Pressure Reducing Control Valve



Technical Drawing

Product Description

Pressure reducing control valves are hydraulic control valves that reduce a high inlet pressure to a lower pressure than desired. The pressure reducing control valve controls and maintains the desired outlet pressure without being affected by flow rate and inlet pressure values. When the valve inlet pressure in the system falls below the set outlet pressure value, the valve opens completely.

The valve can be used in horizontal or vertical positions in the system. Plastic hoses and fittings are standard in Bkv plastic control valves.

Production Standards

DN50

Pressure Range	1 bar ⇨ 16 bar
Connection	ISO (BSP)
Temperature	-10 °C +80 °C

Application Areas

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

Features

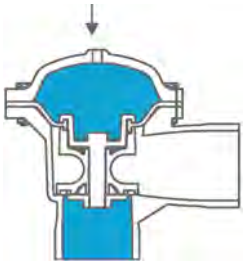
- Simple structure for easy operation and maintenance
- Low cost
- Operation over a wide pressure range
- Flawless modulation even at low flow rates
- Impact-free opening and closing with flexible diaphragm
- Complete sealing with reinforced diaphragm and internal spring
- Very wide range of control applications with the use of different pilot valves
- Ability to operate in horizontal and vertical positions in application areas
- Maintenance can be performed without removing it from the pipeline.

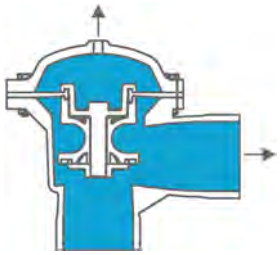
Working Principle

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

- Connect the valve to the line.
- Set the 3-way selector valve to the Auto position.
- You can increase or decrease the outlet pressure by tightening or loosening the adjustment screw on the pilot marked 'c'.
- Once the desired pressure is reached, tighten the lock nut to secure the pressure.





Diameter	2" DN50	2" 1/2" DN65	3" DN80
Code	D90BDV 50	D90BDV 65	D90BDV 80



Recommended Work Values

Working Pressure	Standard	1-16 bar (10-240 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.

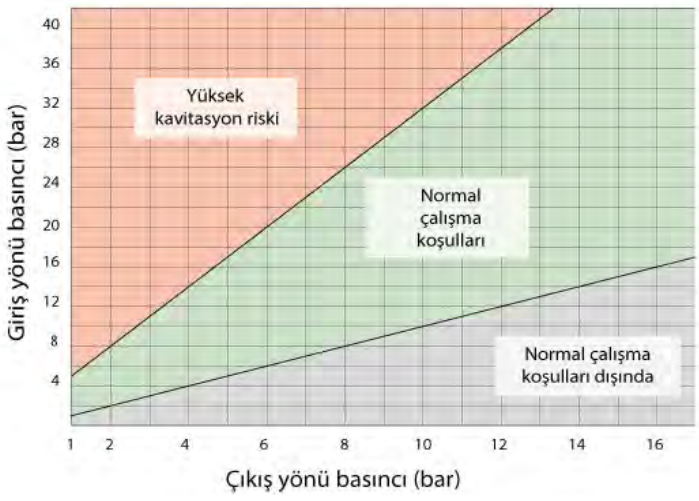
Main Parts

Example Application

Flow Performance

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

Cavitation Graph



Flow
(m3/h)

Pressure Loss Graph

