

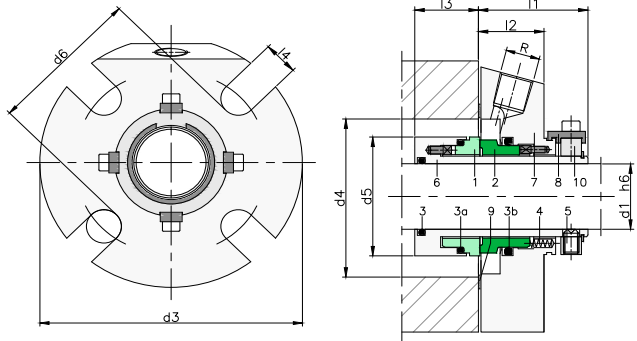
ASSEMBLY INSTRUCTIONS

SIMPLE CARTRIDGE

• Exploded cartridge:

Item	Description
1	Rotary face
2	Seat face
3	O-rings *
4	Springs *
5	Drive screws *
6	Sleeve
7	Bride
8	Setting clips *
9	Gasket
10	Fixation ring

* The quantity and sizes of that components is different depending on the model and size cartridge.



• General instructions:

- Revise the catalogue to check that the technical features of the cartridge are suitable for the required application.
- Revise if the stuffing box dimension is appropriate according to the minimum values required in the catalogue.

• Preparation: 1. Shaft:

Ensure that there are no sharp edges over which the sleeve o-ring must pass.

Surface finish	A	S	Shaft outside diameter tolerance h6
Surface in contact with the elastomer	1 µm		Shaft run out < 0.1 mm
Seat for the flat gasket	1.6 µm		
Shaft end float < 0.13 mm			Squareness < 0,002 mm per shaft mm

2. Housing:

Ensure that the cavity is clean and free of dirt.

• Installation instructions

The cartridge must be handle carefully. The assembly process is as follows:

1. Lubricate the shaft with soapy water to 3% of neutral soap. Lubricate also the screws and nuts of the pump.
2. Slide the cartridge onto the shaft into position. Fit the flat gasket into the stuffing box housing and ensure that it is in the correct position.
3. Tighten gland nuts down firmly.
4. Equally tighten the Drive Screws down onto the shaft. To be sure the screws are fixed correctly, maximum hardness of shaft has to be 230 HB.
5. Remove setting clips and retain them for future use.
6. Spin the shaft by hand and feel for any shaft binding, etc. If so, set the setting clips again, loosen the drive screws and the gland nuts. Start over from step 2. If the noise is still experienced, check the shaft run out.
7. Use the recirculation connection (flush) if it is possible. If not, place a threaded metal cap to close. The dimension of the connections are:
 - Type LSC211A Ø25mm to Ø70mm: 1/8 NPT (TAPON ALLEN 1/8 NPT)
 - Type LSC40 Ø25mm to Ø35mm: 1/4 NPT (TAPON ALLEN 1/4 NPT)
 - Ø38mm to Ø100mm: 3/8 NPT (TAPON ALLEN 3/8 NPT)

If the fluid is dirty, with particles is mandatory to connect fluid connection with external clean. The fluid must have a pressure 2 bar higher than that of the seal chamber.

8. Ensure that the pump is primed before starting.