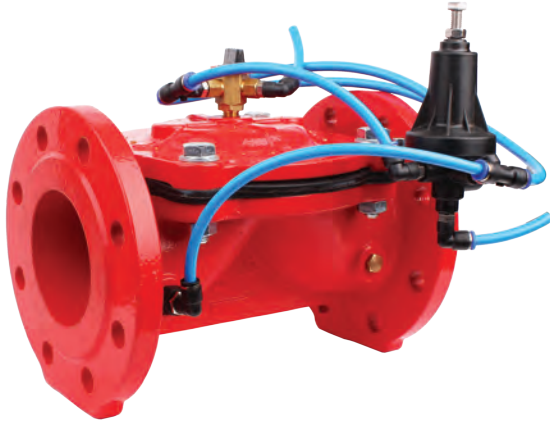
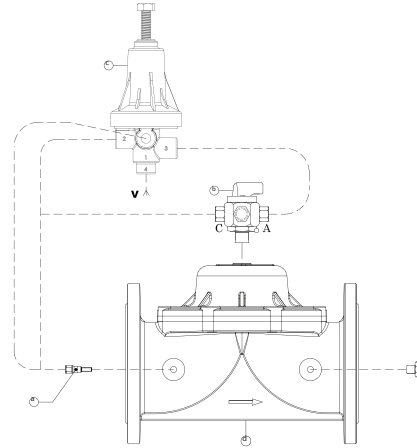




### Technical Drawing



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

### Product Description

BKV 210 Series pressure stabilizing control valves are designed to maintain a constant inlet pressure. When the system pressure exceeds the valve's set pressure, the valve opens, ensuring the inlet pressure remains constant. This prevents the pump motor from being overloaded and thus avoids pressure fluctuations during pump start-up. The valve continuously monitors and maintains the inlet pressure value without being affected by changes in flow rate. When there is no flow, the valve closes completely and leak-proof.

### Production Standards

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

### Features

- Preventing pump overload
- Classifying pressure zones according to their importance.
- Preventing pipeline emptying.
- Maintaining minimum pump flow rate
- Maintenance can be performed without removing it from the pipeline.

### Application Areas

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

### Adjustment

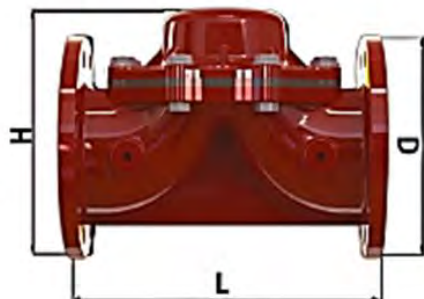
- Loosen the adjustment screw located on pilot valve "c" completely.
- Flow water into the system.
- Adjust the inlet pressure using the adjustment screw on the pilot valve until the desired pressure is reached.
- Tightening the adjustment screw increases the inlet pressure; turning it in the opposite direction decreases it.

### 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.



**Recommended Work Values**



|                         |                                   |                        |
|-------------------------|-----------------------------------|------------------------|
| <b>Working Pressure</b> | <b>Standard</b>                   | 1-16 bar (10-240 psi)  |
| <b>Temperature</b>      | <b>Min. Operating Temperature</b> | -10°C                  |
|                         | <b>Max. Operating Temperature</b> | +80°C                  |
| <b>Connection</b>       | <b>Flanged</b>                    | EN 1092-2 ISO 7005-2   |
|                         | <b>Threaded</b>                   | ISO (BSP) – ANSI (NPT) |
| <b>Paint Coating</b>    | <b>Standard</b>                   | Polyester              |
|                         | <b>Optional</b>                   | 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.

