

Germaniastraße 28 D 44379 Dortmund Telefon: +49 (0)231/61009-0 E-mail: gefa@gefa.com Postfach 700110 D 44371 Dortmund Fax: +49 (0)231/61009-80 Internet: www.gefa.com Operating instructions
Maintenance / Mounting
butterfly valve series K
two-piece body
DN 25 – DN 500

Maintenance

• The valves do not require any special maintenance.

Disassembly

- Valves with hand lever:
 - Loosen the lateral screw joint of the hand lever and pull the hand lever off the valve stem (3).
 - If only the seat (2) or the disc (3) have to be replaced, the throttle plate can be left mounted.
 - Remove the throttle plate by loosening the screws to replace the bearing (6).
- Valves with actuator:
 - Loosen the fastening screws between the MULTITOP mounting plate (29) and the actuator or between the valve and the bracket and remove the actuator to replace the bearing (6).
 - Remove the MULTITOP mounting plate (29) from the valve by loosening the fastening screws (31) and the clamping sleeves (30).
 - If only the seat (2) or the disc (3) has to be replaced, the actuator may remain on the valve.
- Turn the disc to "OPEN" position.
- Loosen and remove the two body screws (8).
- Pull off the lower part of the body (1b). Once the body screws (8) have been removed, this is only held by the dovetail of the seat (2). Use two screwdrivers in the body splits to pull off the bottom part with a rotating motion.
- Pull the disc (3) and seat (2) out of the upper part of the body (1a).
- In order to remove the disc (3) from the seat (2), deform the seat into a long oval until the short end of the shaft can be cleared. Using a rotating motion the long end of the shaft can now be removed from the seat shaft hole.
- Check all part for flawless condition and renew them, if required. Only use original GEFA spare parts.

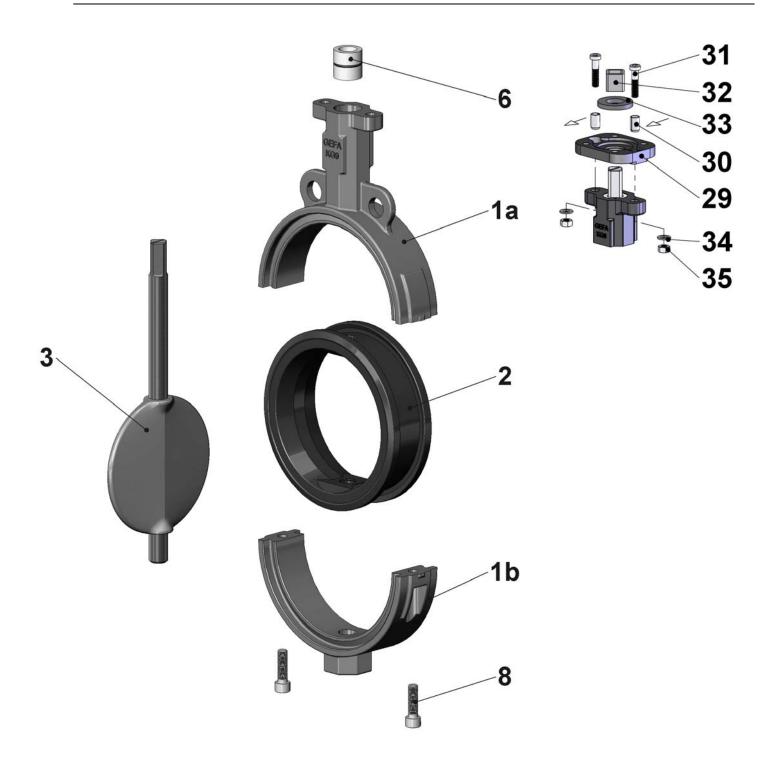
Assembly

- Thoroughly clean all parts and check them for wear. Parts that show wear or corrosion must be replaced to ensure operational safety in future. If possible use silicone oil for assembly.
- Insert the long end of the valve shaft (3) into a shaft hole of the seat (2) by using a rotating motion.
- Turn the disc (3) to "OPEN" position and deform the seat again into a long oval until the short end of the shaft can be inserted easily into the shaft hole of the seat.
- Insert the long shaft end of the "disc-shaft-seat unit" (2+3) into the upper part of the body (1a). Push the dovetail of the seat into the body's contour of the dovetail.
- Assemble the upper and lower part of the body (1a/1b) and fasten them with the body screws (8).
 Each body half has a small moulded cam at the body split that shows the correct position of the body halves in relation to each other.
- Insert the bearing with the O-rings (6) into the upper body part (1a) if the bearing has to be replaced.
- After the assembly the disc has to be switched for several times (at least 4x) by 180°.
- Check the seat and the stem tightness. Test pressure 1.1 times nominal pressure.
- Valves with hand lever:
 - Fix the throttle plate loosely on the top flange. Insert the hand lever onto the shaft and position the throttle plate. Tighten the screws of the throttle plate and fix the lever in place using the collateral screw joint.
- Valves with actuator:
 - Place the complete actuator unit in position, align and fix by using the screws.

Mounting of the MULTITOP mounting plate.

- Position the mounting plate (29) on the body.
- Insert the spring dowel sleeves (30) through the mounting plate into the body. The slot in the spring dowel sleeve must point in the force direction (see arrow in the assembly drawing) to achieve a rigid connection. Do not insert the mounting plate without using spring dowel sleeves, as the transverse forces cannot be absorbed by the screws.
- Insert the cylinder screws (31) and tighten them.
- Slide a square adapter (32) onto the stem, if required. Prevent the square adapter from sliding down the stem by using the attached washer (33), if required.





- 1a Upper part of the body
- 1b Lower part of the body
- 2 Seat
- 3 Disc
- 6 Bearing with O-ring
- 8 Body screw

29 MULTITOP mounting plate

Edition: 2014-11-04

- 30 Spring dowel sleeve
- 31 Cylinder screw
- 32 Square adapter
- 33 Retaining washer
- 34 Washer
- 35 Hexagonal nut