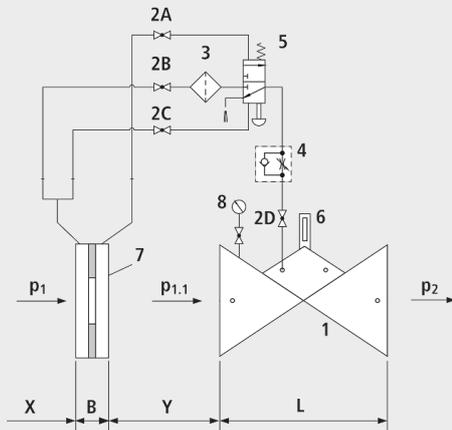


Pipe-break safety device valve, hydraulic control

1709



Components

- 1: Main valve
- 2: Ball valve (A, B, C)
- 3: Filter
- 4: Throttle check valve
- 5: Control valve
- 6: Accessories (optional)
- 7: Differential pressure orifice plate
- 8: Pressure gauge with ball valve
- B: DN 40 to DN 150: 40 mm DN 200 to DN 400: 44 mm
- X: 5 x DN line
- Y: 3 x DN line

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)
- Closing of the line in the event of excessive water flow (burst pipe)

Mode of operation

- The pipe breakage safety valve monitors the volumetric flow rate with the differential orifice plate. In the case of a burst pipe, the volumetric flow rate in the differential orifice plate increases, and the difference in pressure becomes larger. The pipe breakage safety valve is switched and the base valve is closed. The flow control valve can be used to adjust the speed that the valve closes.

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)
- Existing counterpressure
- Maximum flow rate
- Maximum permitted loss of pressure (standard loss of pressure through the measuring orifice and valve 0.5 bar)
- 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 (before the orifice plate). Depending on the installation situation, a mounting/dismounting adapter should be provided. An aeration of the supply system must be provided after the valve.
- The orifice plate must be installed before the valve. It is recommended that the following measurements are taken into consideration:
- $X = 5 \times DN$, distance in front of the orifice plate in a straight line
- $Y = 3 \times DN$, distance after the orifice plate and before the valve, in a straight line

Vantages

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

	DN	PN (bar)	L (mm)	weight (kg)	NPK No. 411
1709007000	1 1/2"	16	210	10.000	
1709008000	2"	16	210	10.000	
1709040000	40	16	200	13.000	845335
1709050000	50	16	230	16.750	845336
1709065000	65	16	290	20.550	845337
1709080000	80	16	310	27.800	845338
1709100000	100	16	350	35.000	845339
1709125000	125	16	400	50.600	845341
1709150000	150	16	480	76.000	845342
1709200000	200	10	600	115.000	845343
1709200016	200	16	600	115.000	
1709250000	250	10/16	730	250.000	845344
1709300000	300	10/16	850	351.000	845345