



Y TYPE CONTROL VALVES-PLASTIC

TAYFUR WATER SYSTEMS

TYPHOON®

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.

STORY OF US

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.



Y TYPE CONTROL VALVE

Plastic

TYPHOON Y Type Plastic Automatic Hydraulic Control Valves are designed in "Y" body model type, with high modulation capacity, to work with minimum pressure loss, cavitation and noise under difficult working conditions with high pressure differences.

TYPHOON Y Type Plastic Automatic Hydraulic Control Valves are close the flap with double chamber diaphragm actuator. It has double control chamber as standard. It can be used as a single chamber without using an extra control chamber. Through to the valve shaft, which is rigidly mounted on the valve body, it operates in a controlled and properly opens and closes fully sealed without causing impact.

TYPHOON Y Type Plastic Automatic Hydraulic Control Valves provide maximum performance under difficult conditions with glass reinforced nylon body structure. It is easy to assemble and disassemble with its simple and reliable structure. It has high chemical and corrosion resistance.

TYPHOON Y Type Automatic Hydraulic Control Valves can be obtained by adding various control equipments to the Basic valve body and valves that can make different tasks.

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

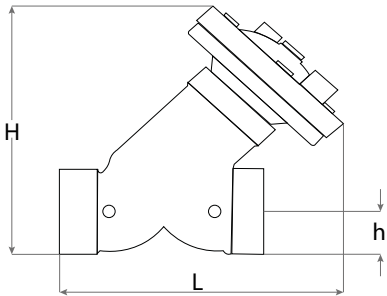
Features

- Easy to use and maintain with its simple structure
- Lower costs
- Working in wide pressure range
- Perfect modulation even at low flow rates
- Impact-free opening and closing with flexible diaphragm
- Fully sealing with reinforced diaphragm and inner spring
- High diaphragm resistance
- Wide control application area with different pilot mounts
- Ability to work in horizontal and vertical positions



Dimentions and Weights

DN		L		h		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	Kg
2	50	6,49	165	1,49	38	8,86	225	3,86	1,75
3/4	20	5,31	135	1,02	26	5,23	133	2,09	0,95
1	25	5,31	135	1,02	26	5,23	133	2,20	1,00
1 1/4	32	5,31	135	1,14	29	5,23	133	2,31	1,05
1 1/2	40	8,78	165	1,49	38	8,86	225	3,86	1,75
2	50	6,49	165	1,49	38	8,86	255	3,86	1,75

