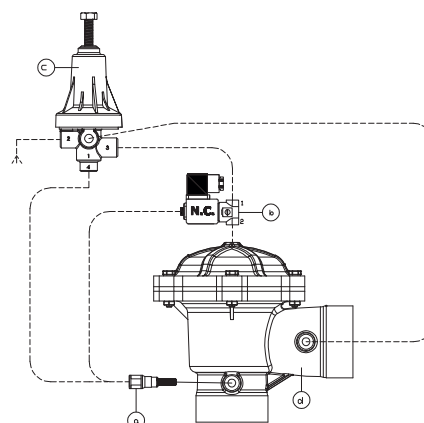




Technical Drawing



- a- Finger Filter
- b- Solenoid
- c- Pilot Pressure Reducer
- d- Main Body

Product Description

Solenoid-controlled pressure reducing valves are hydraulic control valves that provide opening and closing via solenoid control by reducing a high inlet pressure to a desired lower pressure value. The pressure reducing valve maintains a constant outlet pressure value without being affected by changes in flow rate and inlet pressure. When the valve inlet pressure in the system falls below the set outlet pressure value, the valve opens completely. The valve can be used in horizontal or vertical positions in the system. Control of this valve is provided by control devices such as time relays, switches, PLC control units, etc. Plastic hoses and fittings are standard in BKV plastic control valves.

Production Standards

DN80

Pressure Range	1 bar	⇒	10 bar
Connection	ISO (BSP)		
Temperature	-10 °C +80 °C		

Features

- Horizontal and vertical mounting is possible.
- During product ordering, information regarding maximum flow rate, operating pressure, line diameter, connection type, maximum inlet pressure, and desired outlet pressure value should be provided.
- The outlet pressure is kept constant at the desired value without being affected by inlet pressure fluctuations.
- Provides low pressure loss and regular flow.
- Easy and precise adjustment to the desired pressure.
- Pressure reduction without being affected by pressure and flow rate changes in the system.
- Manual opening and closing.
- Easy maintenance. Low energy consumption.
- Maintenance can be performed without removing it from the pipeline.

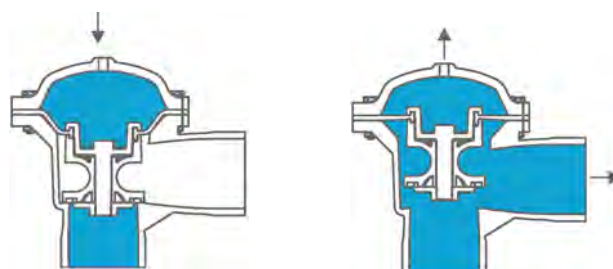
Application Areas

- 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.



Adjustment

- Power is supplied to the solenoid coil on the main valve via the control panel.
- The main valve has 2 pilot valves. Turning the pilot valve adjustment screw clockwise increases the pressure. Turning it counterclockwise decreases the pressure.
- Once the desired pressure value is reached, the lock nut under the adjustment screw is tightened to maintain the pressure.

Diameter	2" / DN50	2" 1/2" / DN65	3" / DN80
Code	P90EKBD 50	P90EKBD 65	P90EKBD 80

Recommended Work Values



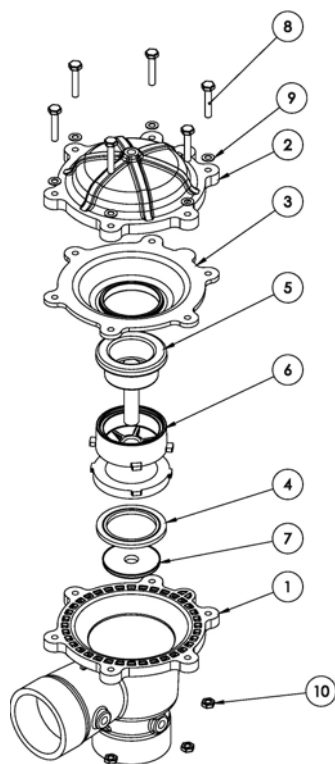
Working Pressure	Standard	1-10 bar (10-145 psi)
Temperature	Max. Operating Temperature	-10°C
	Max. Operating Temperature	+80°C
Connections	Threaded	ISO (BSP) – ANSI (NPT)
Hydraulic Connections	Standard	Reinforced Nylon (Air Break) Hydraulic Hose
Current Links	Standard	Reinforced Nylon (Air Break) Hydraulic Hose

