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”

BSFG™

CARTRIDGE MECHANICAL SEAL

INSTALLATION INSTRUCTIONS

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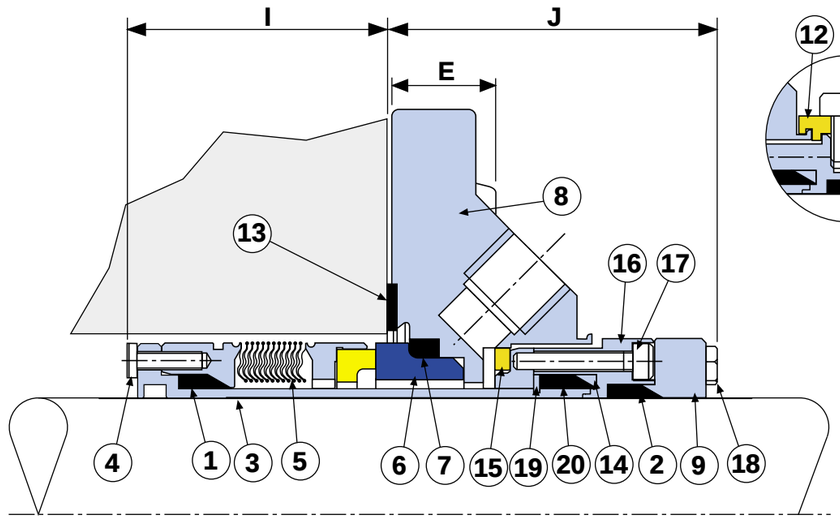
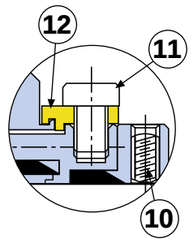
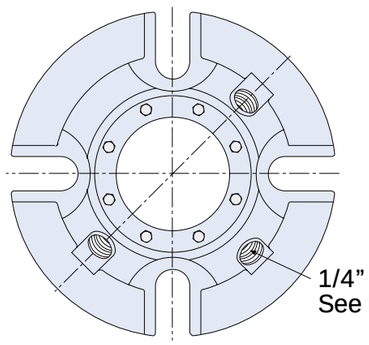
ENVIRONMENTAL TECHNOLOGY







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

GB

Pre-Installation Checks.

(i) Shaft Outside Diameter is within tolerance ± 0.002” (±0.05mm)
(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 Sleeve Wedge (2) must pass.

Installation instructions.

1. Lubricate the shaft with the grease provided.
2. Slide the seal onto the shaft - SEE NOTE 1.
3. 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).
4. Assemble rest of equipment in final running position.
5. Slide seal into position on the pump. Fit washers in all cases and tighten Gland Nuts down firmly.
6. 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).
7. Equally tighten the Seal Drive Screws (10) down onto the shaft.
8. Remove setting clip screws and setting clips (11 and 12).
9. Spin the shaft by hand. Listen and feel for any shaft binding, etc.
10. 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.
11. Ensure the pump is primed and fully vented prior to start up, the Flush connection can be used for venting if required.
12. 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