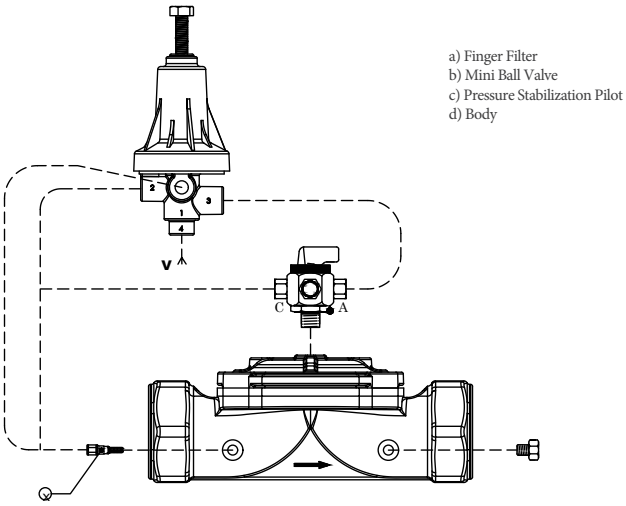


Technical Drawing



Product Description

BKV 510 Series pressure stabilizing control valves are designed to maintain a constant inlet pressure. When the system pressure exceeds the valve's set pressure, the valve opens, ensuring the inlet pressure remains constant. This prevents the pump motor from being overloaded and thus avoids pressure fluctuations during pump start-up. The valve continuously monitors and maintains the inlet pressure value without being affected by changes in flow rate. When there is no flow, the valve closes completely and leak-proof.

Production Standards

DN50 ⟹ DN80	
Pressure Range	1 bar ⟹ 10 bar
Connection	ISO (BSP) - ANSI (NPT)
Paint	Electrostatic Powder Coating
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 "c" 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
Code	GD10BSV 50	GD10BSV 65	GD10BSV 80



Recommended Work Values

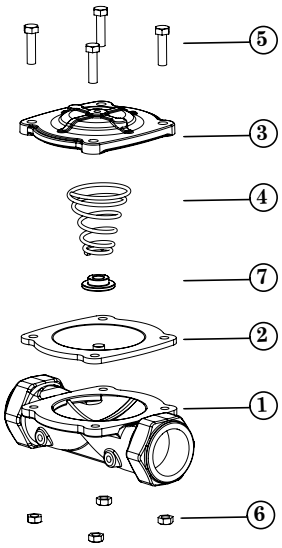
Working Pressure	Standard	1-16 bar (10-160 psi)
Temperature	Min.Operating Temperature	-10°C
	Max.Operating Temperature	+80°C
Connection	Flanged	EN 1092-2 ISO 7005-2
	Threaded	ISO (BSP) – ANSI (NPT)
Paint Coating	Standard	Polyester
	Optional	Epoxy

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.

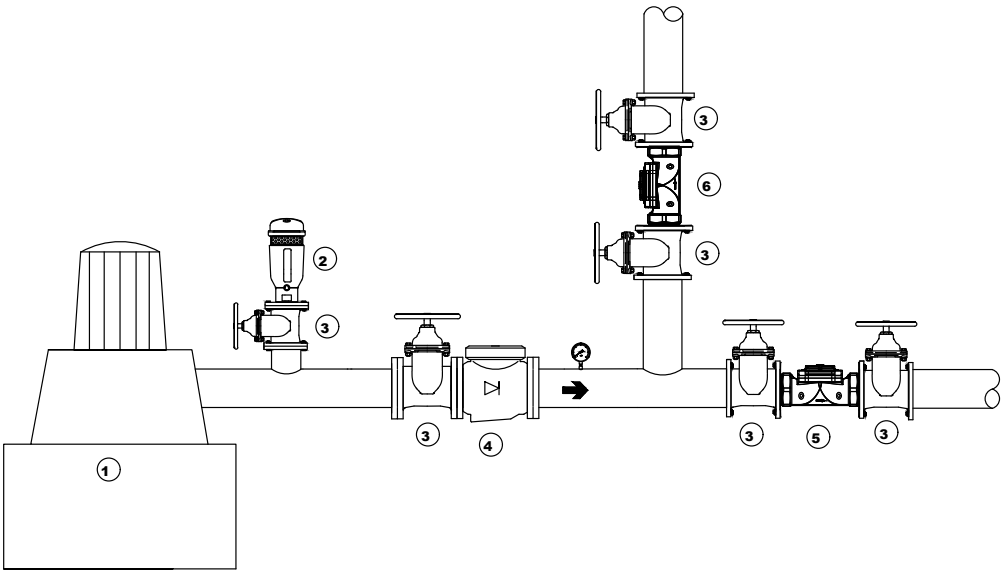
Main Parts



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	Stainless
5	Bolt	Coated Steel
6	Nut	Coated Steel
7	Diaphragm Pressure Ring	Polyamid / Polyester

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

Example Application

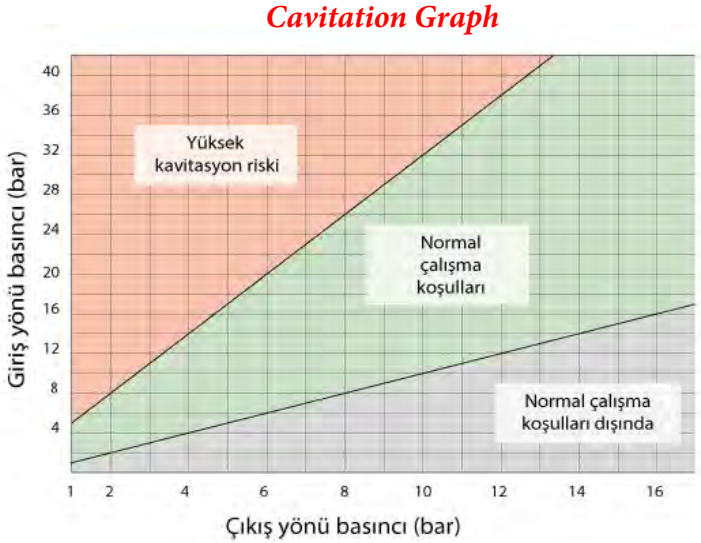


1) Pump
2) Air Suction Cup
3) Isolation Valve
4) Check Valve
5) Pressure Stabilization Valve
6) Pressure Relief Valve

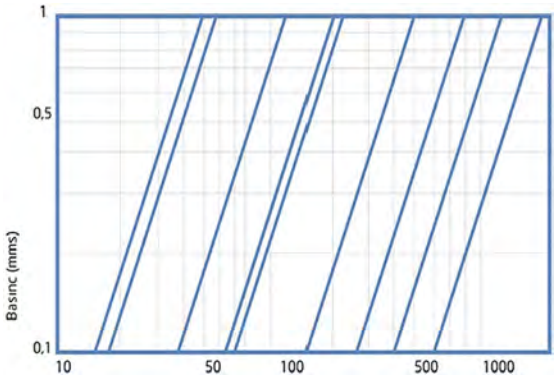
Flow Performance

Diameter	*mm*	*50*	*65*	*80*	*100*	*125*	*150*	*200*	*250*	*300*
	İnch	*2”*	*2½”*	*3”*	*4”*	*5”*	*6”*	*8”*	*10”*	*12”*
kv	*m³/h- 1 Bar*	*70*	*73*	*167*	*215*	*224*	*503*	*830*	*1300*	*1800*
		44	*46*	*96*	*168*	*171*	*388*	*685*	*1054*	*1565*

Cavitation Graph



Pressure Loss Graph



Flow m^3/ h