



Pre-Installation Checks.

- (i) Shaft Outside Diameter is within tolerance $\pm 0.002"$ ($\pm 0.05\text{mm}$).
- (ii) Housing bore is nominal size $\pm 0.001"$ ($\pm 0.025\text{mm}$).
- (iii) Shaft run out $< 0.010"$ (0.25mm) T.I.R.
- (iv) Shaft end float $< 0.010"$ (0.25mm).
- (v) There are no sharp edges over which the seal 'O' Ring (2) and 'O' Ring (6) 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) with the lubricant provided (P-80 lubricant ONLY).
- (viii) Check that the o-ring (2) position sits on an unmarked area of the shaft.
- (ix) Ensure shaft surface finish is better than $32\mu"$ CLA (0.8 μm Ra) at elastomer position 2 & 6.
- (x) For Oil Mist applications ensure the Oil Mist system supplies Oil Mist into the bearing chamber / MagTecta OM™ for at least 24 hours (soaking period) prior to equipment start up.
- (xi) For high velocity Oil Mist applications (greater than 7m/s (1378ft/min)) ensure rotating elements within the bearing are pre-lubricated with a compatible oil before equipment start up.

Installation instructions.

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

1. Ascertain which orientation the MagTecta OM™ is to be installed in. If it is to be installed in the normal (standard radial cross section) orientation follow point 2 until the shoulder on the outer body (item 5) is contacting the face of the bearing housing plate, as shown in figure 1. If the MagTecta OM™ is to be installed in reverse (larger radial cross section) orientation it must be installed within the dimensional envelope shown in figure 2. For sizes above 4.000" (100mm) ensure expulsion port is at the 6 o'clock position as shown in figure 3.
2. Press the MagTecta OM™ seal into the bearing housing plate. This plate is typically separate to the bearing housing. Note: Use a hydraulic press if available. The force from the press should be concentric to the plate bore. Avoid using grease on the housing.
3. Slide the seal and housing plate assembly into the running position, on the shaft.
4. Secure the housing plate onto the bearing chamber.
5. Assemble rest of equipment in final running position.
6. 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' Ring.

MagTecta OM™ seals are a one piece cartridge design. Do not dis-assemble the unit as this will void any product warranty.

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 MagTecta OM™ into the pump housing plate.

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

In AESSEAL® 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.

ØA	E	D	F (min)
0.750" - 4.000"	0.610"	0.315"	0.040"
16mm - 100mm	15.5mm	8.0mm	1.0mm

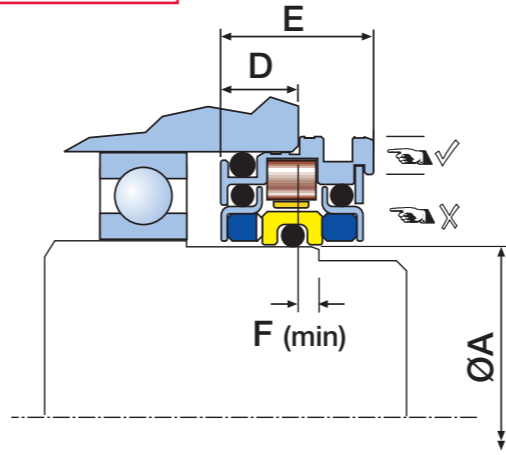


Figure 1

Normal orientation TXN/LXN.

ITEM 9 MUST REMAIN OUTBOARD AT ALL TIMES.

ØA	E	G (min)	H (min)
0.750" - 4.000"	0.610"	0.150"	0.265"
16mm - 100 mm	15.5mm	4.0mm	7.0mm

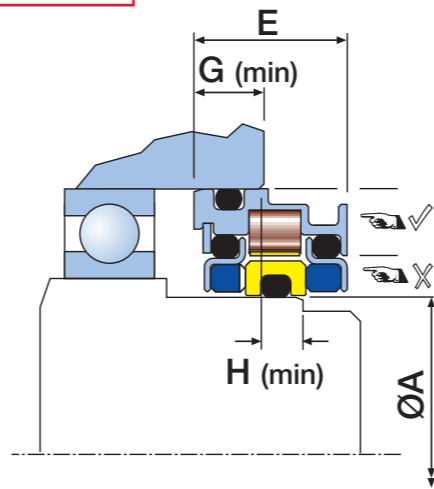


Figure 2

Reverse orientation TXR/LXR.

ØA	D	E
4.062" - 5.875"	0.570"	0.050"
105mm - 145mm	14.5mm	1.3mm

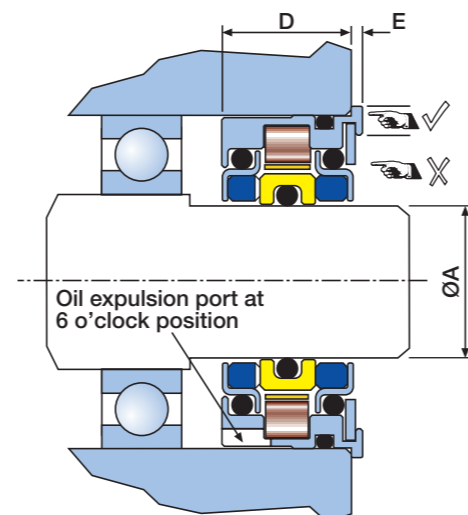
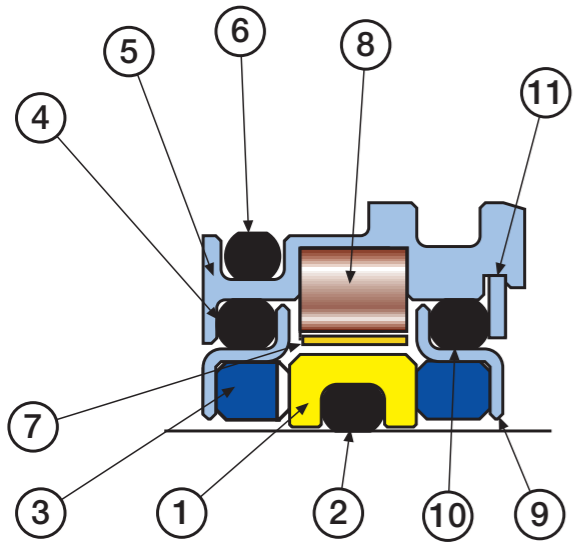


Figure 3



ITEM	DESCRIPTION	MATERIAL
1	Rotary Seal Face	Tungsten Carbide
2	Rotary Elastomer	Viton®
3	Stationary Seal Face Assy	416 Stainless Steel / Antimony Carbon
4	Stationary Elastomer	Viton®
5	Outer Body	Stainless Steel
6	Outer Body Elastomer	Viton®
7	Shroud	Phosphor Bronze
8	Magnet	Metal
9	Stationary Seal Face Assy	416 Stainless Steel / Antimony Carbon
10	Stationary Elastomer	Viton®
11	Circlip	Stainless Steel



MagTecta-OM™

Oil Mist & Marginal Lubrication Applications

INSTALLATION INSTRUCTIONS

AESSEAL plc
 Mill Close, Bradmarsh Business Park
 Rotherham S60 1BZ
 ENGLAND
 email info@aes seal.co.uk
 tel +44 (0) 1709 369966
 fax +44 (0) 1709 720788
www.aes seal.com

