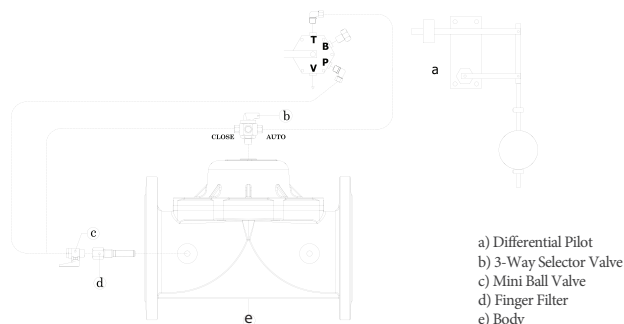




Technical Drawing



Product Description

The BKV 216 Series differential float level control valve is a hydraulic control valve that can control the water level in tanks or reservoirs within desired ranges. Thanks to the 4/3-way differential control pilot mounted in the control chamber of the main valve, the main valve closes smoothly and completely leak-proof when the water level reaches the desired maximum level. The maximum and minimum water levels in the tank or reservoir can be easily adjusted to the desired value within a very wide range. Due to this feature, the pump does not constantly switch on and off during level control in tanks or reservoirs fed by a pump. The valve maintains a constant water level within the desired range without being affected by flow rate and pressure changes. It can be easily used in tanks or reservoirs fed from the bottom or top.

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,
- 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 moves the diaphragm upwards, allowing flow.

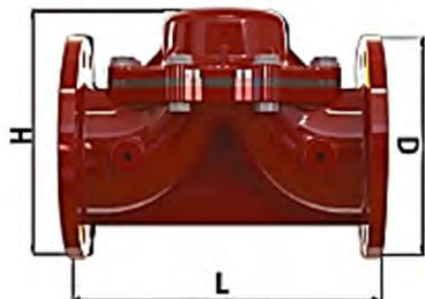
Modulation position: The diaphragm remains in a fixed position by balancing the internal and external line pressures.

Adjustment

- Connect the valve to the main line.
- Mount the differential pilot to the tank as shown in the technical drawing.
- Connect the hoses supplied with the valve between the valve and the float as shown in the drawing.
- Set the 3-way selector on the valve to the auto position.
- Operate the valve by supplying water to the line.

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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.

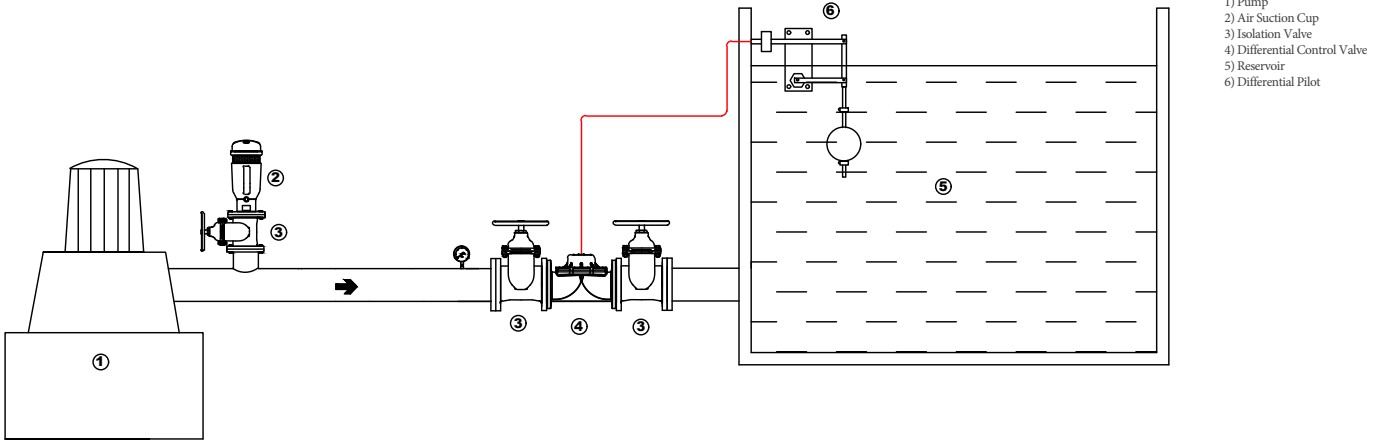
Main Parts



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

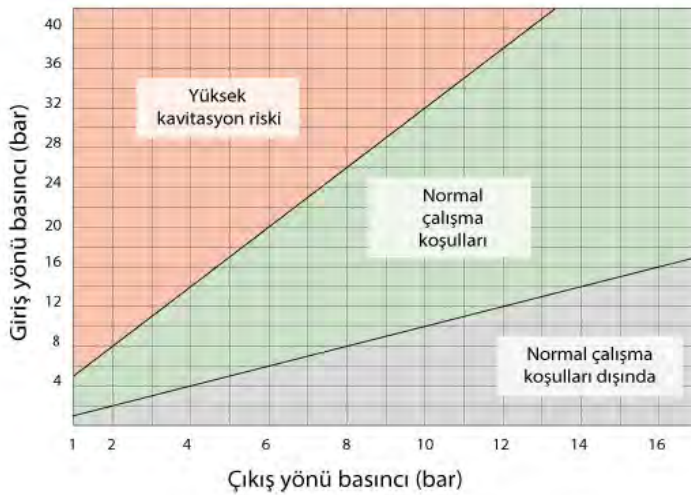
Example Application



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	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

