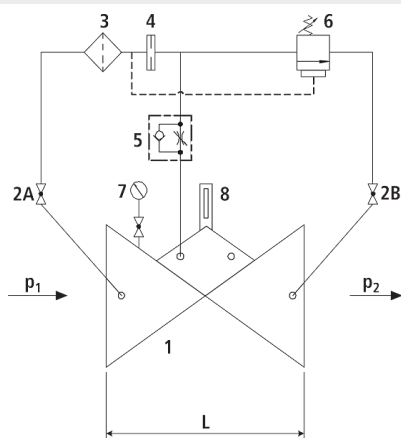
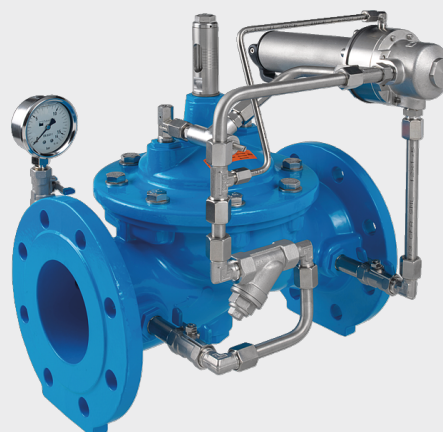
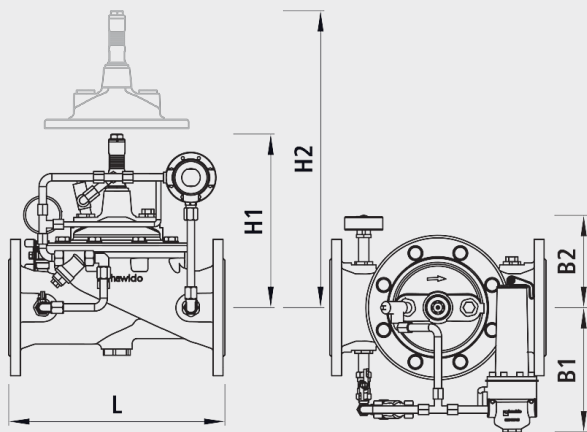


## Pressure relief and pressure retention valve DAV

1400



### Components

- 1: Main valve
- 2: Ball valve (A, B)
- 3: Filter
- 4: Orifice
- 5: Throttle check valve
- 6: Control valve
- 7: Pressure gauge with ball valve
- 8: Optical position indicator (optional: Electrical position indicator, opening limiter)

### Physical characteristics

- The main valve is a hydraulically operating diaphragm valve. The work energy is the inherent medium.
- Most valve types operate purely hydraulically without any foreign energy.

### Application

- To use in drinking water systems (other media after consultation)
- Sustaining the network pressure in a supply
- Protecting the network by releasing excess pressure

### Mode of operation

- The pressure relief valve maintains constant the pre-set inlet pressure ( $p_1$ ). Any excess system pressure is relieved by fast opening of the valve. The closing procedure is slow in order to avoid shock pressure loads. Variable flow rates have no effect on the maintained pressure which is regulated by the control valve. The overpressure or maintained pressure can be set within the range of 2 bar to 16 bar (standard design).

### Product information

- To calculate the dimensions of the valve please refer to the following information:
- Maximum and minimum inlet pressure (static and dynamic pressure ratios)
- Required sustained pressure or discharge pressure
- Maximum and minimum flow rates
- Available line diameters and lengths
- Construction of the valve (straight or angle design)
- For the calculation basis, information on the loss of pressure and the characteristic values of the valve, please refer to the end of Chapter E.

