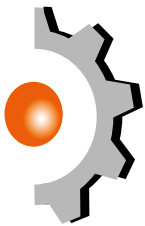


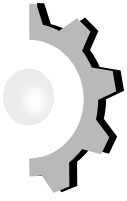
**proval**

Hydraulic Control Valves



**DORUK ENDÜSTRİ**

Valve & Automation Systems



# DORUK ENDÜSTRİ

Valve & Automation Systems



DORUK ENDUSTRI LTD is specialized in manufacturing high quality rotary actuators, actuator accessories and industrial valves under its registered brand name PROVAL in Dilovasi-Kocaeli, nearby Istanbul in Turkey.

PROVAL branded valves and actuators are engineered and designed by using the latest 3D CAD design software, machined in the latest techno-logy horizontal & vertical CNC machining centres.



All valves and actuators are inspected with no exception for any kind of machining failures by using most appropriate testing tools in order to achieve customer satisfaction and supply compatible products to meet their severe service applications.

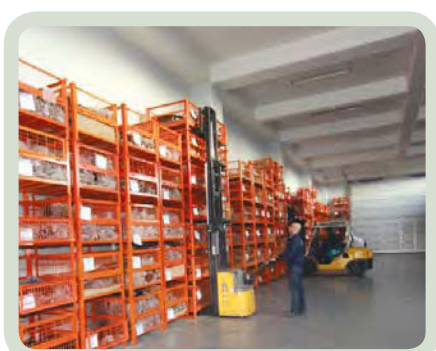
The goal of DORUK ENDUSTRI is to provide our customers with the good quality, high-performance, innovative design and cost-effective process control equipments.

DORUK ENDUSTRI is an ISO9001 and GOST-R certified company. Each PROVAL actuator is manufactured under strict quality management system.

PROVAL branded valves and actuators have been successfully exported to more than 40 countries worldwide



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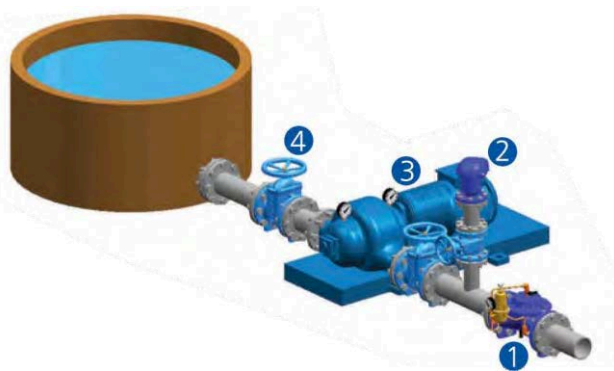




# Hydraulic Control Valves

## product description

TYP “PS” model pressure sustaining hydraulic control valve maintains valve upstream pressure value constant. Valve is opened when line pressure reaches adjusted valve pressure level. It ensures that pump motor within pumping systems will start without load. It also prevents positive pressure waves caused by pump during start-up. Valve controls upstream pressure value continuously and keeps it in a constant value without being affected from changes in flow rates. When no flow exists, it is closed by itself as fully tightness.



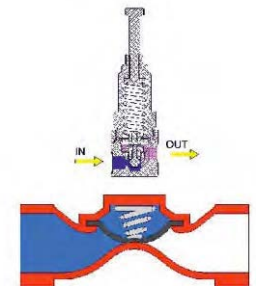
- 1 Pressure Sustaining Valve
- 2 Air Valve
- 3 Pump
- 4 Isolation Valve

### Working Principals

It is automatic hydraulic control valve designed for make desired modulation processes in main valve network line as full hydraulically by means of line pressure without requiring different energy sources such as electric, pneumatic or mechanic energy.

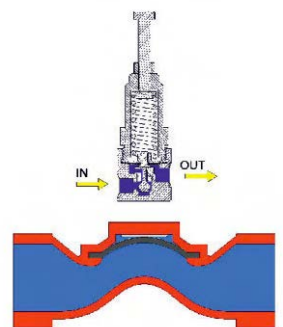
### Valve Closing Mode

When pilot valves connected on main valve transport water pressure in valve upstream to valve actuator (control chamber), water creates a hydraulic power on valve diaphragm. This power formed, by combining with extra power applied by inner spring, ensures that valve will be closed as full tightness.



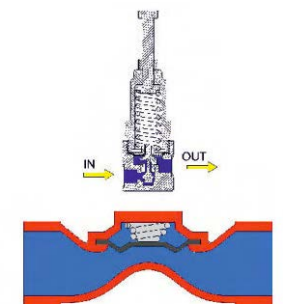
### Valve Opening Mod

When way of pilot valve located on main valve being in closed position is brought into relief position, pressurized water within control chamber on main valve diaphragm is released. When line pressure (P1) reaches to the value which will overcome spring power, water carries valve to fully open position by applying a hydraulic power to valve diaphragm from bottom.



