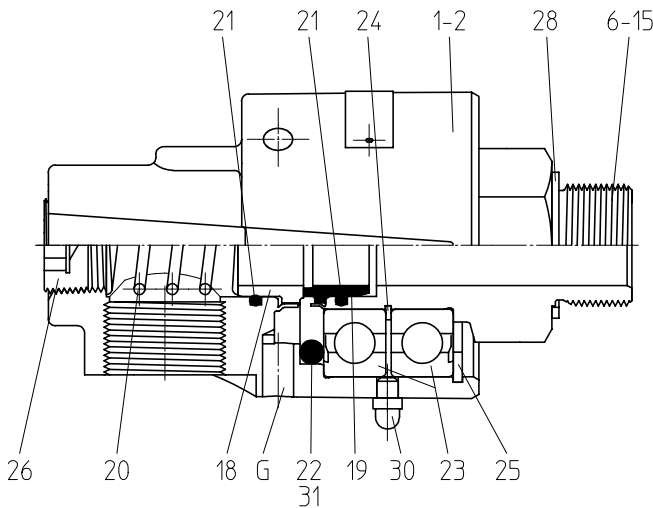


Maintenance Instructions

Series DP DN 10 - 50

IDP_E.DOC Rel. 15.09.99



1 Housing G	20 Pressure spring
2 Housing N	* 21 O ring
6 Rotor RG	22 O ring
7 Rotor LG	* 23 Ball bearing
8 Rotor RN	24 Locking ring
9 Rotor LN	25 Locking ring
14 Rotor K	26 Screw plug
15 Rotor K	* 28 CU seal
* 18E Mech. seal E	30 Lub. nipple
* 18C Mech. seal C	* 31 Shaft seal
* 19W Counter ring W	
* 19C Counter ring C	* = wearing part

Attention :

For **thermal oil**, you **MUST** use parts 18E, 19W. O rings 21 and shaft seal 31 must be made of Viton. Please specify when ordering. Order bearing 23 version for thermal oil.

Repair

Repair is required during preventive maintenance or when leaks are detected at housing holes (G).

Dismantling the unit

- Remove locking ring 25.
- Remove rotor 6-15 with deep groove ball bearings 23 from housing 1-2. If necessary, use disassembly bolt and puller for ball bearings.
- Remove counter ring 19 and O ring 21 from rotor.
- If bearings 23 are defective: extract left bearing 23 from rotor. Then remove locking ring 24 and extract second bearing 23.
- Depending on version, remove O ring 22 or shaft sealing ring 31 from housing.
- Remove rotating mechanical seal 18 from housing.
- Remove spring 20 from housing.
- Remove O ring 21 from housing.

Evaluating the parts

- The quality of the sealing surfaces of counter ring 19 and mechanical seal 18 is of particular importance. The surface are lapped. Therefore, these parts always need to be replaced.
- For safety reasons, replace O rings 21.
- Shaft sealing ring 31 or O ring 22 - if applicable - must be replaced.
- Replace or relubricate deep groove ball bearing 23.

Reassembling the unit

- **ATTENTION: All sealing parts must be dry when mounted. Never use grease or oil. Make sure hands and tools are free from grease and clean.**
- Mount deep groove ball bearing 23, locking ring 24, second deep groove ball bearing 23 to rotor 6-15.
- Mount O ring 21 and counter ring 19 in rotor. Make sure not to scratch the sealing surfaces. The counter ring has a bead that fits into the bead of the rotor.
- Mount O ring 21 in housing groove.
- Mount spring 20 in housing (make sure not to damage the O ring).
- Press down spring with bolt. Fixate this position with a screw driver (see fig. 1). Now mount the mechanical seal.

- Press mechanical seal 18 into the housing (manually). The two beads must engage in the housing. Tilting must not be possible.
- Place O ring 22 into the housing. Versions with shaft sealing ring 31: apply some ball bearing grease to the interior of the shaft sealing ring.
- Press rotor 6-15 with bearings and mechanical seal 19 into housing.
- Mount locking ring 25.
- Remove screw driver used to hold the spring in position. Check to make sure the spring is straight.

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. 1: Locking the spring by means of a screwdriver for mounting the counter ring.