## Design

- Design according to DIN EN 1074
- Construction length acc. to DIN EN 558
- Flange mass according to DIN 1092-2, to PN 25 DN 300
- Pressure levels: PN 10 or PN 16 to DN 300, PN 25 to DN 200, higher pressures on request.
- Nominal widths DN 50, DN 80, DN 100 and DN 150 available in angular design
- Nominal widths 1 1/2" and 2" with threaded connection (female thread)
- Medium temperature up to 40°C

## Installation and assembly

- Shut-off valves should be fitted on both sides of the valve and a dirt trap should be installed on the inlet side of the valve. If the valve outlet flows to the outside or into a shaft, the outlet slider can be omitted. Depending on the installation situation, a mounting/dismounting adapter should be provided.

## Vantages

- Maintenance-free, non-rusting valve seat
- Pressed-in seat
- EWS-coating according to RAL GSK

## Caution

- Dimension H1 with electric position indicator and opening limiter is 110 mm higher up to DN 100 and 130 mm higher at DN 125 to DN 300.

|            | DN     | PN<br>(bar) | L<br>(mm) | B1<br>(mm) | B2<br>(mm) | H1<br>(mm) | H2<br>(mm) | KVS<br>l/min. | weight<br>(kg) | NPK No.<br>411 | BIM /<br>CAD                                                                          |
|------------|--------|-------------|-----------|------------|------------|------------|------------|---------------|----------------|----------------|---------------------------------------------------------------------------------------|
| 1400007000 | 1 1/2" | 16          | 210       | 190        | 160        | 220        | 400        | 315           | 11.900         |                |                                                                                       |
| 1400008000 | 2"     | 16          | 210       | 190        | 160        | 220        | 400        | 315           | 13.750         |                |                                                                                       |
| 1400008025 | 2"     | 25          | 210       | 190        | 160        | 220        | 400        | 460           | 13.750         |                |                                                                                       |
| 1400040000 | 40     | 16          | 200       | 190        | 160        | 220        | 400        | 315           | 13.900         | 833215         |  |
| 1400040025 | 40     | 25          | 200       | 190        | 160        | 220        | 400        | 315           | 13.900         |                |  |
| 1400050000 | 50     | 16          | 230       | 190        | 160        | 220        | 400        | 506           | 16.250         | 833216         |  |
| 1400050025 | 50     | 25          | 230       | 190        | 160        | 220        | 400        | 506           | 16.250         |                |  |
| 1400065000 | 65     | 16          | 290       | 190        | 160        | 240        | 400        | 725           | 21.300         | 833217         |  |
| 1400065025 | 65     | 25          | 290       | 190        | 160        | 240        | 400        | 725           | 21.350         |                |  |
| 1400080000 | 80     | 16          | 310       | 190        | 180        | 250        | 400        | 1200          | 28.000         | 833218         |  |
| 1400080025 | 80     | 25          | 310       | 190        | 180        | 250        | 400        | 1200          | 27.400         |                |  |
| 1400100000 | 100    | 16          | 350       | 220        | 200        | 280        | 400        | 2150          | 35.800         | 833219         |  |
| 1400100025 | 100    | 25          | 350       | 220        | 200        | 280        | 400        | 1770          | 35.400         |                |  |
| 1400125000 | 125    | 16          | 400       | 230        | 210        | 360        | 500        | 2955          | 51.500         | 833241         |  |
| 1400125025 | 125    | 25          | 400       | 230        | 210        | 360        | 500        | 2955          | 51.500         |                |  |
| 1400150000 | 150    | 16          | 480       | 250        | 220        | 400        | 500        | 4960          | 76.000         | 833242         |  |
| 1400150025 | 150    | 25          | 480       | 250        | 220        | 400        | 500        | 4960          | 76.000         |                |  |
| 1400200000 | 200    | 10          | 600       | 260        | 250        | 450        | 500        | 7640          | 114.600        |                |  |
| 1400200016 | 200    | 16          | 600       | 260        | 250        | 450        | 500        | 7640          | 114.600        | 833243         |  |
| 1400250000 | 250    | 10/16       | 730       | 320        | 270        | 520        | 600        | 11600         | 178.000        |                |  |
| 1400300000 | 300    | 10/16       | 850       | 420        | 280        | 510        | 600        | 24600         | 358.000        |                |  |