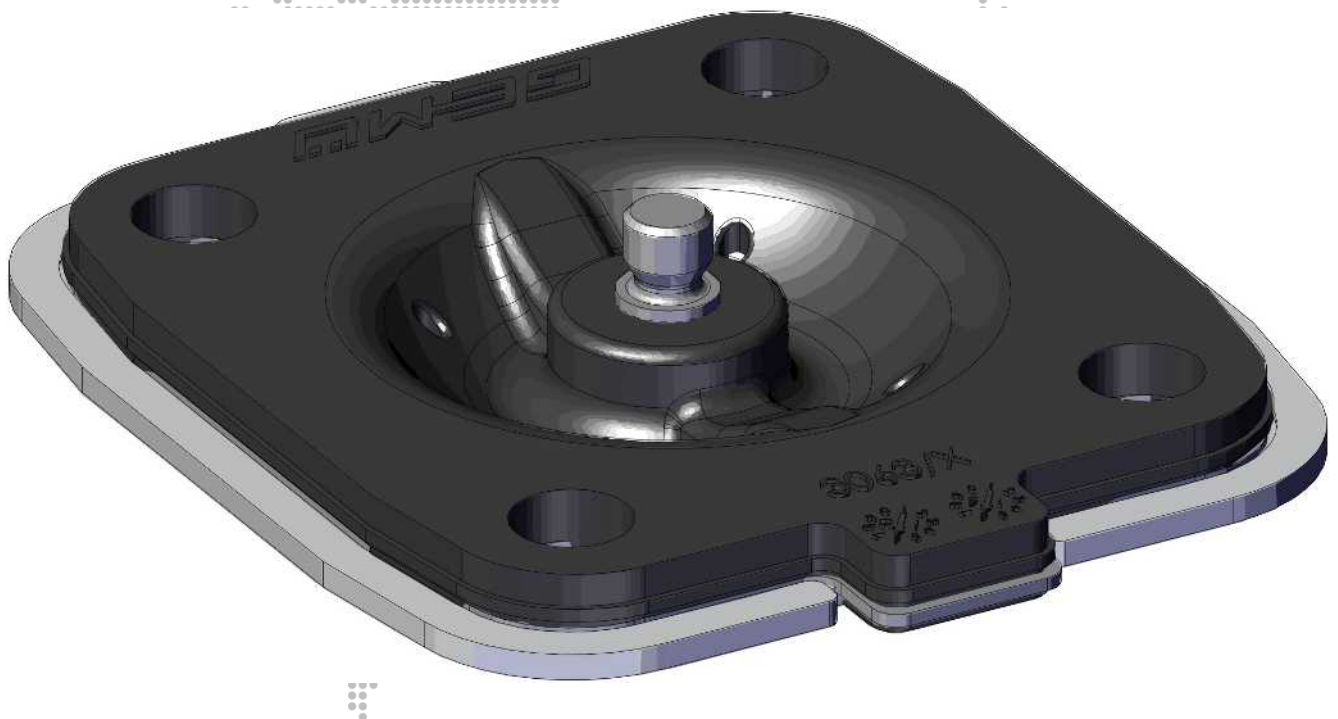


GEMÜ Code 71

PTFE / PVDF / EPDM diaphragm

EN

Assembly instructions



1 Information

NOTICE

- ▶ Only use the assembly instructions in conjunction with the operating instructions.

NOTICE

Tools

- ▶ The tools required for installation and assembly are not included in the scope of delivery.
- Use appropriate, functional and safe tools.

Requirements for assembly:

- It is recommended that new GEMÜ mounting sets be used for each assembly process
- Compressed air or power supply (depending on actuator)

2 Diaphragm replacement

⚠ WARNING



Corrosive chemicals

- ▶ Risk of caustic burns
- Wear suitable protective gear.
- Completely drain the plant.

⚠ WARNING

The equipment is subject to pressure!

- ▶ Risk of severe injury or death.
- Depressurize the plant.
- Completely drain the plant.

⚠ CAUTION

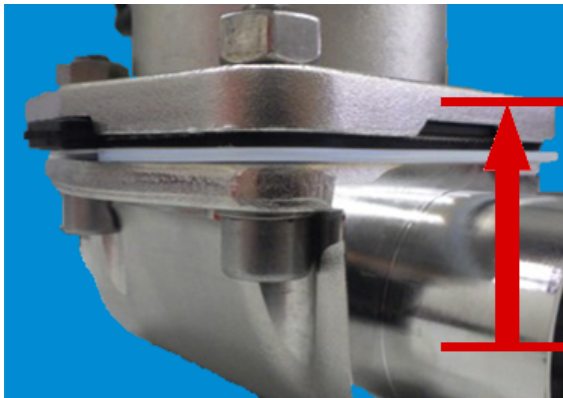


Hot plant components!

- ▶ Risk of burns!
- Only work on plant that has cooled down.

