



Armaturen GmbH

Armaturen, Rohre, Sonderteile aus Edelstahl
fittings, pipes, special parts of stainless steel

Operating Instructions

Throttle Valve liner/male (DIN)

M&S Article No. 65200



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2. Symbols used



Danger warnings

Danger warnings are denoted by the danger symbol which appears on the left and are framed.



Information

Descriptions to which particular attention must be paid are denoted by this symbol which appears on the left and are also framed.

3. Sectional drawings

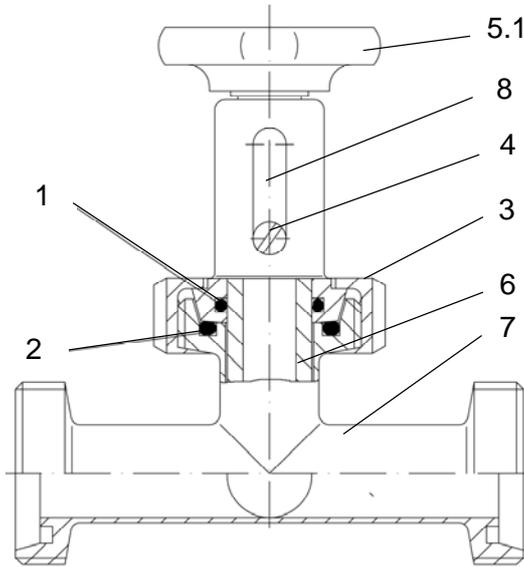


Fig. 1 Sectional view of throttle valve DN25-50

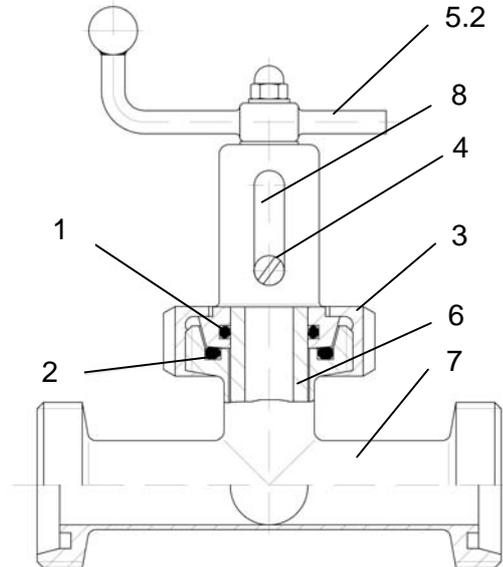


Fig. 2 Sectional view of throttle valve DN65-100

Tab. 1 Bill of material of throttle valve

Item	Designation	Item	Designation
1	O-ring	5	Handwheel (5.1)/crank handle (5.2)*
2	Gasket G	6	Valve piston
3	Grooved nut	7	Tee
4	Locking screw	8	Valve spindle

*) Crank handle as of DN65

4. Use and operating principle

The throttle valve is a manually operated valve to throttle the media flow in a system or a line. The flow cannot be blocked entirely.

The valve can be flown through from both sides.

5. Transport

5.1 Checking the delivery contents



- When you receive the throttle valve, check the delivery against the order to make sure they correspond.
- Check that the delivery is complete, and check its condition.

If there are visible signs of transit damage and/or packing units are missing notify the forwarding agent immediately in the consignment note. You (the recipient) should take recourse against the forwarding agent immediately in writing, and M&S Armaturen GmbH must be informed of this action.

Complaints regarding transit damage that is not immediately evident must be made to the forwarding agent within 6 days.

The recipient must bear the costs for claims made after this period.

5.2 Transport



- The packing units must only be transported using suitable lifting equipment and slinging gear.
- Pay attention to the graphic symbols on the packaging.
- Transport the throttle valve carefully to prevent damage from sudden impacts; exercise due care when loading/unloading.

6. Safety advice



- Prior to maintenance works, the pipeline system containing the throttle valve must be depressurised and fluid-free!
- For safe maintenance of the throttle valve, observe the installation instructions (chap. 7).

7. Installation / disassembly / assembly

7.1 Installation



- Observe the relevant national guidelines and regulations.
- Install the throttle valve without tension into the pipeline system.
- The valve may only be installed when depressurised.
- Only assemble in cooled down and cleaned condition.

- The throttle valve can be installed in any position.
- Connect the throttle valve via the two liners to the supply and return pipelines. One side is screwed to the threaded liner using a gasket DIN 11851-G (M&S Art.-No. 111), a cone liner DIN 11851 (M&S Art.-No. 114) and a grooved nut DIN 11851-F (M&S Art.-No. 110). The other side is screwed to the cone liner using a gasket DIN 11851-G (M&S Art.-No. 111) and a threaded liner (M&S Art.-No. 113). Other connection options (e.g. welded parts) are available upon request.

