Pressure reducing valve with inlet pressure control and non-return function 1505





Application

- To use in drinking water systems (other media after consultation)
- Reduction in pressure to feed a network whilst maintaining a minimal inlet pressure
- Emergency feed into a second network (network connections) whilst maintaining a minimal inlet pressure
- Ensuring and maintaining the inlet pressure
- Prevention of a backflow

Components

- 1: Main valve
- 2: Ball valve (A, B, C)
- 3: Filter
- 4: Orifice
- 5: Throttle check valve (A, B)
- 6: Control valve pressure reduction
- 7: Manometer with ball valve (A, B)
- 8: Optical position indicator (optional: Electrical position indicator, opening limiter)
- 9: Check valve (A, B)
- 10: Control valve maintaining the pressure

Mode of operation

• The pressure reducing valve with inlet pressure control and backward flow prevention reduces a variable inlet pressure to a constant outlet pressure, controls the inlet pressure (if the inlet pressure drops below the pre-set value, the valve closes) and prevents the backward flow if the inlet pressure falls below the outlet pressure. Fluctuating inlet pressure and flow rate have no effect on the outlet pressure controlled by the control valve. The outlet pressure is adjustable in the range from 1.5 to 12 bar (standard design).



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.

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)
- Desired outlet pressure
- Required sustained pressure on the inlet side
- Maximum and minimum flow rates
- Possible requirement for extinguishing water
- 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.
Depending on the installation situation, a mounting/dismounting adapter and an aeration and ventilation system 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
1505007000	1 1/2"	16	210	11.500	on demand
1505008000	2"	16	210	11.500	on demand
1505040000	40	16	200	16.250	on demand
1505050000	50	16	230	16.750	on demand
1505065000	65	16	290	21.800	on demand
1505080000	80	16	310	27.900	on demand
1505100000	100	16	350	35.900	on demand
1505125000	125	16	400	52.000	on demand
1505150000	150	16	480	76.000	on demand
1505200000	200	10	600	115.100	on demand
1505200016	200	16	600	115.100	on demand
1505250000	250	10/16	730	247.500	on demand
1505300000	300	10/16	850	356.000	on demand