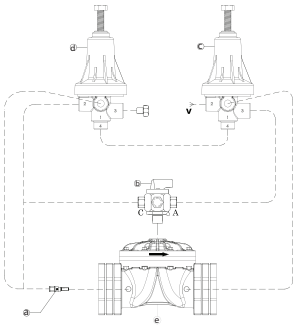
CONTROL VALVES

300 Series Plastic Control Valves

Pressure Stabilization Pressure Reducing Control Valve



Technical Drawing



a) Finger Filter
b) 3-Way Selector Valve
c) Pressure Reducing Pilot
d) Pressure Stabilization Pilot
e) Body

Product Description

Pressure reducing/stabilizing hydraulic control valve. These control valves stabilize the inlet pressure and reduce the outlet pressure to the desired value. The valve has two pilots. The inlet pilot is a pressure stabilizing pilot and stabilizes the inlet pressure.
The outlet pilot is a pressure reducing pilot valve and reduces the outlet pressure to the desired value, ensuring it remains constant. The pressure reducing/stabilizing control valve regulates excessive flow and high pressure in pumping systems that pump downhill, ensuring the system operates at normal values. The valve continuously monitors and maintains the inlet and outlet pressures without being affected by changes in flow rate.

Production Standards

DN50 ⇨ DN100	
Pressure Range	1 bar ⇨ 10 bar
Connection	ISO (BSP)
Temperature	-10 °C +80 °C

Features

- Operates over a wide flow range.
- The set pressure can be adjusted with a single adjustment screw located on the pressure reducing pilot valve.
- Maintenance can be performed without removing it from the pipeline.

Application Areas

- Agricultural irrigation
- Industrial applications
- Irrigation and Drinking Water Systems

Adjustment

- Start the pump or open the main valve on the network to supply water to the system.
- Adjust the desired inlet pressure value by checking the pressure gauge using the adjustment bolt on the pressure stabilizing pilot valve indicated by "c".
- After determining the adjustment point, tighten the lock nut.
- Adjust the outlet pressure using the adjustment bolt on the pressure reducing pilot valve indicated by "d".

Working Principle

Closed position: The valve is closed by applying pressure to the diaphragm through fluid pressure.
Open position: Internal line pressure moves the diaphragm upwards, allowing flow.
Modulation position: The diaphragm remains in a fixed position by balancing the internal and external line pressures.



Diameter	2" DN50	2 1/2" DN65	3" DN80	4" DN100
Code	GP10BSBD 50	GP10BSBD 65	GP10BSBD 80	GP10BSBD 100



Recommended Work Values

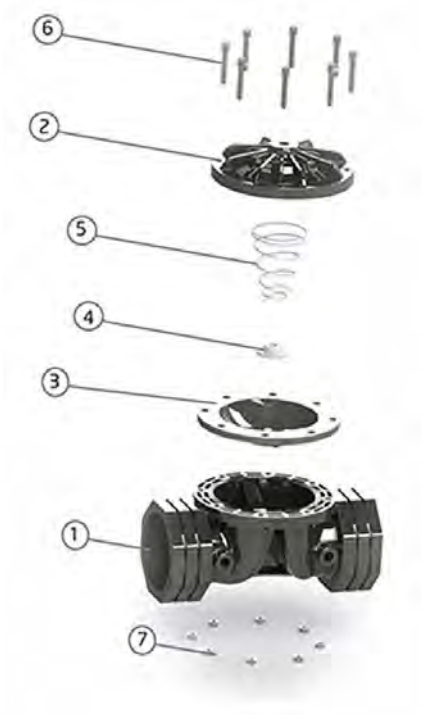
Working Pressure	Standard	1-10 bar (10-145 psi)
Temperature	Min.Operating Temperature	-10°C
	Max.Operating Temperature	+80°C
Connection	Threaded	ISO (BSP) – ANSI (NPT)
Hydraulic Connections	Standard	Güçlendirilmiş Naylon (Air Break) Hidrolik Hortum
Current Links	Standard	Güçlendirilmiş Naylon (Air Break) Hidrolik Hortum

Globe Type Control Valves Size and Weight Table

DN		L		H		WEIGHT	
inch	mm	inch	mm	inch	mm	inch	mm
2"	50						
2 ½"	65						
3"	80						
4"	100						

NOTE: Weight and valve height (h) do not include accessories.

