



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

Original Instructions.

- (i) For further dimensional information, please contact your AES local representative.
- (ii) Use machined washers at least 3mm thick between the seal gland nuts and the seal gland.
- (iii) It is a good practice wherever possible to install the seal with the inlet port at 6 o'clock position, and the outlet port at 12 o'clock position.

Pre-Installation Checks.

- (i) Shaft Outside Diameter is within tolerance $\pm 0.002"$ ($\pm 0.05\text{mm}$).
- (ii) Shaft run out $< 0.004"$ (0.1mm) T.I.R.
- (iii) Shaft end float $< 0.005"$ (0.13mm).
- (iv) Fluid seal can be obtained on the Stuffing Box face.
- (v) There are no sharp edges over which the seal 'O' Ring (3) must pass.

Installation instructions.

1. Lubricate the shaft with the grease provided.
2. Slide the seal onto the shaft.
3. Assemble rest of equipment in final running position.
4. Slide seal into position. Fit washers in all cases and tighten Gland Nuts down firmly.
5. Equally tighten the Drive Screws down onto the shaft.
6. Remove setting clips.
7. Spin the shaft by hand. Listen and feel for any shaft binding, etc.
8. Connect the Quench & Drain (1/4" NPT)
9. Ensure Barrier fluid is present before start up.
10. Retain clips and clip screws for future use.

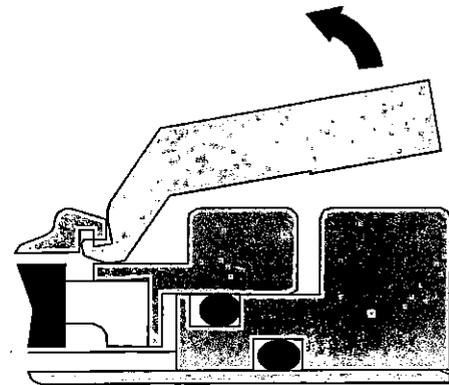
NOTE: Ensure that the seal is firmly bolted to the Stuffing Box, with the shaft already in position, before removing the centering clips.

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.



Seal Size	I	J
24mm - 35mm	32.5mm	52.4mm
38mm - 50mm	33.3mm	54.0mm
53mm - 60mm	35.0mm	54.0mm
63mm - 125mm	38.1mm	60.3mm
1.000" - 1.375"	1.281"	2.062"
1.500" - 1.875"	1.312"	2.125"
2.000" - 2.375"	1.380"	2.125"
2.500" - 5.000"	1.500"	2.375"



CDSA™

Cartridge Mechanical Seal

INSTALLATION INSTRUCTIONS



II 2 G D

Ex h Gb/Db



EXPERIENCE THE EXCEPTIONAL

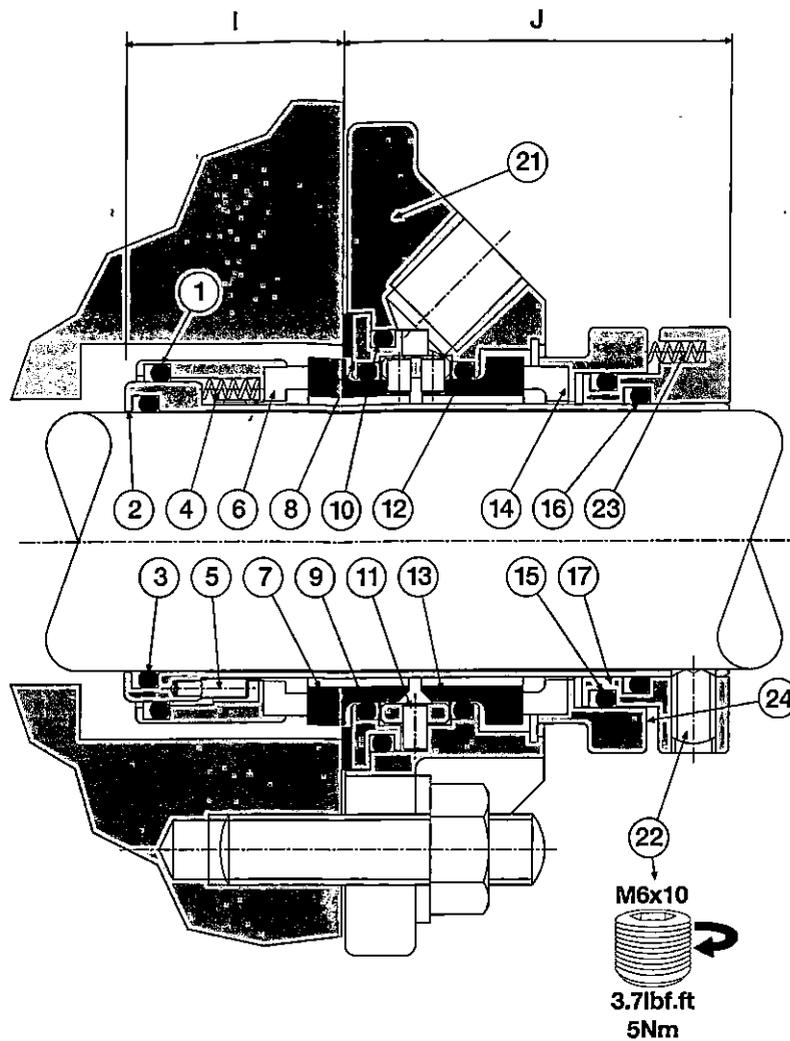
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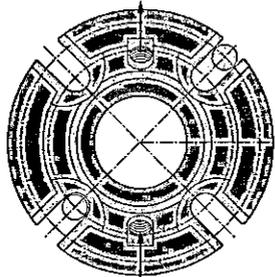
fax +44 (0) 1709 720788

