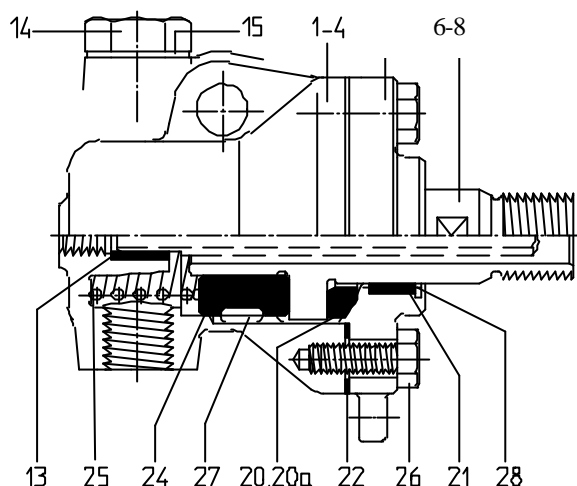


Maintenance Instructions

Series H/HW DN 15-100

ih15-100_e.doc Rel. 05.12.2003



Repair

Repair is required during preventive maintenance or when leaks are detected between cover 23 and rotor 6-10. We recommend annual inspection. Operate the ball of the vacuum valve every 4 weeks to preserve the function.

Warning: hot - danger of burning.

Dismantling the unit

- Unscrew screws 26 at cover 23. **ATTENTION: The internal parts are under spring tension.** To slowly reduce the tension, use two threaded rods.
- Lift off cover 23. All internal parts can now be removed from housing 1-4. **Caution:** carbon 24 bearing may be difficult to remove!
- Remove cover bearing 21 from cover 23.
- Version for rotating inner pipe: remove slide bearing 13 from housing 4.
- Version H3: unscrew vacuum valve 14 from housing.

Evaluating the parts

- The quality of the sealing surfaces of sealing ring 20/20a, rotor 6-10 and cover 23 is of particular importance. These parts are precision-turned. Therefore, always replace sealing ring 20/20a. Reuse rotor 6-10 and cover 23 only if turning of the sealing is still possible. Size DN 65 and greater: maximum turning at rotor is 1 mm. **ATTENTION!** If you detect scoring on the sealing surface of rotor 6-10 and cover 23, it is not sufficient to replace sealing ring 20/20a!
- Lap sealing ring 20/20a (rotor and cover 23 (fig. 2)), 2 mm wide. Use lapping paste (S). Then clean the parts with agent which does not leave any residue.
- Replace cover bearing 21, flat packing 22, carbon bearing bush 24.
- Version H3: check function of vacuum valve, replace, if necessary. Replace sealing ring 15 and O ring 29.

Reassembling the unit

- Version with rotating inner pipe: press slide bearing 13 into housing 4.

1 Housing 1	* 20a Sealing ring
2 Housing 2	* 21 Cover bearing
3 Housing 3	* 22 Flat packing
4 Housing R2	* 23 Complete cover
* 6 Rotor R	* 24 Carbon bearing bush
* 7 Rotor L	25 Pressure spring
* 8 Rotor K	26 Hex screw
* 13 Slide bearing	27 Locking pin
14 Vacuum valve	28 Locking ring
15 CU seal	29 O ring vacuum valve
* 20 Sealing ring	

* = wearing part

- Place pressure spring 25 into housing 1-4.
- Insert carbon bearing bush 24 and locking pin 27 into housing 1-4. The arrow must point towards the pressure spring. Observe position of the groove in the housing (attention: danger of damage).
- Insert rotor 6-10 into housing 1-4.
- Fit sealing ring 20/20a onto rotor 6-10.
- Fit cover 23 and flat packing 22 onto housing and carefully lock by means of screws 26 (apply even torque).
- Function check. apply axial load on the rotor to compress springs. If axial displacement of 2 - 3 mm is possible, the unit has been properly reassembled.
- Retighten screws 26 after a short operating period.
- Version H3: screw vacuum valve 14 with CU sealing ring 15 into housing 3. Always install rotary joint with the vacuum valve on top.

ATTENTION! Never oil or grease the sealing surfaces!

Spare parts

It is recommended to stock the wearing parts mentioned above. Always specify the part number and the complete type designation of the rotary joint as per type designation plate when ordering spare parts.

Please refer to our GENERAL MAINTENANCE INSTRUCTIONS "IA" for further details.

- We reserve the right to technical modifications -

Fig. 2: Lapping the sealing ring for H/HW and HWB