7.2 Disassembly



- The valve may only be disassembled when depressurised.

- Unscrew the grooved nut (3) using a sickle spanner.
- Pull the valve insert completely out of the tee (7).
- Loosen and remove the side locking screws (4).
- Turn the handwheel (5.1) or the crank handle (5.2) until the valve piston (6) comes loose of the valve spindle (8).
- O-ring (1) and gasket G (2) are now accessible and can be replaced.

7.3 Assembly



- The valve may only be assembled when depressurised.

- Prior to gasket installation, clean installation space and running surfaces.
- Replace O-ring (1) and gasket G (2), if necessary.
- Assemble in reverse order.
- Check the valve function.

8. Repairs/Maintenance



- The maintenance intervals differ from case to case, the operator should define them by himself basing on sporadic checks.
- To replace the gaskets, refer to the installation instructions (chap. 7) or the cleaning instructions (chap. 9).



- M&S Armaturen GmbH cannot accept liability for claims made as a result of non-observance of these Operating Instructions or constructional changes to the throttle valve.
- Any other use or use outside the defined scope is considered to be improper use. M&S Armaturen GmbH will not accept liability for losses incurred as a result of improper use.

9. Cleaning



- Observe the safety data sheets by the cleaning agent manufacturers!

- Clean individual parts carefully.

10. Technical Data

10.1 Dimensions

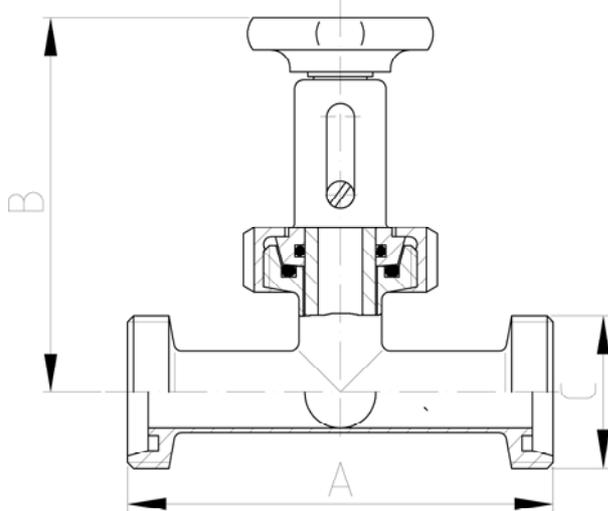


Fig. 3 Dimensions of throttle valve DN25-50

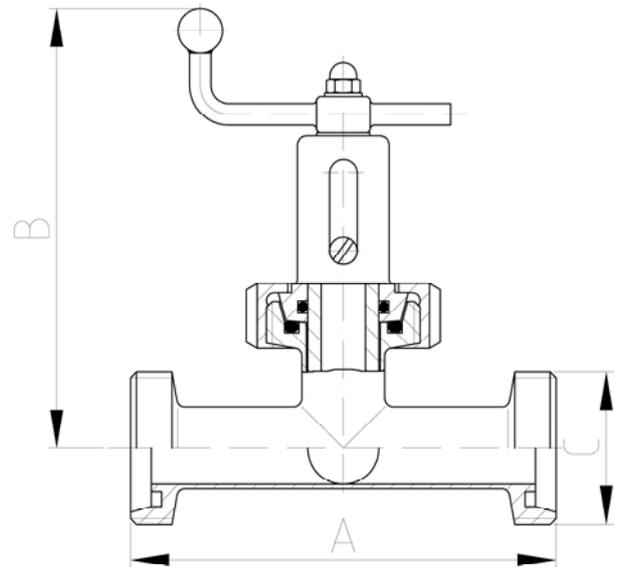


Fig. 4 Dimensions of throttle valve DN65-100

Tab. 2 Dimensions of throttle valve DN25-100

DN	A [mm]	B [mm]	C [DIN 405-1]
25	144	128	Rd52x1/6
32	154	140	Rd58x1/6
40	164	152	Rd65x1/6
50	186	181	Rd78x1/6
65	210	255	Rd95x1/6
80	230	287	Rd110x1/4
100	260	345	Rd130x1/4

11. Material and surfaces

In contact with product: 1.4301/1.4307 AISI 304/304L
 1.4404 AISI 316L (optional)

Not in contact with product: 1.4301/1.4307 AISI 304/304L

Gaskets: NBR, EPDM or FKM (depending on specification and/or version)

Inner surface: depending on specification

Outer surfaces: depending on specification