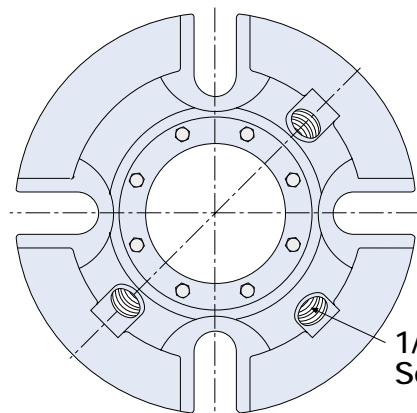
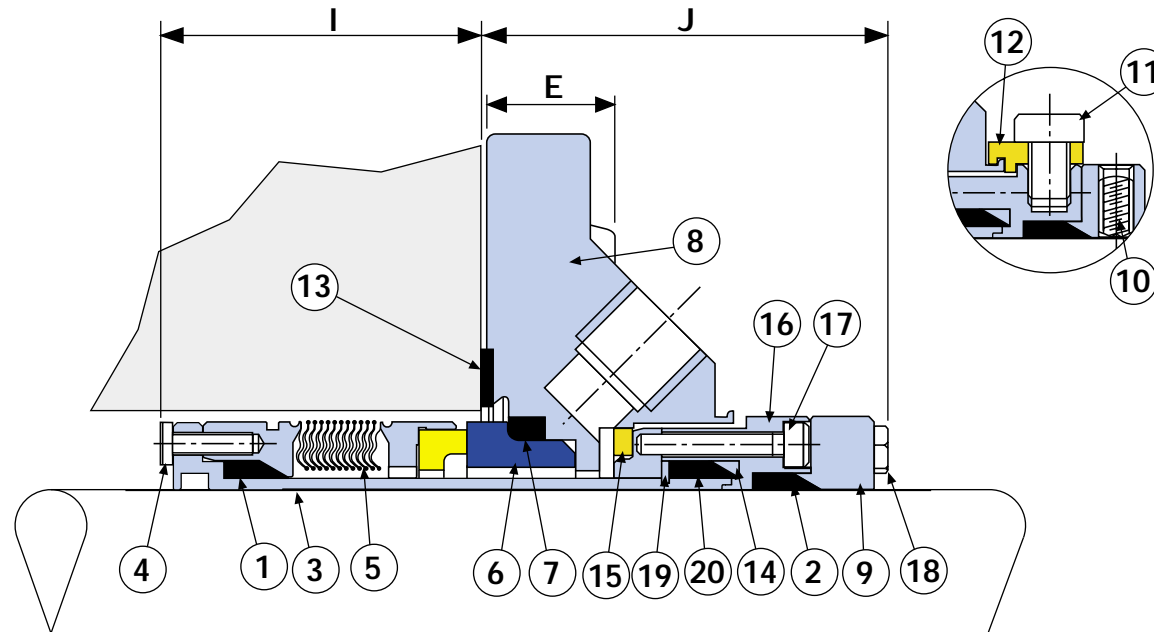


Standard gland format dimensional information

| Seal Size | I | J | E |
|-----------------------------------|--------------------|--------------------|--------------------|
| 1.000" - 1.375" (24mm - 35mm) | 1.500" (38.1mm) | 2.062" (52.3mm) | 0.519" (13.2mm) |
| 1.500" - 1.875" (38mm - 50mm) | 1.625" (41.3mm) | 2.062" (52.3mm) | 0.644" (16.4mm) |
| 2.000" - 2.375" (53mm - 60mm) | 1.750" (44.5mm) | 2.062" (52.3mm) | 0.644" (16.4mm) |
| 2.500" - 2.875" (63mm - 68mm) | 1.937" (49.2mm) | 2.437" (62.0mm) | 0.769" (19.6mm) |
| 3.000" - 4.000" (70mm - 100mm) | 2.000" (50.8mm) | 2.437" (62.0mm) | 0.769" (19.6mm) |

ANSI+ gland format dimensional information

| Seal Size | I | J | E |
|-----------------|--------|--------|--------|
| 1.125" - 1.375" | 1.500" | 2.062" | 1.000" |
| 1.750" - 1.875" | 1.625" | 2.062" | 0.644" |
| 2.125" | 1.750" | 2.062" | 0.644" |
| 2.500" - 2.750" | 1.937" | 2.437" | 0.644" |



1/4" NPT Flush
See Note 1.

