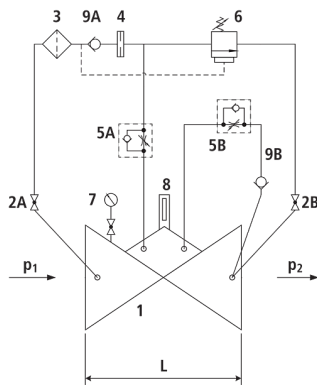


Pressure relief and pressure retention valve DAV with flow-back prevention

1401



Components

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

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 and preventing any backflow
- Protection of the network by releasing excess pressure, when the backflow also has to be simultaneously prevented

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). The valve closes if a backflow enters the system (p_1 is smaller than p_2)

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
- Possible differential pressure with backflow
- 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 ½" 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

Article No.	DN	PN (bar)	L (mm)	weight (kg)	Availability
1401007000	1 1/2"	16	210	11.000	on demand
1401008000	2"	16	210	11.000	on demand
1401040000	40	16	200	15.750	on demand
1401050000	50	16	230	16.250	on demand
1401065000	65	16	290	21.300	on demand
1401080000	80	16	310	27.400	on demand
1401100000	100	16	350	35.400	on demand
1401125000	125	16	400	51.500	on demand
1401150000	150	16	480	76.000	on demand
1401200000	200	10	600	114.600	on demand
1401200016	200	16	600	114.600	on demand
1401250000	250	10/16	730	247.000	on demand
1401300000	300	10/16	850	359.000	on demand