Pressure Stabilization Pressure Reducing Control Valve



Technical Drawing

Product Description

BPressure 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 controls and maintains the inlet and outlet pressures without being affected by changes in flow rate.

Production Standards

DN50

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

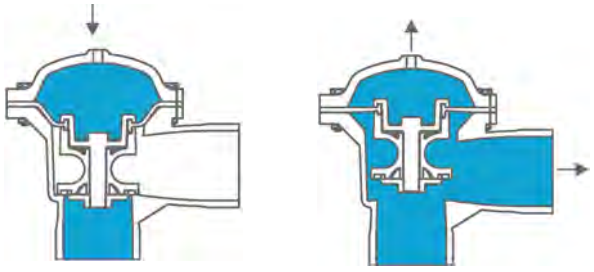
- Agricultural irrigation
- Industrial applications
- Irrigation and Drinking Water Systems

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
Code	D90BSBD 50	D90BSBD 65	D90BSBD 80



Tavsiye Edilen Çalışma Değerleri

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	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	lbs	kg
3”	80	11	280	10	250	5,5	2,5

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

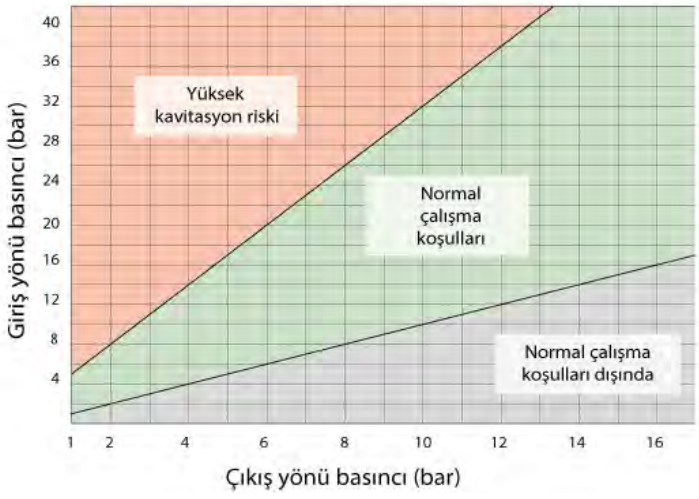
Main Parts

Example Application

Flow Performance

Diameter	mm	50
	İnch	3"
kv	m^3/h- 1 Bar	

Cavitation Graph



Flow
(m3/h)

Pressure Loss Graph

