Mate	erial	Во	dy	Transmition Pressure			
Vict	aulic	GG	G40	Globe			PN10 - PN16 - PN25		
	,				Diameters				
mm	50	65	80	100	150	200			
inch	2	21/2	3	4	6	8			



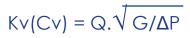
Angled

Conne	onnection Material		Во	dy	Transmition Pressure	
Flan Thre	ged aded	ed led GGG40		Globe		PN10 - PN16 - PN25
	A				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	8	88	8	8	17	74	18	37	18	37	4	19	11	39	16	98	22	76
Cv gmp @ 1psi	1	02	10)2	20	01	21	16	2	16	48	34	13	16	19	61	26	29



 \mathbf{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

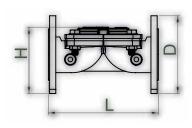
ΔP: Pressure Loss (bar, psi)

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



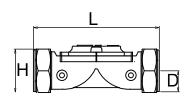
Sizes and Weights

Flanged



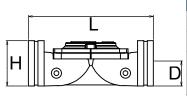
D	N	[D L		ŀ	1	Wei	ght	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
2	50	6,50	165	8,66	220	5,87	149	17,60	8,00
21/2	65	7,28	185	8,66	220	6,06	154	21,60	9,80
3	80	7,87	200	11,26	286	6,81	173	38,80	17,46
4	100	8,66	220	12,99	330	6,81	173	46,47	29,08
5	125	9,84	250	14,49	368	8,35	212	62,30	28,25
6	150	11,22	285	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

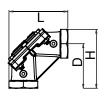


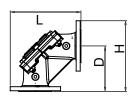
D	N	[D		L		Н		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg	
3/4	20	0,9	23	5,2	132	2	50	2,2	1	
1	25	0,9	23	5,2	132	2	50	2,2	1	
11⁄4	32	1,35	34	6,8	173	3,6	92,3	6,3	2,85	
11/2	40	1,35	34	6,8	173	3,6	92,3	5,8	2,65	
2	50	1,65	41,5	7,3	186	4,4	112	9	4,1	
21/2	65	1,8	46	8,9	226	4,6	118	11,7	5,3	
3	80	2,05	52,5	12,5	318	5	127	26,4	12	

Victaulic



	D	Ν	[)	L	-	ŀ	1	Wei	ght
	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
	21/2	65	1,46	37	8,9	226	3,74	95	9,92	4,5
7	3	80	1,77	45	11,42	290	3,7	94	13	5,9
4	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	





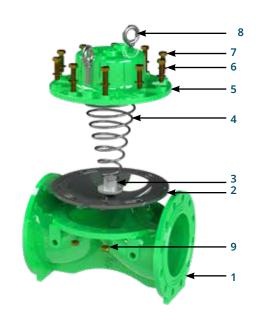
Angled

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

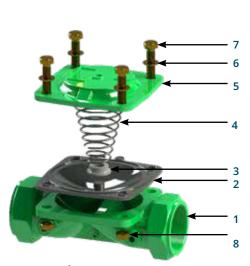
Main Parts

Flanged

	langea							
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
3	Spring Seat	Polyamide
4	Spring	SST 302
5	Cover	GGG40
6	Washer	8.8 Coated Steel
7	Bolt	8.8 Coated Steel
8	Nut	8.8 Coated Steel

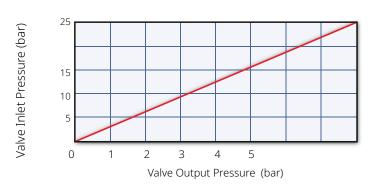


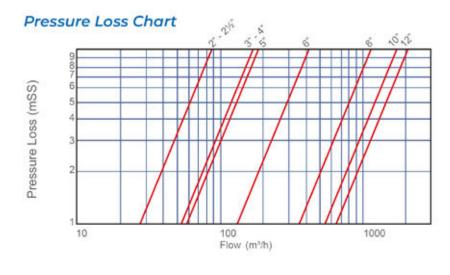
Technical Specifications

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	

Cavitation Chart























Her Fabrika Bir Kaledir*

Kaledir*



*Every factory is a fortress