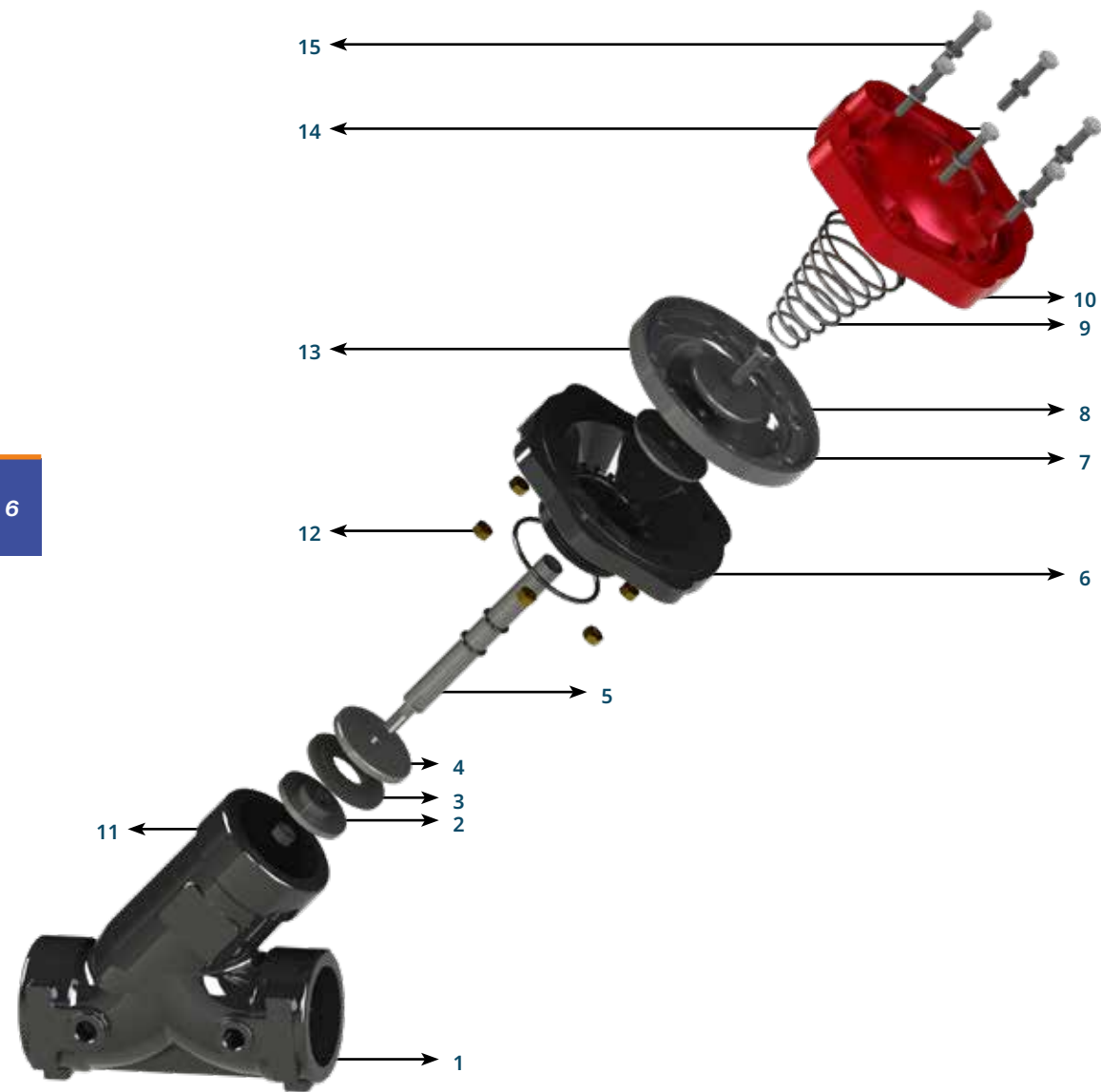


Working Temperature: Maximum 80°C
Working Pressure: Maximum 10 Bar



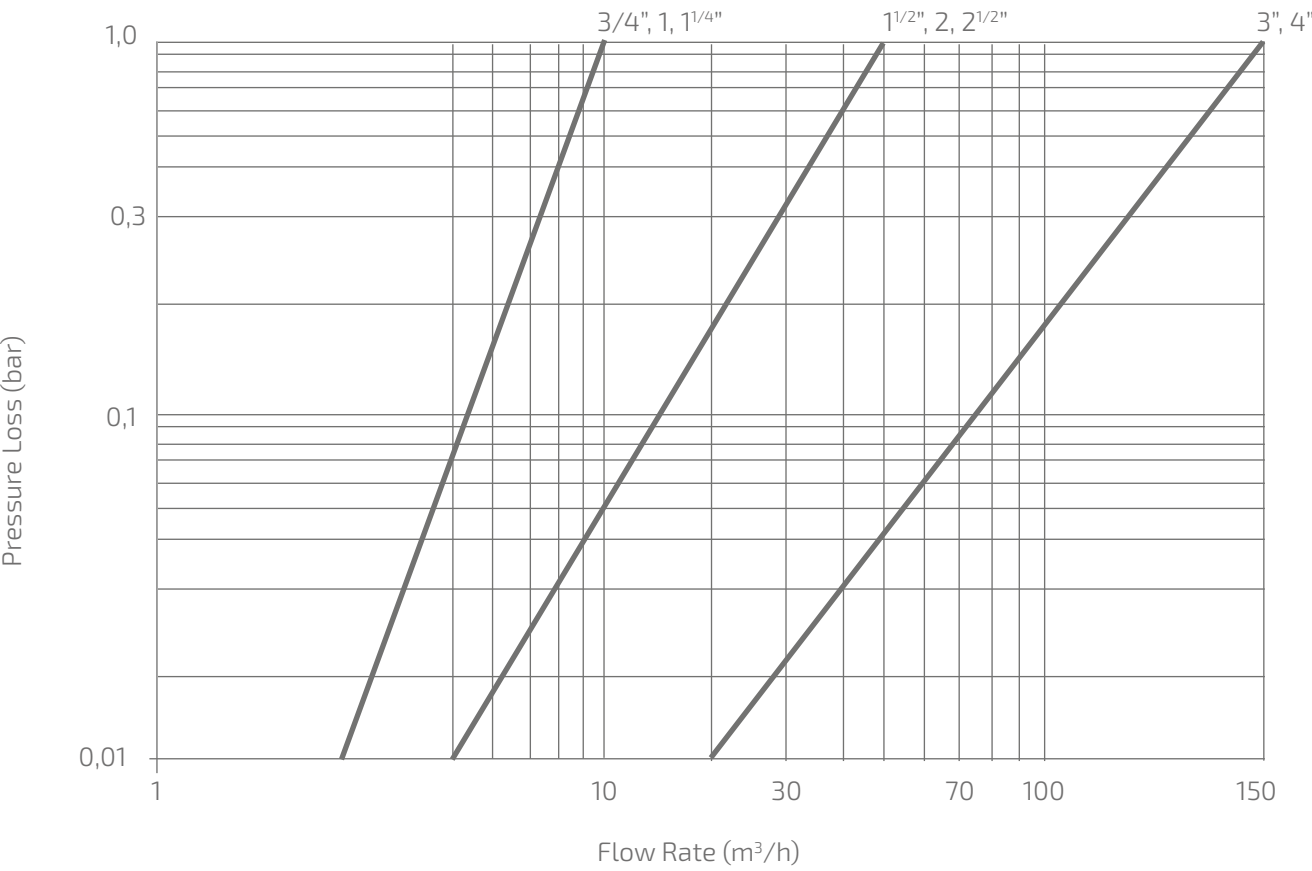
Y TYPE CONTROL VALVE

Plastic



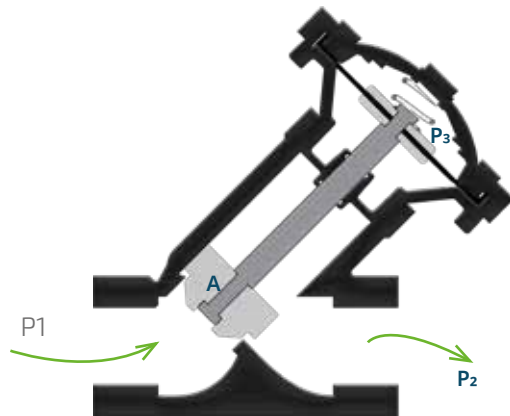
#	Material Name	Type Of Material
1	Body	Glass Fiber Reinforced Polyamide
2	Flap	Stainless Steel
3	Sealing Rubber	EPDM
4	Bowl	Stainless Steel
5	Shaft	Stainless Steel
6	Bottom Cover	Glass Fiber Reinforced Polyamide
7	Diaphragm	Natural Rubber
8	Diaphragm Support	Stainless Steel
9	Spring	Stainless Steel
10	Top Cover	Glass Fiber Reinforced Polyamide
11	Nut	Stainless Steel
12	Nut	Brass
13	Bolt	Stainless Steel
14	Bolt	Stainless Steel
15	Washer	Stainless Steel

Pressure Loss Chart



Y TYPE CONTROL VALVE

Plastic - Serie 1

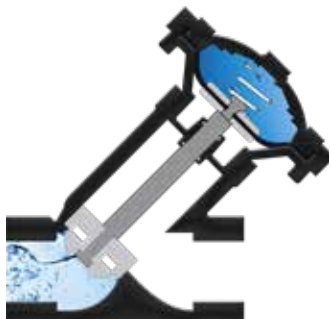


Valve Closing Mode

When the pilots on the main control valve bring the inlet pressure (P1) above the diaphragm, the water creates hydraulic force. Though to this force, the valve flap fits into the body bushing and ensures the valve to be closed in a fully sealed manner.