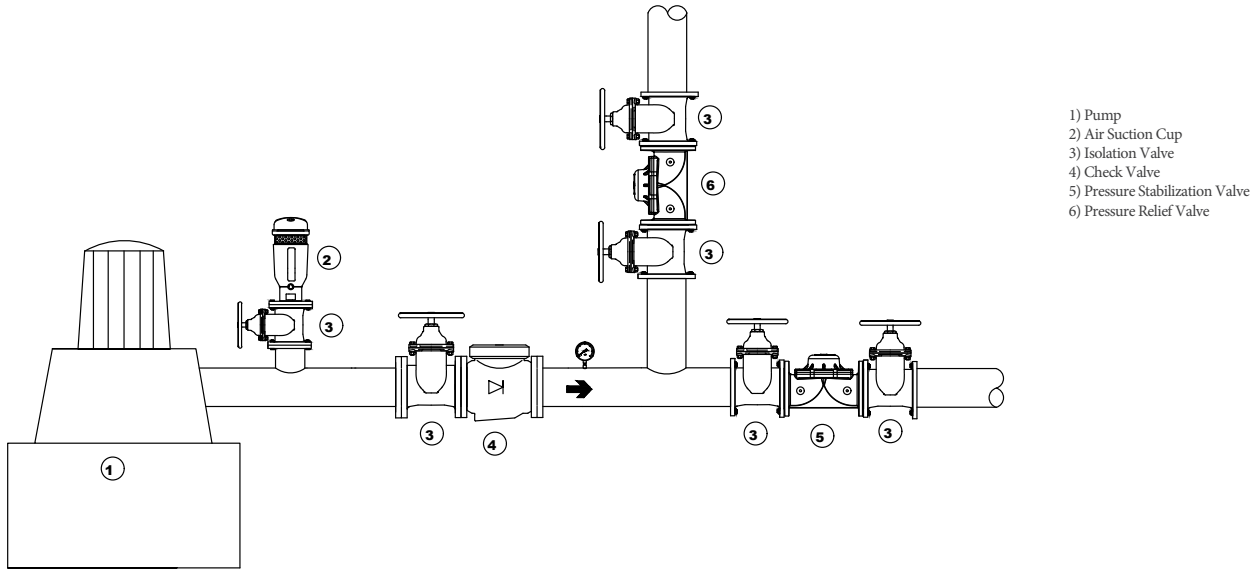
**Main Parts**



|          |                                |                                        |
|----------|--------------------------------|----------------------------------------|
| <b>1</b> | <b>Body</b>                    | GG 25 / GGG40 (EN-GJS 400-15)          |
| <b>2</b> | <b>Diaphragm</b>               | Court Fabric Reinforced Natural Rubber |
| <b>3</b> | <b>Lid</b>                     | GG 25 / GGG40 (EN-GJS 400-15)          |
| <b>4</b> | <b>Rondela</b>                 | Coated Steel                           |
| <b>5</b> | <b>Bolt</b>                    | Coated Steel                           |
| <b>6</b> | <b>Nut</b>                     | Coated Steel                           |
| <b>7</b> | <b>Diaphragm Pressure Ring</b> | Polyamid / Polyester                   |
| <b>8</b> | <b>Spring</b>                  | Stainless                              |

| Max. Operating Function |     | Leakage Test |     | Body Test |     |
|-------------------------|-----|--------------|-----|-----------|-----|
| BAR                     | PSI | BAR          | PSI | BAR       | PSI |
| 10                      | 145 | 11           | 160 | 15        | 217 |
|                         |     |              |     |           |     |

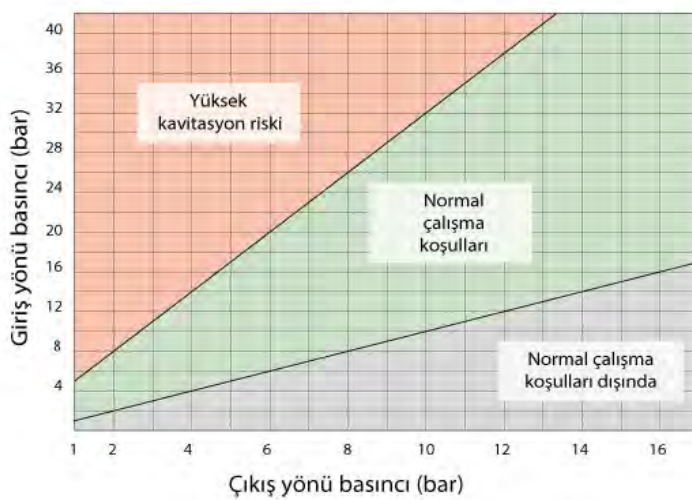
## Example Application



## 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 <sup>3</sup> /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

