Maintenance/repair of pinch valves Series VMC, DN125-150, type F, FA, R, RA, T, TA







Figure 1



Figure 3



Figure 5



Figure 7

* Wear parts:

Flange/socket end cover (A), mounting bolts (C), sleeve (D) Assembly aids: Assembly kit incl. AKO assembly paste MP200 or MPL200 for the food sector, AKO assembly pipe, AKO assembly board and bolts for pre-assembly

To remove the old sleeve

Remove both flanges/socket end covers (A) by loosening the mounting bolts (C). Use your thumb to push the old sleeve (D) out of the body (B). Use AKO assembly paste (MP200, for food sector MPL200) as lubrication between the body (B) and sleeve (D). Remove the old sleeve (D) with a pipe wrench or another suitable tool. Clean all individual parts afterwards and check the parts for damage as well as for ageing and porosity. Replace damaged parts.

To fit the new sleeve

Figure 1: Lubricate the following parts with AKO assembly paste (MP200, for food sector MPL200):

- Inner neck of the body (B) on both sides
- Inside and outside of the sleeve (D) on both ends
- Cones of both flanges/socket end covers (A)

Note: Do not use any adhesive, grease or oil. For pinch valves used in the food sector, please only use AKO assembly paste MPL200. Figure 2: Slide or push the sleeve (D) into the body (B) until it protrudes evenly at both ends.

Figure 3: Stand the valve unit on its end and place a flange/socket end cover (A) flat onto the sleeve (D).

Align the groove in the flange/socket end cover (A) with the bolt on the body (B). Insert four bolts for pre-assembly crossways into the mounting holes. Push the mounting discs (E) (flat to the body) onto the bolts for pre-assembly. Tighten the nuts until the mounting discs (E) are flush to the body flange (B).

If necessary, lubricate the bolts with suitable grease before unscrewing them.

Figure 4: Push the flange/socket end cover (A) diagonally into the sleeve (D) and tighten the nut by approx. one length of a nut. Repeat this process on the opposite side of the flange/socket end cover (A). Also tighten the two remaining nuts by approx. one length of a nut. Turn the valve unit 180° and repeat the process with the second flange/socket end cover (A).

Realign the groove in the flange/socket end cover (A) with the bolt on the body (B) if necessary.

Figure 5: Slide the assembly pipe into the pinch valve. Apply approx. 2 bar of air to the body (B) via the control air connection. Make sure that the sleeve (D) is protruding evenly on both sides (approx. 5 mm).

Figure 6: Tighten the nuts crossways on both sides with a spanner (SW19)untiltheflange/socketendcover(A)isfittedflushtothebody(B). Release the control air from the body (B). Remove the assembly pipe. Figure 7: Insert the remaining mounting bolts (C) into the mounting holes on each side of the flange/socket end cover (A) and tighten them. Replace the bolts for pre-assembly with mounting bolts on each flange/socket end cover (A) and tighten them as well. Now tighten the mounting bolts alternately and crossways on both sides to max. 30Nm until the flanges/socket end covers rest firmly on the body (B). Figure 8: Check the function of the valve. Insert the assembly board into the valve so that the narrow side of the board is facing the air connection. Hold the assembly board firmly. Apply the minimal control pressure to the body. Make sure that it closes correctly to form a lip shape.

Repeat the process two or three times to give the sleeve the optimum closing direction.

CAUTION: NO SHARP OBJECTS MAY BE USED FOR THE INSTALLATION.

Subject to technical modifications

AKO Armaturen & Separationstechnik GmbH





Figure 2

Figure 6



Figure 8

