



Ex 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 (h7).
- (ii) Housing Inside Diameter is within tolerance (H8).
- (iii) Shaft run out < 0.004" (0.1mm) T.I.R.
- (iv) Seal chamber face runout (shaft squareness relative to mounting face) < 0.5 µm/mm (0.0005 in./in) of seal chamber bore diameter.
- (v) Shaft end float < 0.005" (0.13mm).
- (vi) There are no sharp edges over which the seal 'O' Ring (Item 2) must pass.

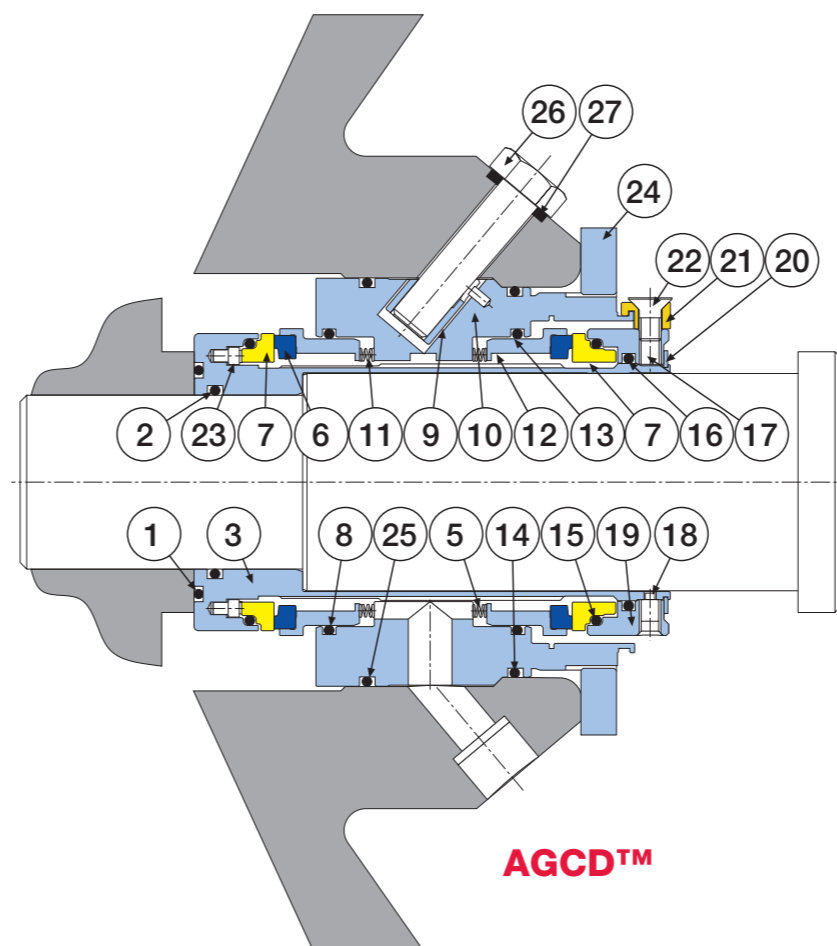
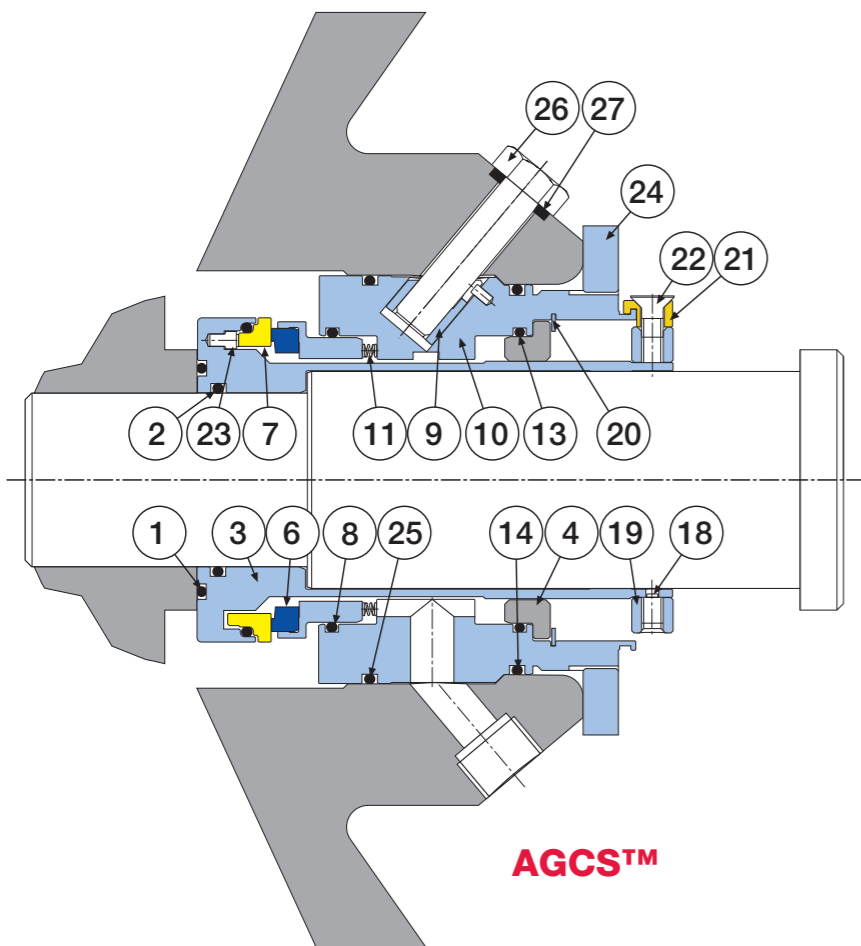
Installation instructions.