If the forces are examined in closing mode ;

$P_3 \times 3A + P_{\text{spring}} > P_1 \times A$
Inequality is achieved. If there is no external influence on the area indicated by the P_3 pressure, the P_3 pressure will be equal to the maximum P_1 pressure.



Working Principles

They are automatic control valves with double chamber diaphragm actuators, which are used to perform hydraulically desired operations with line pressure without the need for energy sources in the network line.

P1 : Inlet Pressure
P2 : Outlet Pressure
P3 : Actuator Pressure

P_{spring} : Spring Force
A : The Valve's Influence

Valve Opening Mode

The inlet pressure of the main control valve is provided to open the valve by overcoming the spring force that helps the closing process and the force created by the pressure P3 on the diaphragm.
If the forces are examined in opening mode ;

$$P_1 \times A > P_{\text{spring}} + P_3 \times 3A$$

Inequality is achieved. As the area indicated by the pressure P3 is evacuated, the differential pressure becomes 0. Thus, $P_1 \times A$ force is overcome by spring force and the valve is opened. Spring force determines the minimum opening pressure that enables the valve to open.



Modulation Mode

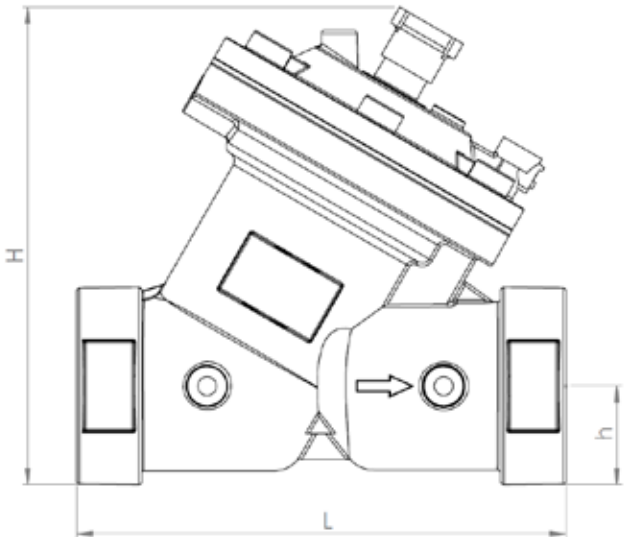
The pilots on the main control valve constantly control the pressure of the fluid and enable it to operate in modulation mode.

If the forces are examined in modulation mode ;

$$P_1 \times A + P_2 \times 3A = P_3 \times 3A + P_{\text{spring}} + P_2 \times A$$