Globe Type Control Valves Size and Weight Table

DN		L		H		Weight	
inch	mm	inch	mm	inch	mm	lbs	kg
3"	80	11	280	10	250	5,5	2,5

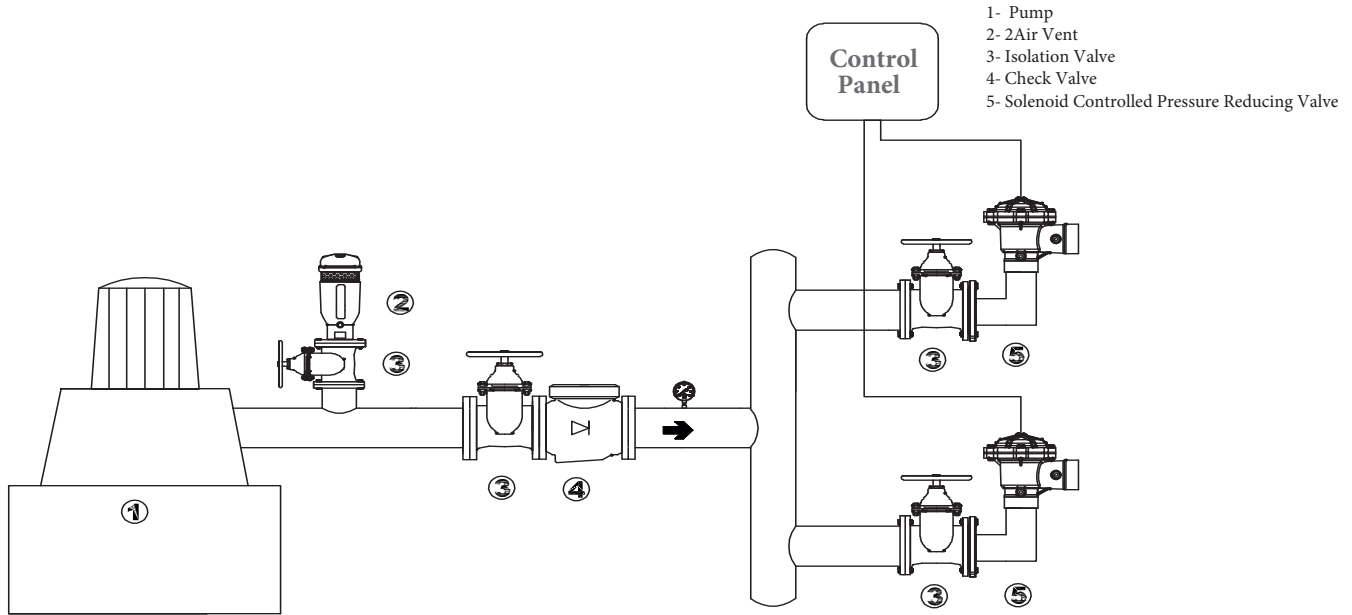
NOTE: Weight and valve height (h) do not include accessories.

Main Parts



1	Body	Polyamide with glass fiber reinforcement
2	Lid	Reinforced Polyamide
3	Diaphragm	Natural Rubber
4	Flap seal	Natural Rubber
5	Flap Top Connection	Polyamide with glass fiber reinforcement
6	Flap bed	Polyamidewithglassfiberreinforcement
7	Flap nut	Polyamide with glass fiber reinforcement
8	M8x45 Bolt	Stainless Steel (A2)
9	M8 Stamp	Stainless Steel (A2)
10	M8 Nut	Stainless Steel (A2)

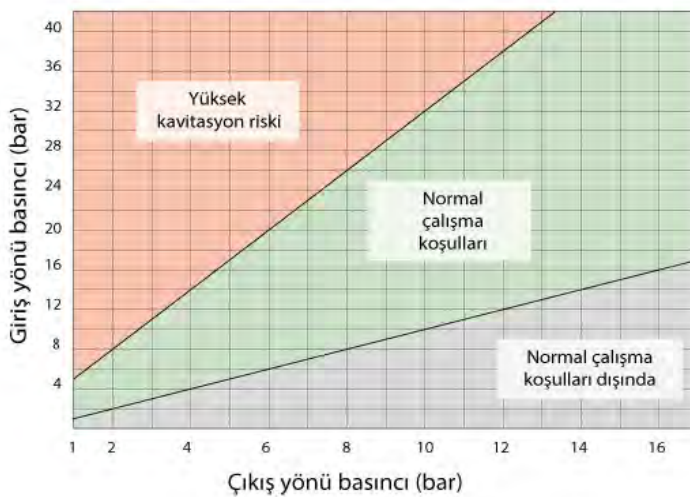
Example Application



Flow Performance

Diameter	mm	50
	Inch	3"
kv	m ³ /h- 1 Bar	

Cavitation Graph



Flow
(m³/h)

Pressure Loss Graph