- 1) Before fitting it is essential that the pump volute casing and impeller have been removed.
- 2) The existing seal should also be slid off the shaft from the impeller side, having first removed the inclined securing bolt.
- 3) Lubricate the shaft with the grease provided.
- 4) Slide the seal onto the shaft, care should be taken to align the 'free moving / self centring' thread (Item 9) with the inclined location orifice in the casing. The C nut (Item 24) can now be used to draw up the gland so that the locator bolt can be fitted.
- 5) Fit the threaded 'locator' bolt and sealing ring (Item 26-27).
- 6) Lubricate the impeller O Ring (Item 1) with the grease provided.
- 7) Refit the impeller and fully tighten.
- 8) Assemble rest of equipment in final running position.
- 9) Remove setting clips (Item 21).
- 10) Spin the shaft by hand. Listen and feel for any shaft binding.
- 11) Connect the Quench and Drain connections if required.
- 12) Ensure the pump is primed and barrier fluid is present prior to start up.
- 13) Retain clips and clip screws for future use.

In the absence of original equipment/fluid manufacturers instructions, ensure that the selected barrier/buffer fluid has an auto-ignition temperature at least 50°C (90°F) ABOVE the maximum surface temperature of any component with which it may come into contact, both in normal operation and in the event of leakage from the seal or barrier system.

Note: under certain conditions the auto-ignition temperature of a fluid can be reduced, for example if an oil is allowed to soak into damaged or unprotected insulation. If any potential sources of ignition are present in an area, it is advisable to select a barrier fluid which has a flash point higher than the maximum surface temperature of any component with which it may come into contact.

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.



BARRIER PRESSURE

1 bar g above Product Pressure For any other Operating Parameters contact the Technical Department

Item	Description	Material
1	O Ring	FKM / EPR / TFE/P
2	O Ring	FKM / EPR / TFE/P
3	Sleeve	316L SS
4	Restriction Bush	Carbon
5	Spring	Alloy 276
6	Inboard Stationary Face	316L SS / SiC / TC
7	Rotary Face	Sintered SiC / TC
8	O Ring	FKM / EPR / TFE/P
9	Free Moving / Self Centering Thread	316L SS
10	Gland	316L SS
11	Spring	Alloy 276
12	Outboard Stationary Face	316L SS / SiC / TC
13	O Ring	FKM / EPR / TFE/P
14	O Ring	FKM / EPR / TFE/P
15	O Ring	FKM / EPR / TFE/P
16	O Ring	FKM / EPR / TFE/P
17	Socket Grub Screw	316 SS
18	Anti-Tamper Screw	316 SS
19	Clamp Ring	316L SS
20	Circlip	Stainless Steel
21	Setting Clip	Phospher Bronze
22	Socket Head CSK Screw	316 SS
23	Internal Drive Pin	316L SS
24	C Nut	316L SS
25	O Ring	FKM / EPR / TFE/P

Parts Not Supplied by AESSEAL®.

26	Locator Bolt
27	Sealing Ring



INSTALLATION INSTRUCTIONS

Ex h Gb/Db



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