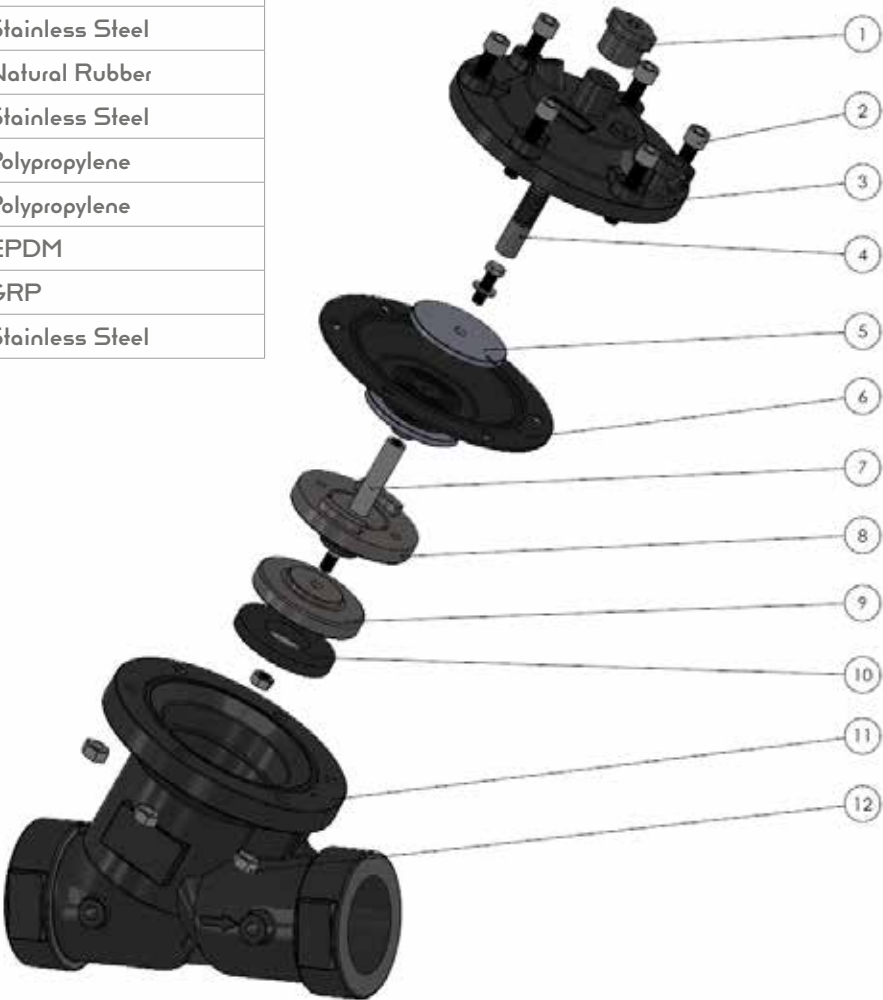
Equality is achieved. The pilot valve, which enables the valve to operate in modulation mode, regulates the pressures of P_2 and P_3 , providing force equality. Thus, the valve operates in modulation mode.





#	Material Name	Type Of Material
1	Flow Rate Clamp	Polypropylene
2	Bolt	Stainless Steel
3	Cover	GRP
4	Flow Shaft	Polypropylene
5	Aperture Support	Stainless Steel
6	Diaphragm	Natural Rubber
7	Mil	Stainless Steel
8	Bottom Cover	Polypropylene
9	Dish	Polypropylene
10	Sealing Rubber	EPDM
11	Body	GRP
12	Nut	Stainless Steel

Connection	DN		L		h		H	
	inch	mm	inch	mm	inch	mm	inch	mm
Threaded	3/4"	20	6,50	165	1,02	26,0	6,30	160
	1"	25	6,50	165	1,02	26,0	6,30	160
	1 1/4"	32	6,50	165	1,18	30,0	6,46	164
	1 1/2"	40	8,78	223	1,46	37,0	8,94	227
	2"	50	8,78	223	1,57	40,0	9,06	230
	2 1/2"	65	8,98	228	1,89	48,0	9,37	238
	3"	80	11,81	300	2,40	61,0	11,61	295
Flanged	4"	100	12,60	320	2,89	73,5	12,00	305
	2"	50	11,28	261	3,25	82,5	10,63	270
	2 1/2"	65	11,28	267	3,64	92,5	11,02	280
	3"	80	15,59	396	3,84	97,5	12,99	330
Victaulic	4"	100	15,59	396	4,47	113,5	13,62	346
	3"	80	11,81	300	2,05	52,0	11,22	285
	4"	100	11,81	300	2,26	57,5	11,42	290







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TYPHOON

Her Fabrika Bir Kaledir*

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*Every factory is a fortress

