

Standard ISO / ANSI Box Bore

Seal Size	D	F	G
24.0mm - 35.0mm	19.1mm	53.1mm	38.9mm
40.0mm - 70.0mm	19.1mm	53.1mm	40.1mm
1.000" - 1.500"	0.750"	2.091"	1.531"
1.625" - 2.750"	0.750"	2.091"	1.580"

Medium Box Bore

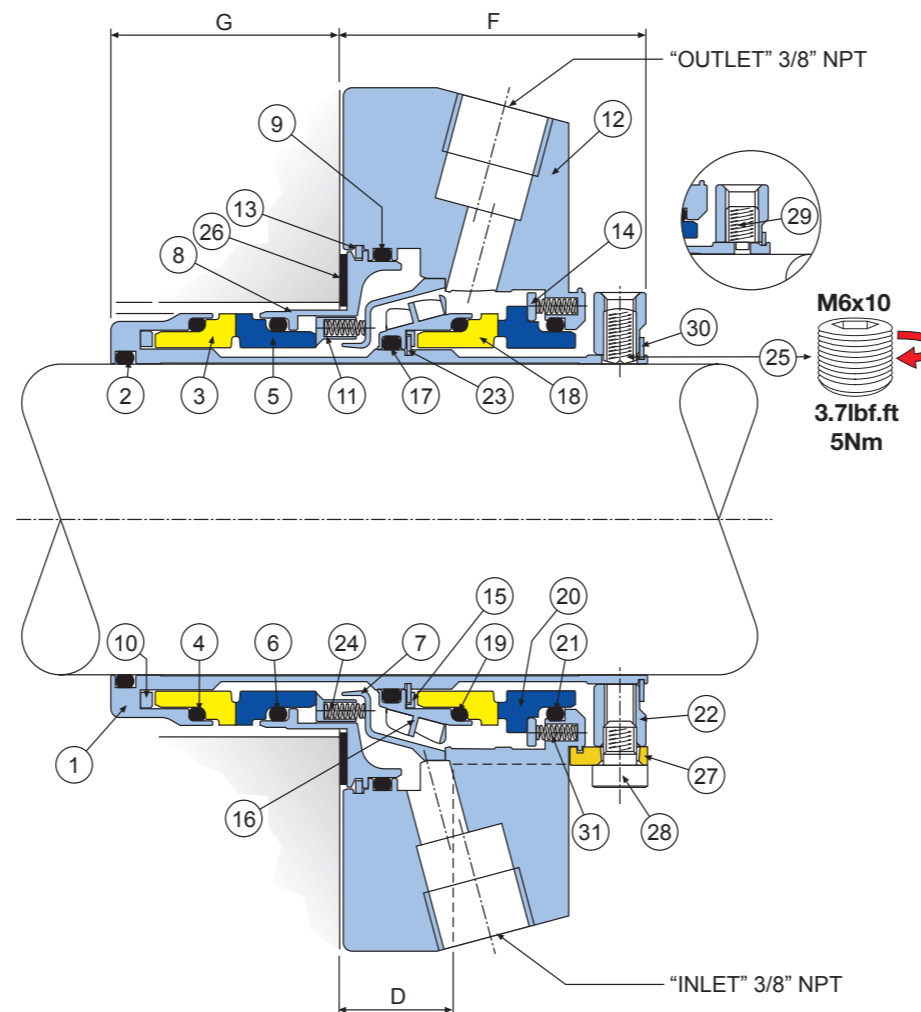
35.0-M	20.6mm	53.1mm	38.9mm
1.125-M	0.760"	2.091"	1.531"
1.375-M	0.702"	2.091"	1.531"
1.750-M - 1.875-M	0.710"	2.091"	1.580"
2.125-M	0.760"	2.091"	1.580"
2.500-M - 2.625-M	0.800"	2.125"	1.546"

Large ISO / ANSI Plus Box Bore

35.0mm	18.0mm	50.8mm	41.2mm
1.125"	0.669"	2.000"	1.662"
1.375"	0.611"	2.000"	1.622"
1.750" - 1.875"	0.619"	2.000"	1.671"
2.125"	0.669"	2.000"	1.671"
2.500" - 2.625"	0.760"	2.091"	1.580"

MAX BARRIER PRESSURE = 25 bar g (363 psi g) (Normally 1 bar g above Product Pressure, unless nature of process dictates otherwise)

Max. Sperrflüssigkeitsdruck = 25 bar g (363 psi g), normalerweise 1 bar g (15psi g) über dem Produktdruck im Dichtraum.