www.aes seal.com



How To Identify Ports

OUTLET / DRAIN - 12 O'Clock



INLET / QUENCH - 6 O'Clock

BARRIER PRESSURE

1 bar g above Product Pressure (17 Barg MAX)

Item	Description	Material
1	Rotary O Ring	Viton® / EPR / Kalrez® / Atlas®
2	Sleeve	316L Stainless Steel
3	Sleeve O Ring	Viton® / EPR / Kalrez® / Atlas®
4	Springs	Alloy 276
5	Rotating Drive Pins	Stainless Steel
6	Rotary Face	316L SS - Carbon / TC / SiC
7	Internal Stationary Face	SiC / Ceramic / TC / 316L SS-CrOx
8	Gland Insert	316L Stainless Steel
9	Internal Stat O Ring	Viton® / EPR / Kalrez® / Atlas®
10	Insert O Ring	Viton® / EPR / Kalrez® / Atlas®
11	Pivot Ring	316L Stainless Steel
12	External Stat O Ring	Viton® / EPR / Kalrez® / Atlas®
13	External Stationary Face	SiC / Ceramic / TC / 316L SS-CrOx
14	Rotating Face	316L SS - Carbon / TC / SiC
15	External Rotary O Ring	Viton® / EPR / Kalrez® / Atlas®
16	Clamp Ring O Ring	Viton® / EPR / Kalrez® / Atlas®
17	Clamp Ring	316L Stainless Steel
18	Anti-Tamper Screws	Stainless Steel
19	Centering Clips	Phosphor Bronze
20	Clip Screws	Stainless Steel
21	Gland	316 Stainless Steel
22	Drive Screws	Stainless Steel
23	Springs	Alloy 276
24	Rotary Drive Pins (not shown)	Stainless Steel

Item 5 is an integral part of Item 11
Item 24 is an integral part of Item 11



MECHANICAL SEAL REPAIR FORM

AESSEAL Inc.
355 Dunavant Dr.
Rockford, TN 37853
Off: 865-531-0192
www.aesseal.com

Customer Account #		DATE	
Customer Name		AES Part #	
Customer P.O. #		Customer Part #	
Delivery Address		Date Required	
Customer Contact		Repair Price Each	
Customer Email		Quote Required?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Customer Tel #		Quote Reference #	
ORDER TYPE:	<input type="checkbox"/> Standard <input type="checkbox"/> Consignment <input type="checkbox"/> FOC		
<input type="checkbox"/> HOLD SEAL FOR WARRANTY or FAILURE ANALYSIS WARRANTY or FAILURE ANALYSIS REQUIRE - form SEAL EXAMINATION INFORMATION SHEET found at: https://www.aesseal.com/en/resources/important-forms , select SEAL RETURN FORM			
Comments/Special Instructions/ETCH Instructions			
Seal Duty/Product & Concentration			
Print Form and put in box with Seal		Ship to:	
Ship <u>Ground</u> to AESSEAL using UPS Number		AESSEAL Inc 355 Dunavant Dr Rockford, TN 37853 Attn: REPAIR DEPT	
			
I confirm that this seal (check ONE ONLY as appropriate)			
<input type="checkbox"/> Has not been in contact with any hazardous substance and is safe to handle, strip & examine.			
<input type="checkbox"/> Has been <u>fully</u> decontaminated <u>inside and out</u> and is safe to handle, strip, & examine.			
<input type="checkbox"/> Needs decontamination and AESSEAL hot alkali detergent wash procedure is suitable.			
<input type="checkbox"/> Decontaminate using the following special instructions:			
Signature		Date	
Print Name		Position	
AESSEAL will hold any seal for repair on quarantine for a maximum of 3 months. In the event that there has been no instruction to either return or repair the seal within that period of time AESSEAL reserves the right to dispose of the seal in the appropriate manner.			
<u>I confirm agreement to Title in the goods passing to AESSEAL 3 months from receipt to allow for appropriate disposal should no written instruction have been received.</u>			
Customer Signature:			

For the health and safety those who come in contact with the seal, all repair seals must be shipped inside the provided **yellow bag** and be accompanied by the complete and signed **Seal Repair Form** inside the box.

When possible, include product SDS with the seal shipped for repair.