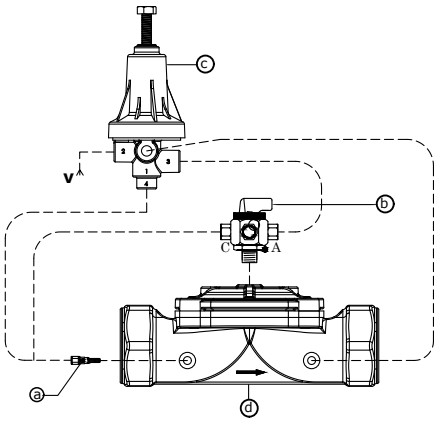


Technical Drawing



a- Finger Filter
b- 3-Way Selector Valve
c- Pressure Reducing Control Valve
d- Body

Product Description

The BKV 510 Series Pressure Reducing Valve is designed to adjust the inlet pressure to the desired outlet pressure. Globe-type pressure reducing valves offer a wide flow range while minimizing pressure loss. The valve's pressure regulator reduces the pressure to the desired level, ensuring smooth fluid transfer. Pressure adjustment in globe-type valves is done with a single adjustment screw.

When the outlet pressure exceeds the set pressure, the control valve closes drip-tight. The control system is highly sensitive to slight pressure changes and instantly controls the main valve to maintain the desired outlet pressure.

Production Standards

DN50 ⟹ DN80	
Pressure Range	1 bar ⟹ 10 bar
Connection	ISO (BSP) - ANSI (NPT)
Paint	Electrostatic Powder Coating
Temperature	-10 °C +80 °C

Application Areas

- The diameter of the pressure reducing valve must be the same as the line diameter.
- During product ordering, information regarding maximum flow rate, operating pressure, line diameter, connection type, maximum inlet pressure, and desired outlet pressure value must be provided.
- Horizontal and vertical mounting is possible.
- The outlet pressure is kept constant at the desired value without being affected by inlet pressure fluctuations.
- Provides low pressure loss and regular flow.
- Operates with the pressure in the network or line and does not require extra energy.
- It is not affected by pressure and flow rate changes in the system. Maintenance can be performed without removing it from the pipeline.

Application Areas

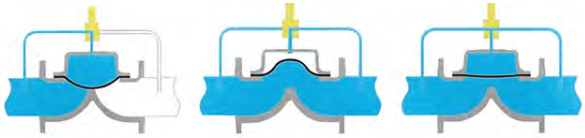
- Agricultural irrigation
- Industrial applications
- Irrigation and drinking water systems

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.

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.



Kapalı Konum
Closed Position

Açık Konum
Open Position

Modülasyon Konum
Modulation Position

Diameter	2" DN50	2" 1/2" DN65	3" DN80
Code	GD10BDV 50	GD10BDV 65	GD10BDV 80



Recommended Work Values

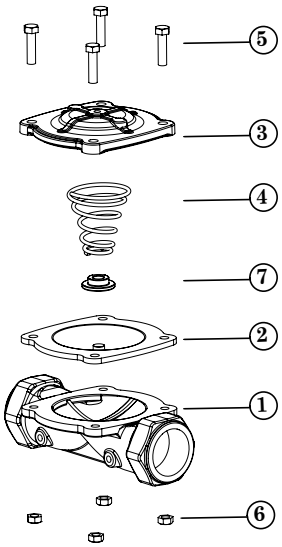
Working Pressure	Standard	1-16 bar (10-160 psi)
Temperature	Min.Operating Temperature	-10°C
	Max.Operating Temperature	+80°C
Connection	Flanged	EN 1092-2 ISO 7005-2
	Threaded	ISO (BSP) – ANSI (NPT)
Paint Coating	Standard	Polyester
	Optional	Epoxy

Globe Type Control Valves Size and Weight Table

DN		L		D		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg
2"	50	8	205	6,5	165	6,5	165	18	8,5
2 ½"	65	8	205	7,3	185	7,3	185	22	10
3"	80	11,4	290	7,9	200	7,9	200	44	20

