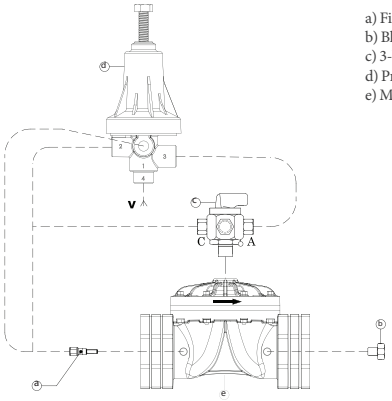
CONTROL VALVES

300 Series Plastic Control Valves

Pressure Stabilization Control Valve



Technical Drawing



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

Product Description

Pressure Stabilizing Control Valves are control valves that stabilize the pressure value at the valve inlet. The valve opens when the line pressure reaches the valve's set pressure level. This feature allows the pump motor to start without load in pumping systems, thus preventing positive pressure fluctuations created by the pump during startup. The valve maintains a constant inlet pressure value without being affected by changes in flow rate. When there is no flow, the valve closes completely leak-proof.

Production Standards

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

Features

- Preventing pump overload
- Classifying pressure zones according to their importance.
- Preventing pipeline emptying.
- Maintaining minimum pump flow rate
- Maintenance can be performed without removing it from the pipeline.

Application Areas

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

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.

Adjustment

- Loosen the adjustment screw located on pilot valve "d" completely.
- Flow water into the system.
- Adjust the inlet pressure using the adjustment screw on the pilot valve until the desired pressure is reached.
- Tightening the adjustment screw increases the inlet pressure; turning it in the opposite direction decreases it.



Diameter	2" / DN50	2 1/2" / DN65	3" / DN80	4" / DN100
Code	GP10BSV 50	GP10BSV 65	GP10BSV 80	GP10BSV 100



Recommended Work Values

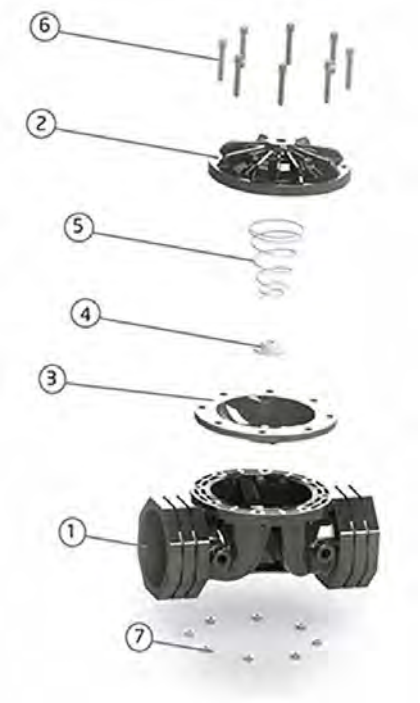
Working Pressure	Standard	1-10 bar (10-145 psi)
Temperature	Min.Operating Temperature	-10°C
	Max.Operating Temperature	+80°C
Connection	Threaded	ISO (BSP) – ANSI (NPT)
Hidrolic Connection	Standard	Reinforced Nylon (Air Break) Hydraulic Hose
Current Links	Standard	Reinforced Nylon (Air Break) Hydraulic Hose

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						

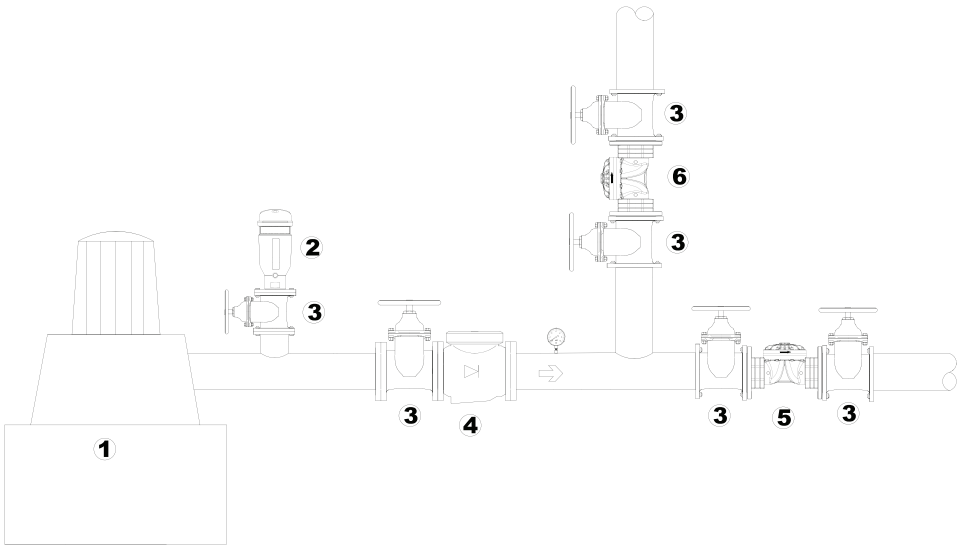
NOTE: Weight and valve height (h) do not include accessories.

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 Valve
6) Line Valve

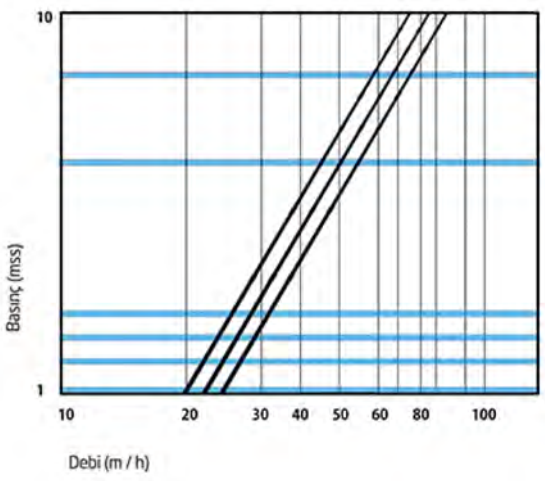
Flow Performance

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

Cavitation Graph



Pressure Loss Graph



Flow
(m3/h)