Original Instructions

- ⚠ Mechanical Seals are Machinery Elements for ATEX 2014/34/EU & IECEx equipment. Documentation available on request.
- (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 $\pm 0.002"$ (± 0.05 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 (2) must pass.

Installation instructions.

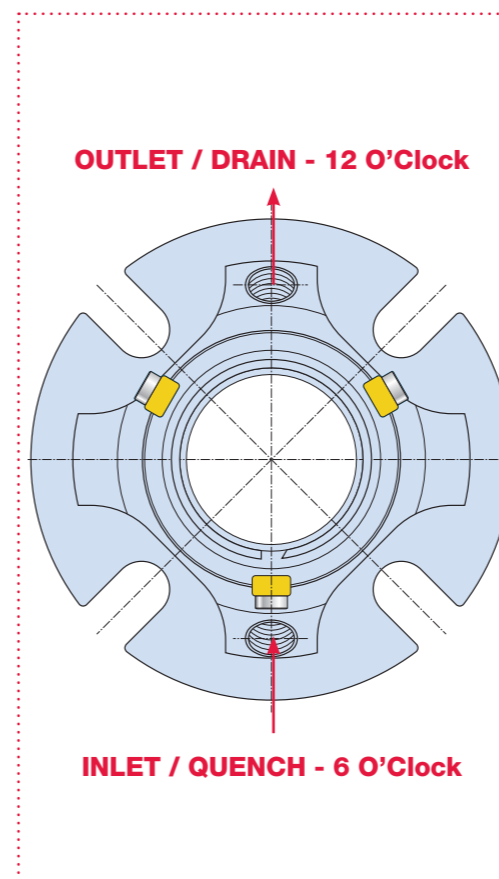
1. Lubricate the shaft with the grease provided.
2. Slide the seal onto the shaft.
3. Ensure the "Barrier in" port is the lowest connection (at the bottom), and the "Barrier out" port is the highest connection (at the top)
4. Assemble rest of equipment in final running position.
5. Slide seal into position. Fit washers in all cases and tighten Gland Nuts down firmly.
6. Equally tighten the Drive Screws down onto the shaft.
7. Remove setting clips.
8. Spin the shaft by hand. Listen and feel for any shaft binding, etc.
9. Connect the Quench to the bottom (inboard) connection (3/8" NPT). Connect the Drain to the top (outboard) connection (3/8" NPT). Ensure Barrier fluid is present before start up and set to a minimum of 2 bar g (30 psi g), (normally 1 barg above product pressure), unless nature of process dictates otherwise.
11. 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.

Item	Description	Material
1	Sleeve	316L SS
2	Sleeve O Ring	Viton® / EPR / Kalrez® / Aflas®
3	Internal Rotary Face	Carbon / SiC / TC
4	Internal Rotary Face O Ring	Viton® / EPR / Kalrez® / Aflas®
5	Internal Stationary Face	Carbon / SiC / TC
6	Internal Stationary Face O Ring	Viton® / EPR / Kalrez® / Aflas®
7	Deflector	316L SS
8	Gland Insert	316L SS
9	Gland Insert O Ring	Viton® / EPR / Kalrez® / Aflas®
10	Internal Drive Ring/Pin	Stainless Steel
11	Internal Spring Plate	316L SS
12	Gland	316 SS
13	Gland Insert Snap Ring	Stainless Steel
14	External Drive Ring/Spring Plate	316L SS
15	External Drive Ring/Pin	Stainless Steel
16	External Rotary Holder	316L SS
17	External Rotary Holder O Ring	Viton® / EPR / Kalrez® / Aflas®
18	External Rotary Face	Carbon / SiC / TC
19	External Rotary Face O Ring	Viton® / EPR / Kalrez® / Aflas®
20	External Stationary Face	Carbon / SiC / TC
21	External Stationary Face O Ring	Viton® / EPR / Kalrez® / Aflas®
22	Clamp Ring	316L SS
23	Circlip	Stainless Steel
24	Springs	Alloy 276
25	Drive Screws	Stainless Steel
26	Gasket	AF1 / GFT
27	Setting Clips	Phosphor Bronze
28	Setting Clip Screws	Stainless Steel
29	Anti-tamper Screws	Stainless Steel
30	Circlip	Stainless Steel
31	Springs	Alloy 276



DMSF™

Cartridge Mechanical Seal

INSTALLATION INSTRUCTIONS

Ex II 2 G D Ex h Gb/Db

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