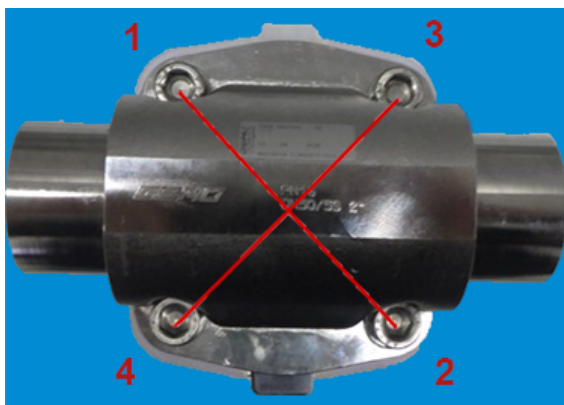
2.1 Removing the diaphragm

1



- Move the actuator to the open position.

2



- Loosen the connecting bolts diagonally and lift the actuator off the valve body.

3



- Move the actuator to the closed position.
- ⇒ With manual operators, ensure that these are not turned down too far. Otherwise the compressor will run out of its guides at the side.

4



1. Invert the PTFE diaphragm face by hand and unscrew from the valve spindle/compressor (right-hand thread: Turn anti-clockwise to undo).
2. Remove the intermediate layer and the EPDM backing diaphragm.
3. Check the diaphragm for potential damage and replace it.

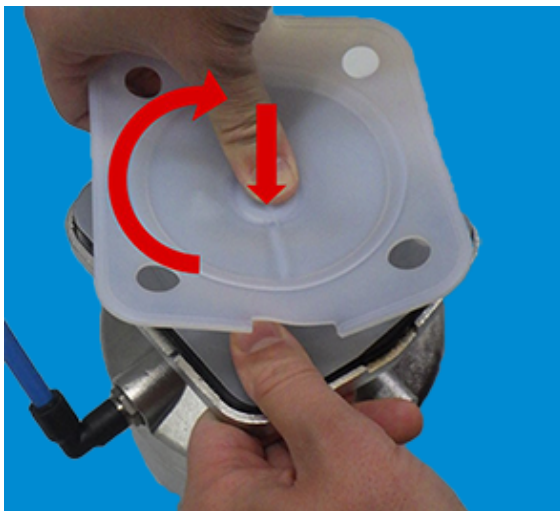
2.2 Mounting the diaphragm

1



1. With the three-part code 71 diaphragm, place the EPDM backing diaphragm in the correct position on the flange of the actuator.
2. Place the intermediate layer made of PVDF likewise in the correct position on the backing diaphragm. In doing so, the tab of the EPDM backing diaphragm and the tab of the PVDF intermediate layer should be aligned on top of each other.

2



1. Invert the PTFE diaphragm face by hand and screw it into the valve spindle/compressor as far as it will go.
2. When screwing into the thread, light pressure should be exerted on the PTFE face, as, due to the increase in wall thickness through the intermediate layer, the diaphragm must be slightly squeezed in order to reach the thread entry of the valve spindle.

3



1. Turn the PTFE diaphragm face back until the next correctly aligned position (max. 180°).
2. Ensure that the compressor, the sealing weir and the diaphragm are in correct alignment.
3. Return the PTFE diaphragm face to its original shape by hand.
 - The tab of the PTFE diaphragm face and the tab of the intermediate layer/EPDM backing diaphragm can be positioned on opposite sides (see figure). The advantage of this is that the markings on both tabs are visible. It is also OK from a technical point of view for the tabs to be on top of one another.

4



- Move the actuator to the open position.

5



1. Position the actuator with the mounted diaphragm on the valve body.
2. Ensure that the valve body, diaphragm and actuator are in correct alignment.

6



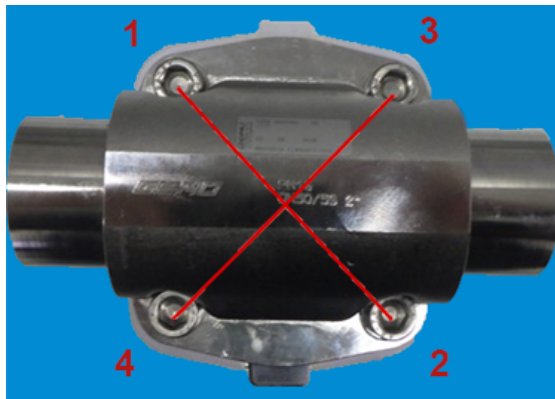
- Position the connecting bolts from the body side and bolt together diagonally with the valve body/nuts so that they are hand tight (do not use force).

7



- Move the actuator to the closed position (move manual operators only as far as the "half closed" position).

8



- Tighten the connecting bolts diagonally (in accordance with the order shown in the figure above) using an appropriate tool in several small, identical steps until the PTFE diaphragm face and intermediate layer/EPDM backing diaphragm are positioned flat and parallel on the valve body (see figure below).
- Perform assembly quickly and without any interruptions.

3 Commissioning

NOTICE

- ▶ Attachments and accessories such as closing and opening stroke limiters, seal adjusters, electrical position indicators or positioners and process controllers must be checked after replacing the diaphragm and recalibrated if necessary (see the relevant operating instructions).

NOTICE

Diaphragms set in the course of time.

- ▶ Leakage.
- After disassembly/assembly of the product, check that the bolts and nuts on the body are tight and retighten if required.
- Before commissioning the system, check that the diaphragm is positioned flat and parallel on the body.
- Retighten the bolts and nuts at the very latest after the first sterilization process.
- Further periodic inspections are recommended during operation depending on the use of the valve.



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Subject to alteration

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