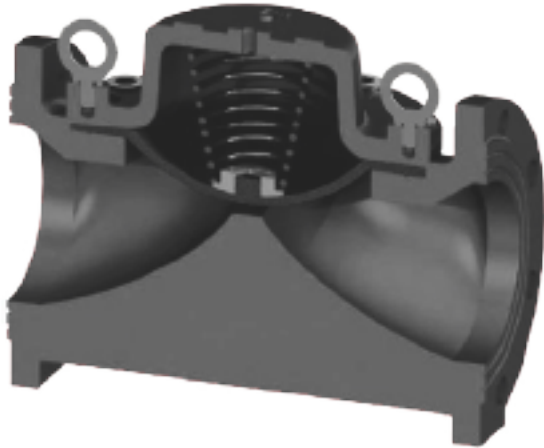
### Modulation Mode

Pilot valves which are connected to main valve actuator ensure that main valve works in modulated mode. According to flow rate or pressure conditions, it ensures that main valve works in modulated mode by controlling pressure of fluid within main valve actuator (control chamber)



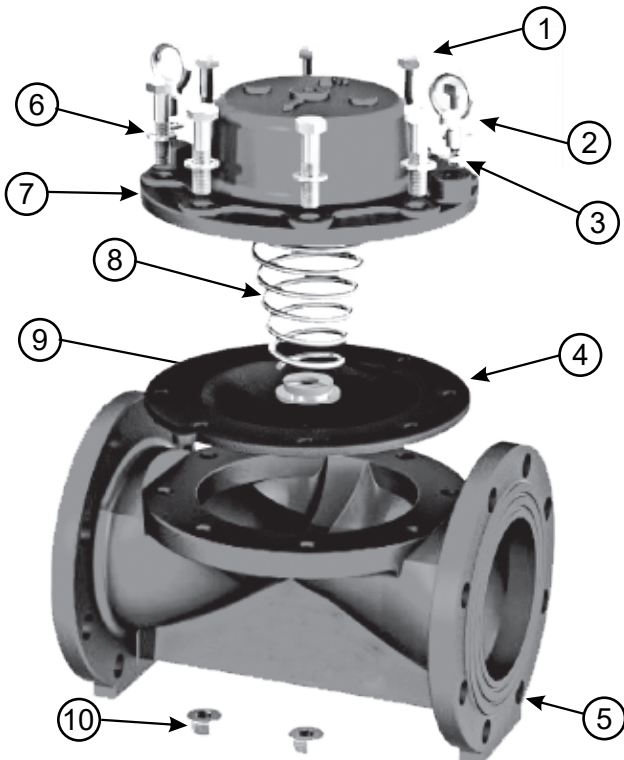


# Hydraulic Control Valves



## Models

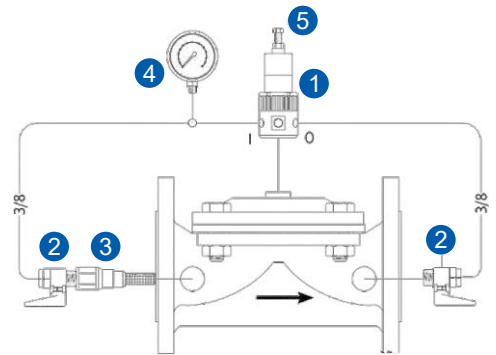
Materials				
Connection	Flanged	Threaded		
Material	GG 25	GG 40		
Body	Globe			
Operating Pressure	PN 10 - PN 16 - PN 25			
Available Diameters	inch	mm	inch	mm
	2	50	2	50
	2 1/2	65	2 1/2	65
	323	80*50	323	80*50
	3	80	3	80
	4	100		
	5	125		
	6	150		
	8	200		
	10	250		
12	300			



NO.	PART NAME	MATERIALS
1	Screw	EN ISO 4014
2	Eye_Bolt	DIN 444
3	Washer	EN ISO 7091
4	Diaphragm	Bez Takviyeli Doğal K auçuk
5	Body	EN GJL -250 GG25
6	Washer	EN ISO 7091
7	Cover	EN GJL -250 GG25
8	Spring	AISI-302
9	Spring Thrust Ring	Polyamide
10	Somun	DIN EN ISO 4032

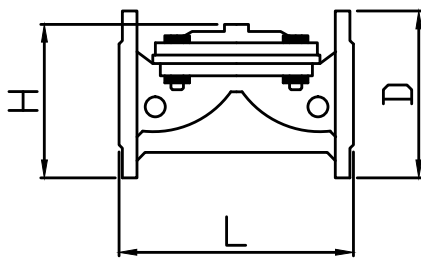


# Hydraulic Control Valves

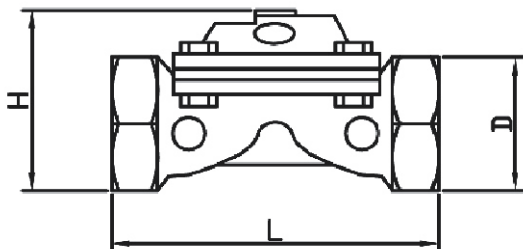


- 1 Pressure Sustaining Pilot Valve
- 2 Ball Valve
- 3 In-line Finger Filter
- 4 Pressure Gauge
- 5 Adjustment Bolt

## Dimensions And Weights



DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	kg
2	50	6,49	165	7,87	200	5,9	150	18,7	8,5
2 1/2	65	7,28	185	8,46	215	6,1	155	22,2	11
323	80*50	7,87	200	8,46	215	6,3	160	27,5	12,5
3	80	7,87	200	11,4	290	6,7	172	46,2	21
4	100	8,66	220	12	330	7	180	51,7	24
5	125	9,84	250	14,3	365	7,87	200	61,6	28
6	150	11,2	285	15,7	400	12	305	119	54
8	200	13,3	340	19,2	490	15	383	238	108
10	250	15,5	395	21	535	17,5	445	290	132
12	300	17,5	445	22,8	580	19,6	495	385	175



DN		D		L		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	Lbs	kg
2	50	3,3	85	7,1	180	4,1	105	11,4	5,2
2 1/2	65	3,7	95	8,1	205	4,1	105	14,3	6,5
323	80*50	4,3	110	8,7	220	4,7	120	17,6	8
3	80	4,3	110	12,6	320	4,9	125	28,6	13



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