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# Operating instructions Maintenance / Mounting butterfly valve series KG2 / KG4 DN 40 – DN 300

### **Maintenance**

The valves do not require any special maintenance. For valves with DVGW approval according to DIN EN 13774 - tightness class 2 / DIN EN 1074-2 (DG-4313 BU0327 and DW-6201BU0331) maintenance must be done by the manufacturer. Otherwise the approval is no longer valid.

## **Disassembly** (Valves without DVGW approval)

- Valves with hand lever:
  - Loosen the lateral screw joint of the hand lever and pull the hand lever off the valve stem (4).
  - Loosen the fastening screws of the throttle plate and remove the throttle plate, if required.
- 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.
  - If required, remove the MULTITOP mounting plate (29) from the valve by loosening the fastening screws (31) and the spring dowel sleeves (30).
- Knock out the grooved pins (5). Take note that the direction of knocking must be from the ungrooved to the grooved side.
- Turn the disc (3) to "OPEN" position.
  - After removing the stems, the disc is no longer secured in the valve and must be prevented from falling out.
- Pull the long stem (4a) including the O-ring (6) out of the body.
- Pull the short stem (4b) including the O-ring (6) out of the body, if necessary by using a screwed-in treaded rod or screw
- Press the disc (3) out of the seat (2).
- Lever the seat (2) with a suitable, blunt tool out of the body (1).
- Check all part for flawless condition and renew them, if required. Only use original GEFA spare parts.

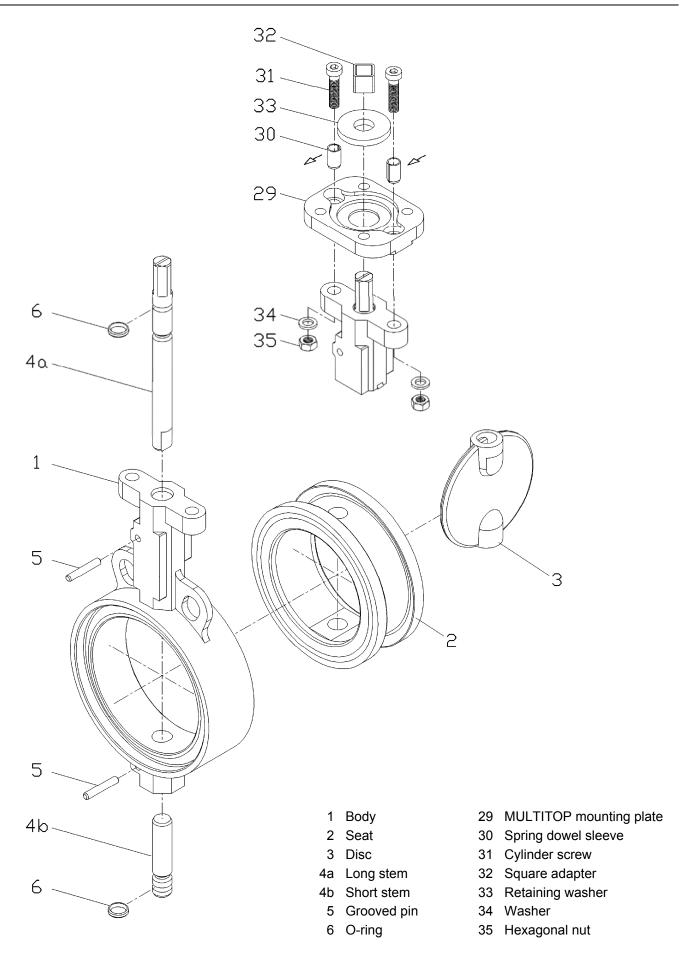
# **Assembly** (Valves without DVGW approval)

- Thoroughly clean all parts and check them for wear. Parts that show wear or corrosion must be replaced to ensure operational safety in future.
  - Use silicone oil for the assembly, if the application permits this.
- Insert the seat (2) according to the holes into the body (1). The two holes in the body and the seat must be aligned.
- Place the O-rings (6) into the small groove (width 4 mm) of the short and the long stem.
- Insert the disc (3) into the seat (2) in a way that the double flat is pointing to the top flange. The disc should be in position "OPEN". It has to be ensured that the stem holes of the disc are in line with the upper and lower holes in the seat (2) and the body (1).
- Insert the long stem (4a) with the double flat side into the body (1). The surfaces of the double flat and the groove on the square must be aligned parallel to the disc (3). Push the stem in until the lower edge of the square fits flush with the upper edge of the body.
- Insert the short stem (4b) into the body (1). The thread at the front side points outwards.
  - Push in the stem until the front side fits flush with the lower edge of the body.
- Check whether the holes in the body (1) are in line with the bigger grooves of the stem (4a, 4b) before inserting the grooved pins (5). When a stem covers a part of the hole, the position of the stem must be corrected.
- Place the grooved pins (5) with the ungrooved side into the holes of the body (1) and push them in by tapping them gently with a hammer.
- 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:
- Loosely attach the throttle plate with the screws to the top flange. Slide the hand lever onto the stem and position the
  throttle plate. Tighten the fastening screws of the throttle plate and attach the lever with the lateral screw joint.
- Valves with actuator:
  - Attach the whole actuator unit, align it and fasten it with 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.





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Subject to modifications without notice