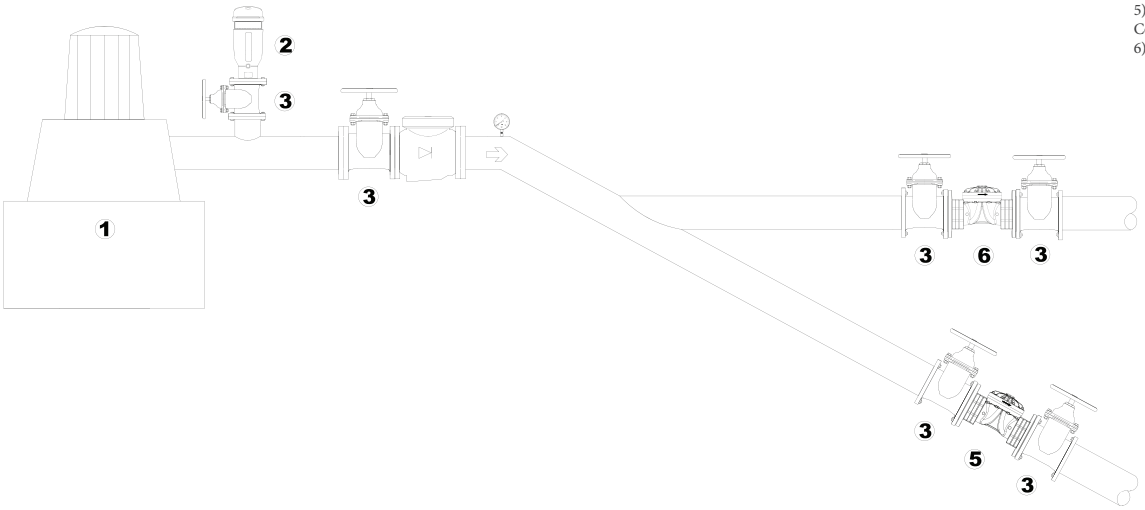
Main Parts



1	Body	Reinforced Polyamide
2	Lid	Reinforced Polyamide
3	Diaphragm	Court Fabric Reinforced Natural Rubber
4	Spring Release Ring	Reinforced Polyamide
5	Spring	Stainless
6	Bolt	Stainless
8	Nut	Ms-58

Example Application

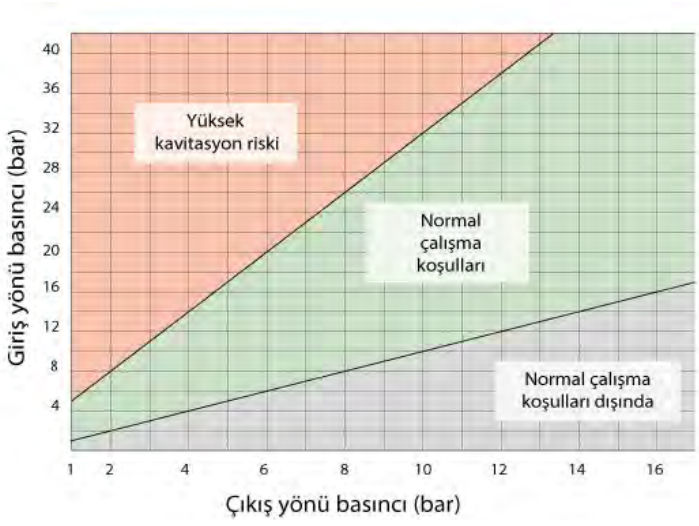
1) Pump
2) Air Valve
3) Isolation Valve
4) Check Valve
5) Pressure Stabilization and Pressure Reducing Control Valve
6) Line Valve



Flow Performance

Nominal diameter	mm	50	65	80	100
	İnch	2"	2½"	3"	4"
kv	m³/h- 1 Bar				

Cavitation Graph



Flow
(m3/h)

Basınç Kayıp Grafiği