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

Main Parts

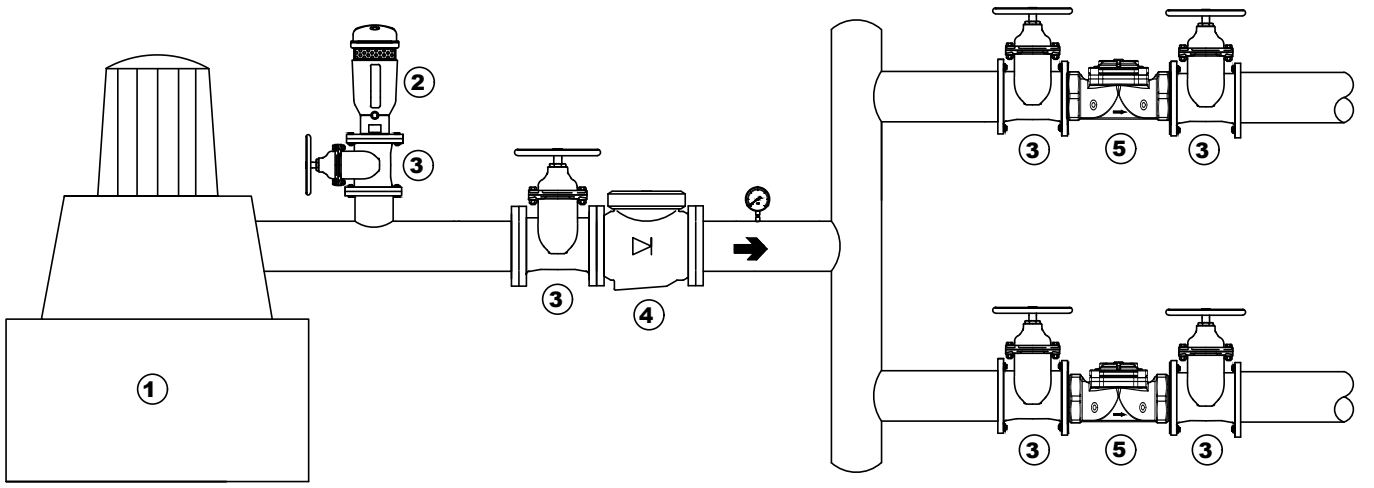


1	Body	GG 25 / GGG40 (EN-GJS 400-15)
2	Diaphragm	Court Fabric Reinforced Natural Rubber
3	Lid	GG 25 / GGG40 (EN-GJS 400-15)
4	Spring	Court Fabric Reinforced Natural Rubber
5	Bolt	Coated Steel
6	Nut	Coated Steel
7	Diaphragm Pressure Ring	Polyamid / Polyester

Max. Working Pressure		Leakage Test Pressure		Body Test Pressure	
BAR	PSI	BAR	PSI	BAR	PSI
10	145	11	160	15	217
16	232	17,6	255	24	348

Example Application

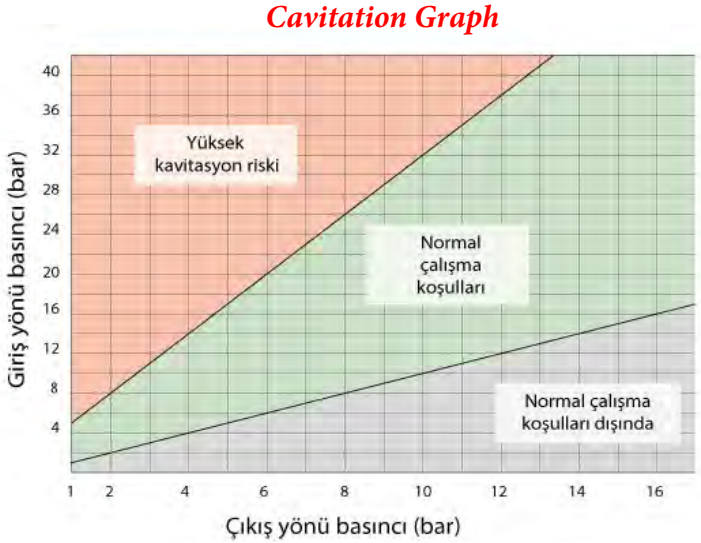
1) Pump
2) Air Suction Cup
3) Isolation Valve
4) Check Valve
5) Pressure Reducing Control Valve



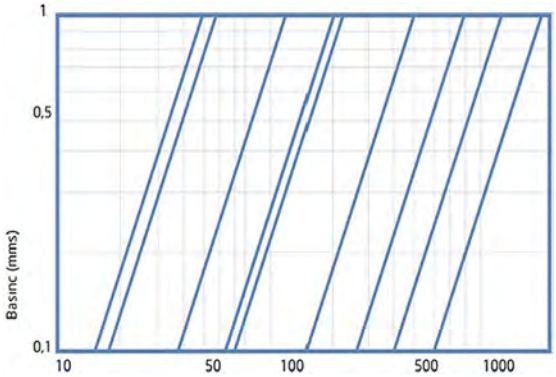
Flow Performance

Diameter	mm	50	65	80
	İnch	2"	2½"	3"
kv	m³/h- 1 Bar	70	73	167
		44	46	96

Cavitation Graph



Pressure Loss Graph



Flow m³/ h