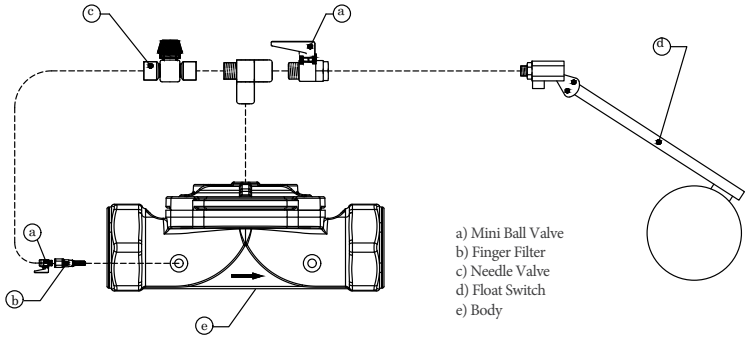


Technical Drawing



Product Description

BKV 510 Series Horizontal Float Level Control Valves are hydraulic control valves that maintain the water level within desired ranges in large surface area tanks or low volume reservoirs. The main valve is automatically controlled by a 2-way horizontal float. Mounted at the tank or reservoir inlets, the main valve closes completely and leak-proof without creating a shock when the water level reaches its maximum. When the water level falls below the float, the main valve fully opens, ensuring the tank or reservoir remains continuously full. The valve automatically adjusts the water inlet flow rate to the tank according to the flow within the tank.

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

- Reliable hydraulic operation,
- Drip-proof sealing,
- Proportional flow,
- Fully automatic operation,
- Always full tank or reservoir,
- Easy level adjustment,
- Maintenance can be performed without removing it from the pipeline.

Application Areas

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

Adjustment

- Mount the float-operated pilot valve, indicated by “d”, securely according to the water level in the tank or reservoir.
- Connect one end of the hydraulic pressure signal tube, supplied with the valve, to the ball valve indicated by “a”, and the other end to the float-operated pilot valve.
- Open the ball valves indicated by “a”.
- Adjust the opening and closing speed of the main valve using the needle valve indicated by “c”.

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	GD10YFV 50	GD10YFV 65	GD10YFV 80



Recommended Work Values

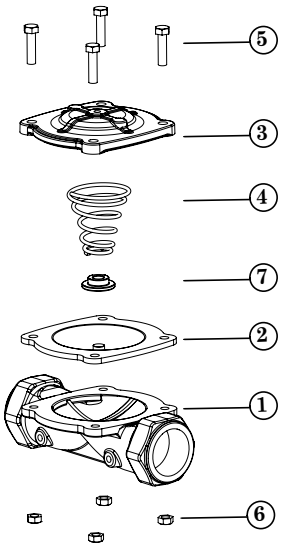
Working Pressure	Standard	1-16 bar (10-160 psi)
Temperature	Min.Operating Temperature	-10°C
	Max.Operating Temperature	+80°C
Connection	Flanged	EN 1092-2 ISO 7005-2
	Threaded	ISO (BSP) – ANSI (NPT)
Paint Coating	Standartd	Polyester
	Optional	Epoxy

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

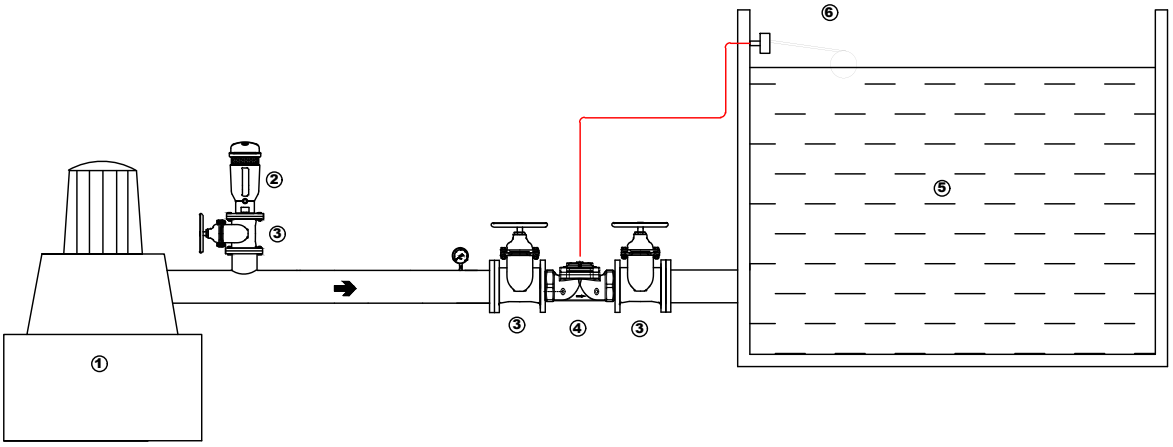


1	Body	GG 25 / GGG40 (EN-GJS 400-15)
2	Diaphragm	Court Fabric Reinforced Natural Rubber
3	Lid	GG 25 / GGG40 (EN-GJS 400-15)
4	Spring	Stainless
5	Bolt	Coated Steel
6	Nut	Coated Steel
7	Diaphragm Pressure Ring	Polyamid / Polyester

Maximum 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

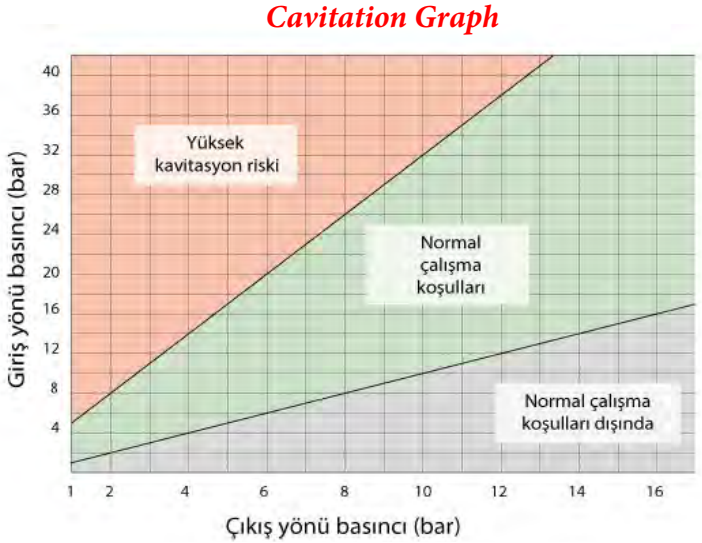
1) Pump
2) Valve
3) Isolation Valve
4) Float-operated Level Control Valve
5) Reservoir
6) Float Switch



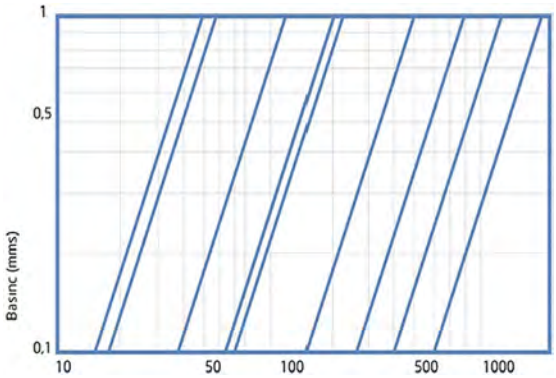
Flow Performance

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