

Disassembly of actuator:

- Move actuator with actuating pressure into the middle of the stroke
- Loosen headless setscrew in the cap nut (21)
- Secure coupling (20) position (width across flats 32), unscrew** cap nut (21)
- Unscrew nut (23)
- Remove actuator from valve
- Let off actuating pressure

Assembly of actuator:

- Position actuator onto valve, tighten nut (23)
- Move actuator into middle of stroke with actuating pressure
- Secure coupling (20) position (width across flats 32)
- Tighten cap nut (21) and headless setscrew
- Move valve into end positions, if necessary, and adjust clamping rings towards position indicator (17)

**** Note:** *Ensure that the position of coupling (20), indicating plate (19) and fastening nut (18) is not altered, otherwise the starting point of the actuator will require resetting.*

Setting the starting point

Ensure that the actuator is readily assembled on the valve before setting.

Release lock nut (18) (see fig. 1) on the actuator spindle (16) and screw slightly in the direction of the actuator. Temporarily remove the indicating plate (19) located beneath.

Set the desired starting pressure for the actuator on the control air reducing unit. If the access is performed via a positioner, set it to the maximum actuating pressure by the appropriate input signal.

Screw coupling (20) onto the actuator spindle (16) until the valve spindle is just in the CLOSED position or starts moving in the OPEN direction.

If the coupling cannot be adjusted sufficiently on the drive spindle, first of all adjust the coupling ring (22) by approx. 5 mm. It is accessible after the cap nut (21) has been screwed off the coupling (20) and can be turned slightly up or down on the spindle.

First of all loosen the headless setscrews of the position securing element on the coupling ring and cap nut. After completing the measure, ensure that all parts are restored to their original status.

Subsequently, reattach indicating plate (19), secure with lock nut (18) and restore to the normal operating status on the pressure reducing unit or positioner.

Exchanging the diaphragms

- Dismantle actuator from valve - as described above
- Unscrew coupling (20) and nut (18) from the drive spindle (16)
- Remove nuts and screws (5) and diaphragm lid (1)

Attention: *All actuators contain two long screws. Ensure that these screws are loosened last and uniformly on both sides to reduce the spring pretension / preloading.*

Non-observance of this information entails risk of injury !

- Remove springs (2) and spindle-diaphragm-diaphragm plate unit
- Secure spindle (16) position (width over flats 13) and screw off screw (4) together with retaining ring
- Remove clamping element (3) and diaphragm (8), insert new diaphragm (8) and clamping element (3)
- Replace retaining ring, insert screw (4) and tighten against the spindle (16)
- Insert springs (2) and spindle-diaphragm-diaphragm plate unit, ensuring at the same time that the springs are correctly positioned in the diaphragm plate (6) and the diaphragm is aligned in relation to the screw holes
- Put diaphragm lid (1) in place and align, insert screws (5) commencing with the two long screws and tighten in a cross pattern with the nuts
- Screw coupling (20) and nut (18) onto the actuator spindle (16), insert indicating plate (19)
- Mount actuator onto valve - as described above
- Set the starting point - as described above

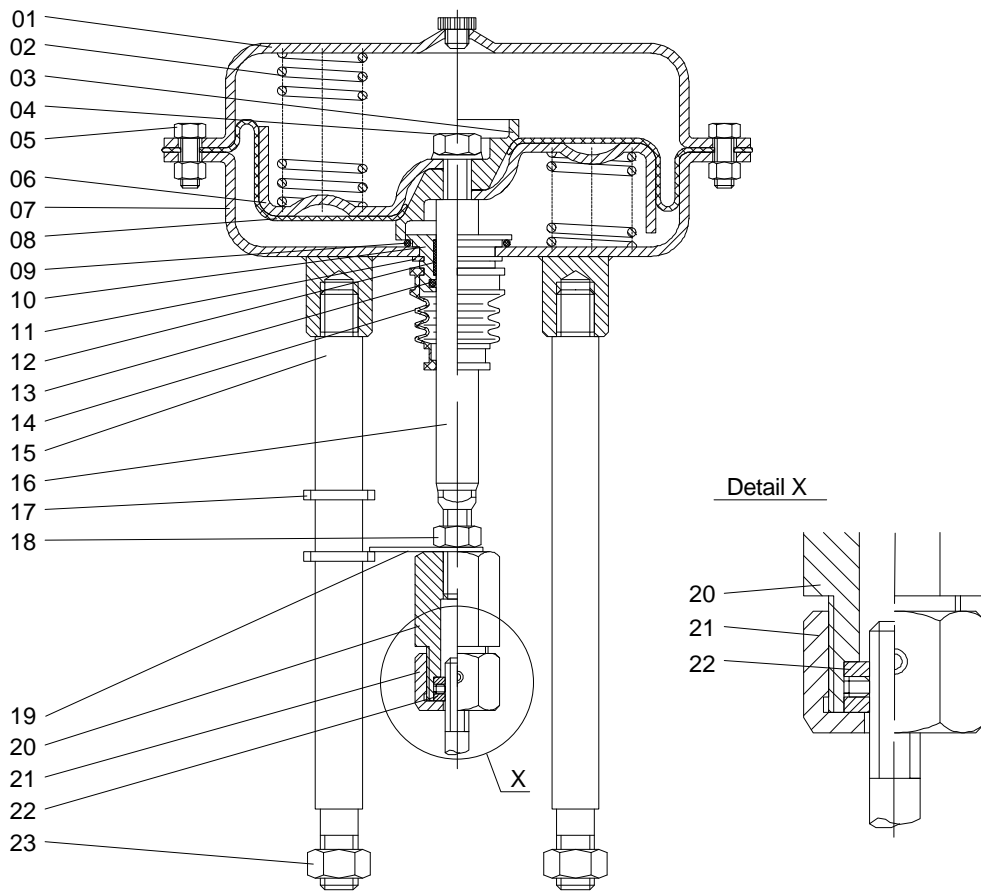


Fig. 1

| No. | Desianation | Part-No. |
|-----|--------------------------------------|-----------------|
| 01 | Diaphragm lid | f5h |
| 02 | Spring | f5f *** |
| 03 | Clamping element | f3ks |
| 04 | Screw M12 with retaining ring | e8av1230+f8ds12 |
| 05 | Screw M8 with Nut | f8av0825+f8mv08 |
| 06 | Diaphragm plate | f5mt |
| 07 | Diaphragm housing | f5b |
| 08 | Diaphragm | f5m |
| 09 | O-ring | f5o38x4 |
| 10 | Spindle guidance | f3sd |
| 11 | Seeger-ring | f5sr31 |
| 12 | Guiding tape | f9fb |
| 13 | O-ring | f5o18x3 |
| 14 | Bellow | f5gf |
| 15 | Mounting rod | f3s200 |
| 16 | Spindle | f3s12 |
| 17 | Stroke indicators | e5ak |
| 18 | Nut M12 | f8mv12f |
| 19 | Indicating plate | f3ab |
| 20 | Coupling | f3k60 |
| 21 | Cap nut | f3um3/4 |
| 22 | Coupling ring with headless setscrew | e3sr10 **** |
| 23 | Nut M16 with spring ring | e8mv16+e8fv16 |

*** = Stroke and control pressure dependent

**** = Only for valve spindle with thread M10