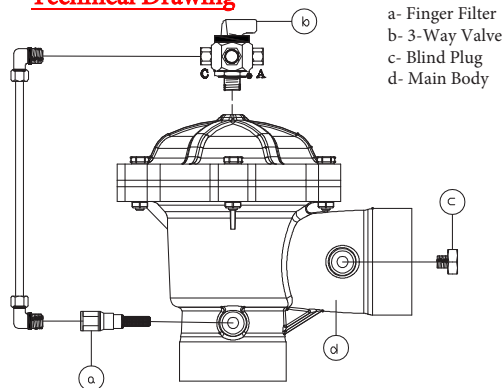


**Technical Drawing****Product Description**

Manually controlled shut-off valves are hydraulic control valves that perform opening and closing operations by being controlled via a 3-way selector valve mounted on them. These valves are controlled manually. Plastic hoses and fittings are standard in BKV plastic control valves.

**Production Standards****DN80**

|                       |                              |
|-----------------------|------------------------------|
| <b>Pressure Range</b> | <b>1 bar</b> ⇒ <b>10 bar</b> |
| <b>Connection</b>     | <b>ISO (BSP)</b>             |
| <b>Temperature</b>    | <b>-10 °C +80 °C</b>         |

**Features**

- Minimum pressure loss
- Adjustable opening/closing speed (optional)
- Easy maintenance
- Maintenance can be performed without removing it from the pipeline.

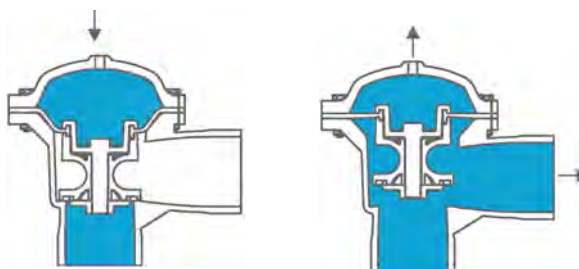
**Application Areas**

- 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**

- Connect the valve to the main line.
- The 3-way selector valve will open in the open position.
- It will close in the close position.

| Diameter | 2" / DN50   | 2" 1/2" / DN65 | 3" / DN80   |
|----------|-------------|----------------|-------------|
| Code     | P90MV<br>50 | P90MV<br>65    | P90MV<br>80 |
|          |             |                |             |



### Recommended Work Values

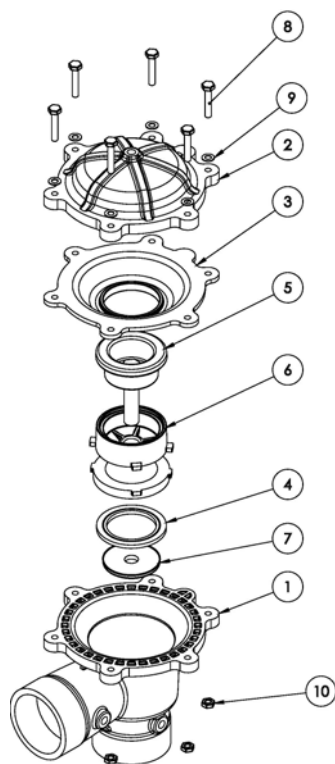
|                       |                            |                                                |
|-----------------------|----------------------------|------------------------------------------------|
| Working Pressure      | Standard                   | 1-10 bar (10-145 psi)                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

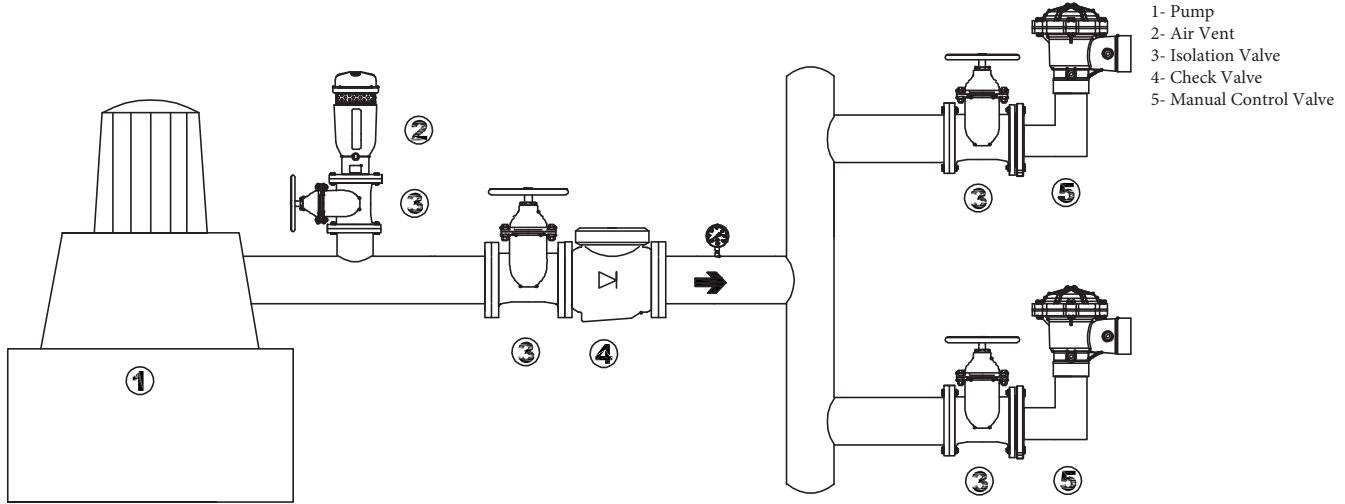
NOTE: Weight and valve height (h) do not include accessories.

### 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            | Polyamide with glass fiber reinforcement |
| 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)                     |

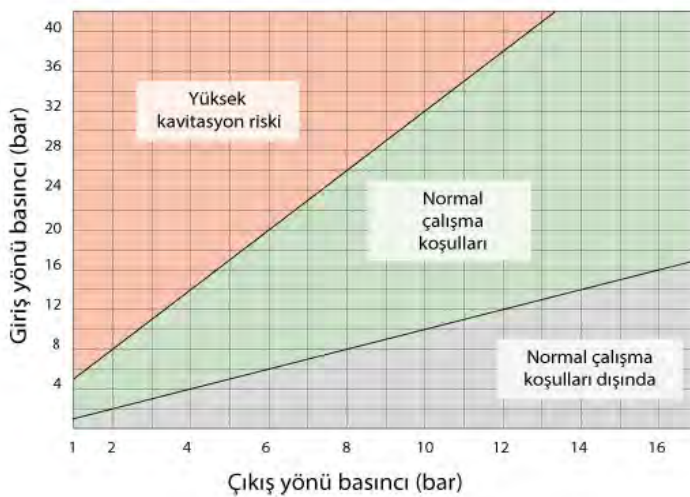
### Example Application



### Flow Performance

|          |                          |    |
|----------|--------------------------|----|
| Diameter | mm                       | 50 |
|          | Inch                     | 3" |
| kv       | m <sup>3</sup> /h- 1 Bar |    |
|          |                          |    |

### Cavitation Graph



Flow  
(m<sup>3</sup>/h)

### Pressure Loss Graph

