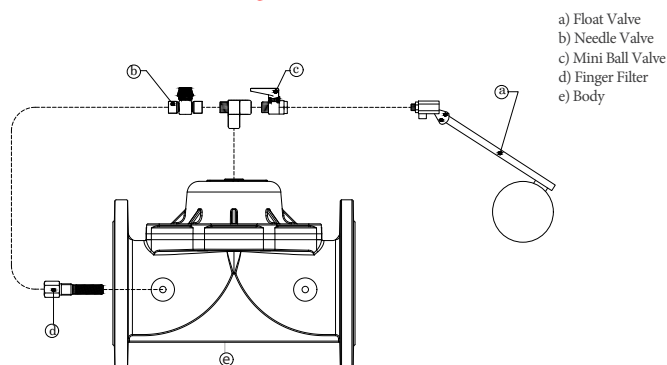




Technical Drawing



Product Description

BKV 216 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

DN40	⇒	DN300
Pressure Range	1 bar	⇒ 16 bar
Connection	Flanged EN1092-2	
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
- Fire extinguishing
- 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 causes the diaphragm to move upwards, allowing flow.
- Modulation position: Internal and external line pressures are balanced, keeping the diaphragm in a fixed position.

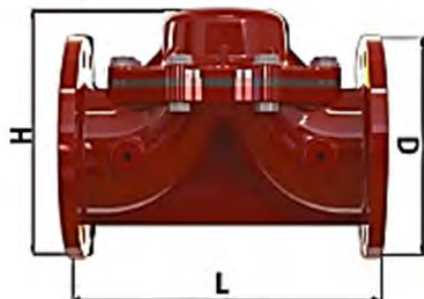


Adjustment

- Mount the float-operated pilot valve, indicated by “a”, 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 “b”, and the other end to the float-operated pilot valve.
- Open the ball valves indicated by “b”.
- Adjust the opening and closing speed of the main valve using the needle valve indicated by “c”.

Diameter	1/2" DN40	2" DN50	2 1/2" DN65	3" DN80	4" DN100	5" DN125	6" DN150	8" DN200	10" DN250	12" DN300
code	GF16YFV 40	GF16YFV 50	GF16YFV 65	GF16YFV 80	GF16YFV 100	GF16YFV 125	GF16YFV 150	GF16YFV 200	GF16YFV 250	GF16YFV 300

Recommended Work Values



Working Pressure	Standard	1-16 bar (10-240 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
1 1/2"	40								
2"	50	8	205	6,5	165	6,5	165	18	8,5
2 1/2"	65	8	205	7,3	185	7,3	185	22	10
3"	80	11,4	290	7,9	200	7,9	200	44	20
4"	100	11,6	295	8,7	220	8,7	220	49	22,5
5"	125	12,8	325	9,8	250	9,8	250	57	26
6"	150	16,3	415	11,2	285	12,6	320	108	49
8"	200	18,5	470	13,4	340	15,9	405	171	78
10"	250	18,7	475	15,9	405	16,9	430	231	105
12"	300	20,9	530	18,3	465	19,5	495	327	148,5

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

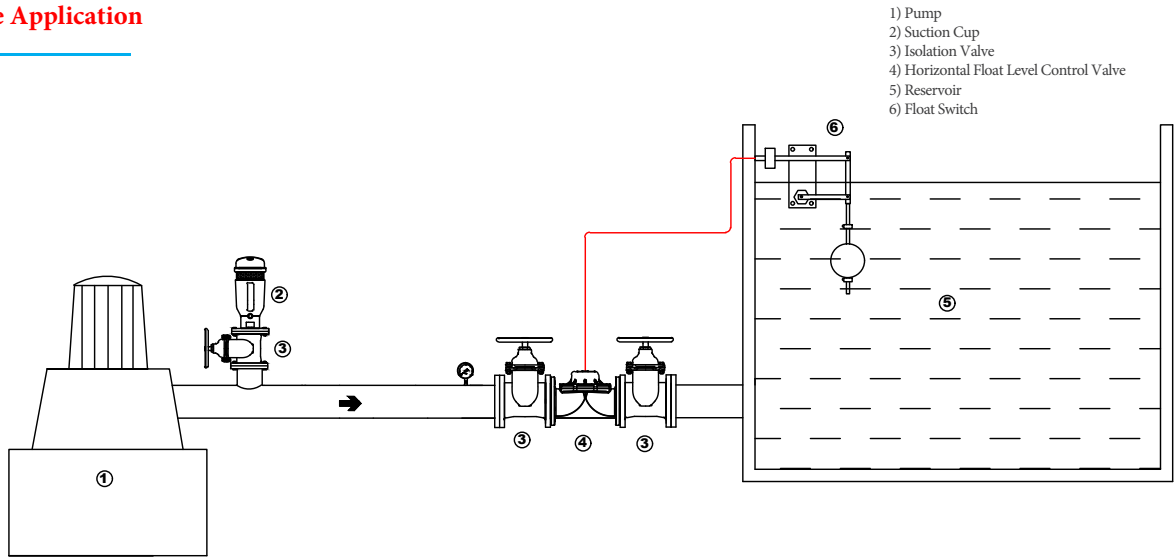
Main Parts



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

Maximum Operating Function		Leakage Test		Body test	
BAR	PSI	BAR	PSI	BAR	PSI
10	145	11	160	15	217
16	232	17,6	255	24	348
25	363	27,5	399	37,5	544

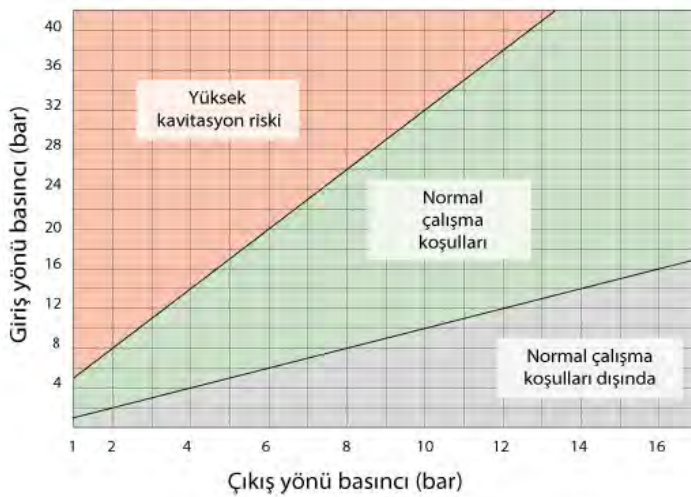
Example Application



Flow Performance

Nominal Diameter	mm	50	65	80	100	125	150	200	250	300
	Inch	2"	2½"	3"	4"	5"	6"	8"	10"	12"
kv	m ³ /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

