G U Quick guide

Replacing the Code 5M shut-off diaphragm Diaphragm size 10-300/DN 10-300



1. Move the actuator to the open position.



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



- **3.** Move the actuator to the closed position.
- ⇒ For manual actuators, make sure that they are only closed such that the compressor can stay in its guides.



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



- 7 Place the new EPDM backing diaphragm on the actuator flange in the correct position.
- 8. Invert the new PTFE diaphragm face by hand and screw it into the valve spindle/compressor until there is noticeable resistance from the travel stop.



- **9.** Turn the PTFE diaphragm face back to the closest possible match of the hole pattern (max. 180°).
- 10. Return the PTFE diaphragm face to its original shape by hand. The tab of the PTFE diaphragm face and the tab of the 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 both tabs to be on top of one another.



11. Move the actuator to the open position.



- **12.** Place the actuator with the mounted diaphragm on the valve body.
- 13. Make sure that it matches the hole pattern.



14. Insert the connecting bolts from the body side, position the nuts and bolt together diagonally so that they are hand tight (do not use force). Do not forget to use washers on both sides.



15. Move the pneumatic actuators to the closed position (move manual actuators only as far as the "half closed" position, open electrically-powered actuators approx. 20%).



- 16 Evenly tighten the connecting bolts diagonally in several steps using an appropriate tool until the PTFE diaphragm face and the EPDM backing diaphragm are positioned level with and parallel to the valve body (see figure below).
- ⇒ Perform assembly quickly and without any interruptions.



Important information:

Due to the setting behaviour of elastomers, the compression of the diaphragm must be checked and, if necessary, its flanging must be retightened (for valves in sterile applications, this must also be repeated after the first sterilization cycle) before putting the system into operation. Other periodic inspections during operation are recommended depending on the use of the valves.

Seal adjusters, attachments and accessories such as stroke limiters, optical position indicators, electrical position indicators, positioners and process controllers must be checked after replacing the shut-off diaphragm and/or recalibrated after readjusting the shut-off diaphragm (see the relevant functional description). For manually operated valves with a seal adjuster, the setting must also be readjusted.