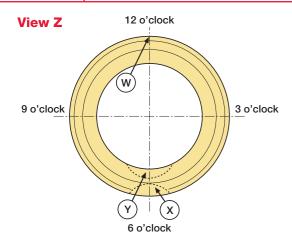


ØA	Е	D	F (min)	G (min)
0.750" - 5.875"	0.610"	0.305"	0.118"	0.270"
<u>6.000" - 12.000"</u>	1.000"	0.488"	0.275"	0.461"
16mm - 145mm	15.5mm	7.7mm	3.0mm	6.8mm
150mm - 305mm	25.4mm	12.4mm	6.9mm	11.7mm

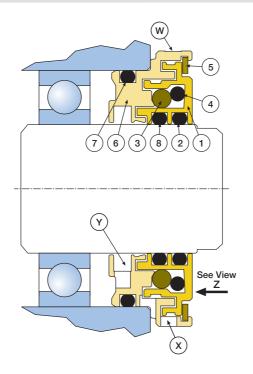




# REPAIR KIT INSTRUCTIONS



AESSEAL plc
Mill Close, Bradmarsh Business Park
Rotherham, S60 1BZ, ENGLAND
tel: +44 (0) 1709 369966
email: enquiries@aesseal.info



Step 1

Remove LabTecta®66 & endplate from equipment



Step 3

Replace Internal Components



Re-Install Face Shield



ITEM	DESCRIPTION	MATERIAL	
1	LabTecta®66 Rotary	Phosphor Bronze	
2	Outboard Rotor O-Ring	FKM	
3	Arknian™ Shut Off Device	Compound Elastomer	
4	Arknian™ Energizer	FKM	
_ 5	Face Shield	Composite Material	
6	Stator Housing	Phosphor Bronze	
7	Stator Housing O-Ring	FKM	
8	Inboard Rotor O-Ring	FKM	

ITEMS 1, 6 & 7 ARE NOT SUPPLIED AS PART OF THE REPAIR KIT.

NOTE: 2 O-RING REPAIR KITS ARE AVAILABLE WHICH

CONSIST ONLY OF ITEMS 3, 5 & 8.

The LabTecta®66 bearing isolator incorporates the latest labyrinth technology for containing oil and repelling water under SPLASHED conditions. It is NOT designed for use in either horizontal or vertical applications that are flooded with oil or other liquid.

# Step 2

## Remove Face Shield



Step 4

## Replace External Components



Step 6

# Re-Install End plate with LabTecta®66







Mechanical Seals are Machinery Elements for ATEX 2014/34/EU & IECEx equipment. Documentation available on request.

### **Pre-Installation Checks.**

- (i) Shaft Outside Diameter is within tolerance ± 0.002" (±0.05mm)
- (ii) Shaft run out < 0.010" (0.25mm) T.I.R.
- i) Shaft end float < 0.010" (0.25mm).
- (iv) Seal chamber face runout (shaft squareness relative to mounting face)  $<0.5 \ \mu m/mm \ (0.0005 \ in./in)$  of seal chamber bore diameter.
- (v) There are no sharp edges over which the seal 'O' Ring (2,8) and 'O' Ring (7) must pass. Break all sharp edges. Pay special attention to keyways, shaft steps and housing bore edges.
- (vi) Clean and degrease the shaft and housing bore.
- (vii) Lightly grease the shaft and shaft 'O' Ring (2,8) with the lubricant provided (P-80 lubricant ONLY)
- iii) Check that the o-ring (2,8) position sits on a unmarked area of the shaft.
- (ix) Ensure shaft & housing surface finish is better than 32μ" CLA (0.8μm Ra) at elastomer position 2 & 8.

#### Installation instructions.

The following installation instructions may vary, depending on the equipment configuration. Therefore use them as a guideline only.

- Ensure the equipment is fully shut down and that it is safe to carry out repairs on. (Refer to your site health and safety representative).
- Remove the end plate and the LabTecta®66 as one assembly. Note It
  is important to leave the LabTecta®66 stator (item 6) pressed inside the
  equipment housing at all times so as not to damage the interference fit.
- Use a small screwdriver or similar to remove the face shield. Take care so as not to damage the LabTecta®66 rotor or stator (items 1 & 6).
- Remove the rotor from the assembly (item 1), which should lift away from the rest of the assembly with very little force.
  - Replace the internal shut off valve O ring's (items 3 & 4). (Apply silicon grease to the o rings before placing back into the rotor's groove)
  - Replace the drive o ring's, items 2 & 8. Do not use any grease.
- Note 2 O ring repair kits only contain O ring item's 3 & 8.
- Replace rotary (item 1) back into the stator housing (item6).
   Replace face shield (item 5) component by hand. No tools required.
- Re-install the end plate with LabTecta®66. Check that the outboard expulsion ports are at the six o'clock position, see view 'Z'. Ensure the pre-installation checks are adhered to.
- 8. Assemble rest of equipment in final running position.
- Fill the bearing housing with an appropriate fluid, to the OEM/suppliers recommended fluid level.
- 10. Spin the shaft by hand. Listen and feel for any shaft binding, etc.

Use the provided lubricant (P-80 ONLY) to grease the shaft and shaft 'O' Rings (2,8)  $\,$ 

Do not hit the seal. The outer housing is a slight interference fit with the nominal housing bore. If in doubt, use a press to install the LabTecta®66 into the equipment housing plate.

The following installation guide is applicable to all types of rotating equipment however is specifically focused at PUMPS.

In AESSEAL  $\!\!\!^{\tiny{\textcircled{\tiny 0}}}$  experience, following this guideline will prolong your equipment life.

- LASER ALIGN SHAFT AND COUPLING
- USE SYNTHETIC BEARING LUBRICANT WHERE EVER POSSIBLE HOWEVER CHECK THE SEALED FLUID COMPATIBILITY FIRST!!!
- FIT A CARTRIDGE SEAL AND SYSTEM.
- ENSURE PUMP HYDRAULICS STABLE.
- REMOVE ANY PIPE STRAIN.



All metallic components are widely recyclable. Once the seal has reached the end of its life, it should be disposed of in accordance with local regulations and with due regard to the environment.