NOTE 1

- When Flush is used, position the Flush Port to the top (12 O'Clock)
- When using steam Quench to Drain, the Quench connection should be positioned at the top (12 O'Clock), and the Drain connection at the bottom (6 O'Clock).

| ITEM | DESCRIPTION | MATERIAL |
|------|-------------------------|---|
| 1 | Rotary Sealing Wedge | Graphite |
| 2 | Shaft Sealing Wedge | Graphite |
| 3 | Sleeve | 316L Stainless Steel |
| 4 | Rotary Drive Screws | Stainless Steel / Alloy 276 |
| 5 | Rotary Bellows Assembly | 316L SS / AM 350 / C42 / Ant. Carbon - SiC Alloy 276 / Alloy 276 / Alloy 276 / Ant. Carbon - SiC |
| 6 | Stationary Face | SiC / TC |
| 7 | Stationary Seal Ring | Graphite / Kalrez® |
| 8 | Gland | 316 Stainless Steel |
| 9 | Clamp Ring | 316L Stainless Steel |
| 10 | Seal Drive Screws | Stainless Steel |
| 11 | Setting Clip Screws | Stainless Steel |
| 12 | Setting Clips | Metal |
| 13 | Gasket | AF1 / GFT |
| 14 | Washer | 316L Stainless Steel |
| 15 | Draw Ring | 316L Stainless Steel / Phosphor Bronze |
| 16 | External Drive Ring | 316L Stainless Steel |
| 17 | Outboard Drive Screws | Stainless Steel |
| 18 | External Drive Screws | Stainless Steel |
| 19 | Circlip | Stainless Steel |
| 20 | Rotary Sealing Wedge | Graphite |

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Kalrez® is a Registered Trademark of DuPont Dow Elastomers.

GB

Pre-Installation Checks.

- Shaft Outside Diameter is within tolerance $\pm 0.002''$ ($\pm 0.05\text{mm}$)
- Shaft run out $< 0.004''$ (0.1mm) T.I.R.
- Shaft end float $< 0.005''$ (0.13mm).
- Fluid seal can be obtained on the Stuffing Box face.
- There are no sharp edges over which the Sleeve Wedge (2) must pass.

Installation instructions.

- Lubricate the shaft with the grease provided.
- Slide the seal onto the shaft - SEE NOTE 1.
- IN CASE OF DAMAGE TO THE GRAPHITE SLEEVE WEDGE DURING INSTALLATION:**
If the graphite Sleeve wedge (2) is damaged on installation there is a spare one in the seal box. Remove the clamp ring (9) and the damaged wedge (2). Slide the clamp ring (9) onto the pump shaft and then carefully slide the new wedge (2) onto the pump shaft in the correct orientation. Slide the remainder of the seal onto the shaft and loosely reattach the clamp ring (9) to the external drive ring (16) using screws (18). **IMPORTANT - DO NOT FULLY TIGHTEN SCREWS (18).**
- Assemble rest of equipment in final running position.
- Slide seal into position on the pump. Fit washers in all cases and tighten Gland Nuts down firmly.
- Secure Clamp Ring (9), and Sleeve wedge (2) using External Drive Screws (18) to the rest of the seal assembly. Fully compress the Sleeve Wedge (2), ensuring metal to metal contact is achieved between the External Drive Ring (16) and the Clamp Ring (9).
- Equally tighten the Seal Drive Screws (10) down onto the shaft.
- Remove setting clip screws and setting clips (11 and 12).
- Spin the shaft by hand. Listen and feel for any shaft binding, etc.
- Connect the flush, quench and drain connections. If flush connection is not required, please ensure that it is properly sealed with a 1/4" NPT plug.
- Ensure the pump is primed and fully vented prior to start up, the Flush connection can be used for venting if required.
- Retain clips and clip screws for future use.

DECLARATION OF INCORPORATION

This Mechanical seal must not be put into service until the relevant machinery into which it is incorporated has been declared to be in conformity with the provisions of the Machinery Directive.

C.J. Rea
Managing Director,
AESSEAL plc

BSFG™

CARTRIDGE MECHANICAL SEAL

INSTALLATION INSTRUCTIONS



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