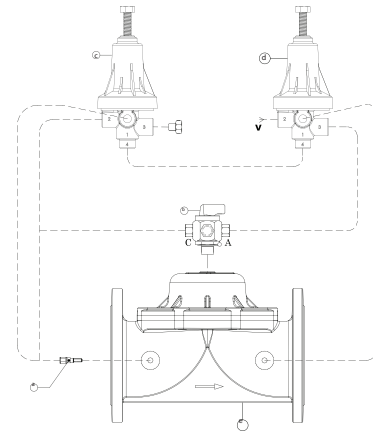




Technical Drawing



- a) Finger Filter
- b) 3-Way Selector Valve
- c) Pressure Stabilization Pilot
- d) Pressure Reducing Pilot
- e) Body

Product Description

The BKV 210 Series pressure stabilizing and pressure reducing control valves are control valves that stabilize the inlet pressure and reduce the outlet pressure to the desired value. The valve has two pilot mechanisms. The first pilot mechanism is the pressure stabilizing mechanism, which stabilizes the valve inlet pressure, while the other pilot mechanism is the pressure reducing pilot mechanism, which reduces the outlet pressure to the desired value and keeps it constant. Pressure stabilizing and pressure reducing control valves regulate excessive flow and high pressure in pumping systems that pump from top to bottom or bottom to top, ensuring the system operates at normal values. The valve continuously monitors and maintains the inlet and outlet pressure values regardless of fluctuating flow or variable fluid pressure.

Production Standards

DN40	⇒	DN150
Pressure Range	1 bar	⇒ 10 bar
Connection	Flanged EN1092-2	
Paint	Electrostatic Powder Coating	
Temperature	-10 °C +80 °C	

Features

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, max. 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 or it operates using pressure in the line and requires no 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.

Adjustment

- Start the pump or open the main valve on the network to supply water to the system.
- Adjust the desired inlet pressure value by checking the pressure gauge using the adjustment bolt on the pressure stabilizing pilot valve indicated by "c".
- After determining the adjustment point, tighten the lock nut.
- Adjust the outlet pressure using the adjustment bolt on the pressure reducing pilot valve indicated by "d".

Application Areas

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

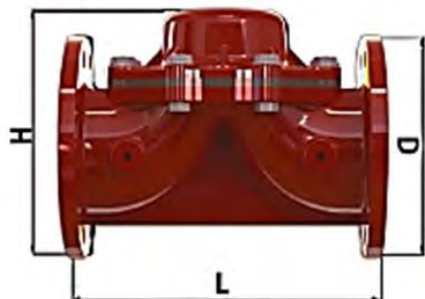
Working Principle

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.



Valve diameter	1 1/2" DN40	2" DN50	2 1/2" DN65	3" DN80	4" DN100	5" DN125	6" DN150
Code	GF108SD 40	GF108SD 50	GF108SD 65	GF108SD 80	GF108SD 100	GF108SD 125	GF108SD 150

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

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

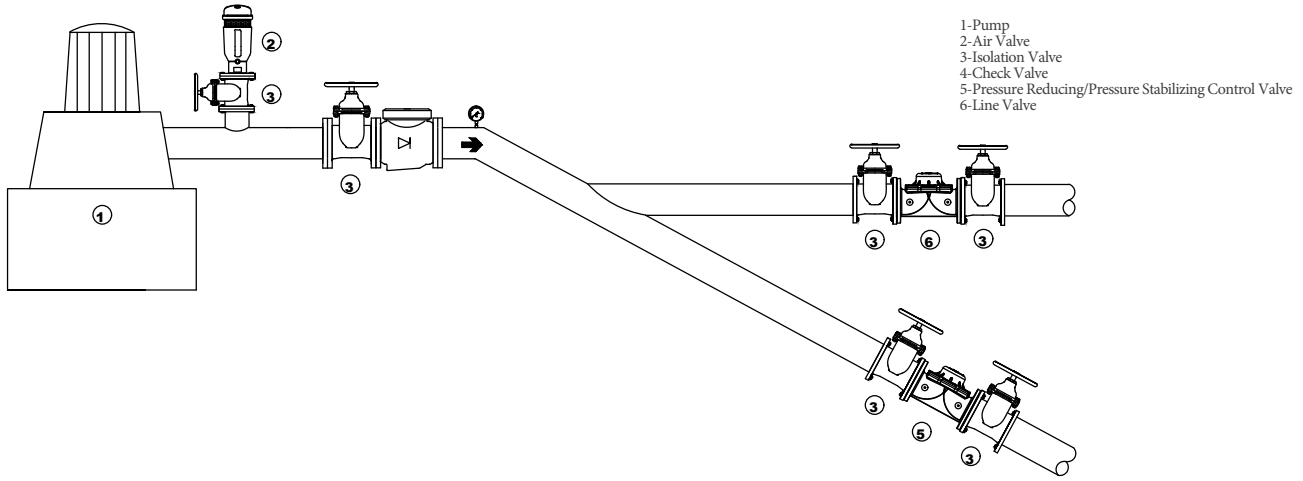
Main Parts



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

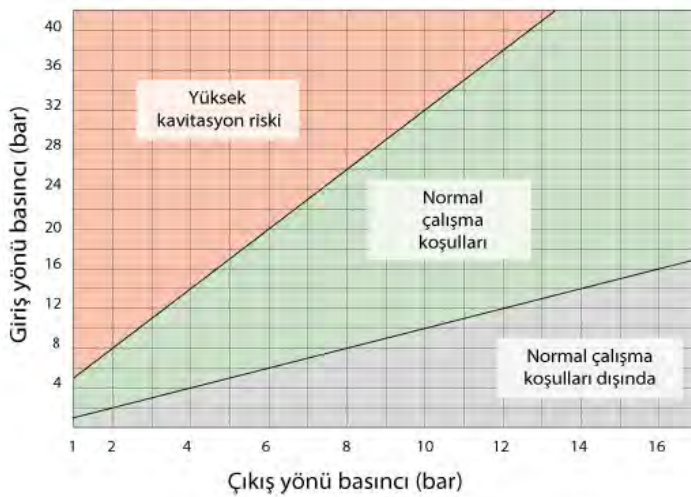
Example Application



Flow Performance

Nominal Diameter	mm	50	65	80	100	125	150	200	250	300
	İnch	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

