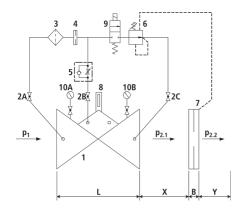
# Flow limitation valve MBV for electrical control - closed without current

1303



# Components

- 1: Main valve
- 2: Ball valve (A, B, C)
- 3: Filter
- 4: Orifice
- 5: Throttle check valve
- 6: Control valve
- 7: Differential pressure orifice plate
- 8: Optical position indicator (optional: Electrical position indicator, opening limiter)
- 9: Electric solenoid valve
- 10: Manometer with ball valve (A, B)
- B: DN 40 to DN 150: 22 mmDN 200 to DN 250: 27 mmDN 300 to DN 400: 29 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)
- Limitation of the inflow from a pressure zone into a lower pressure zone
- Constantly maintaining a filter flow
- The supply to a secondary network necessitates a limitation of the flow, so as to not endanger, for example, the extinguishing reservoir of the primary network (in combination with a reduction in pressure).

#### Mode of operation

 The flow-control valve completely hydraulically ensures a pre-determined maximum flow, irrespective of any changes in the operating pressure. The nominal flow rate can be progressively varied up to ±15% via the control valve. The valve is started up by the solenoid valve (customer`s control system). The valve is shut when the power is off.

# **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 outlet pressure after the orifice plate
- Required flow rate
- Voltage information for the solenoid valve
- Permissible loss of pressure incl. measuring orifice (usually 0.5 bar over the valve and orifice plate)
- 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.

#### Vantages

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

#### 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.
- The orifice plate must be installed after the valve. It is recommended that the following measurements are taken into consideration:
- X = 5 x DN, distance between the valve and the orifice plate in a straight line
- Y = 3 x DN, distance after the orifice plate and the shut-off component, in a straight line

| Article No. | DN     | PN<br>(bar) | L<br>(mm) | weight<br>(kg) | Availability |
|-------------|--------|-------------|-----------|----------------|--------------|
| 1303007000  | 1 1/2" | 16          | 210       | 11.000         | on demand    |
| 1303008000  | 2"     | 16          | 210       | 11.000         | on demand    |
| 1303040000  | 40     | 16          | 200       | 15.750         | on demand    |
| 1303050000  | 50     | 16          | 230       | 16.250         | on demand    |
| 1303065000  | 65     | 16          | 290       | 21.300         | on demand    |



| Article No. | DN  | PN<br>(bar) | L<br>(mm) | weight<br>(kg) | Availability |
|-------------|-----|-------------|-----------|----------------|--------------|
| 1303080000  | 80  | 16          | 310       | 27.400         | on demand    |
| 1303100000  | 100 | 16          | 350       | 35.400         | on demand    |
| 1303125000  | 125 | 16          | 400       | 51.500         | on demand    |
| 1303150000  | 150 | 16          | 480       | 76.000         | on demand    |
| 1303200000  | 200 | 10          | 600       | 114.600        | on demand    |
| 1303200016  | 200 | 16          | 600       | 114.600        | on demand    |
| 1303250000  | 250 | 10/16       | 730       | 247.000        | on demand    |
| 1303300000  | 300 | 10/16       | 850       | 358.000        | on demand    |