



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 $\pm 0.002"$ ($\pm 0.05\text{mm}$)
- (ii) Shaft run out $< 0.004"$ (0.1mm) T.I.R.
- (iii) Shaft end float $< 0.005"$ (0.13mm).
- (iv) Seal chamber face runout (shaft squareness relative to mounting face) $< 0.5 \mu\text{m/mm}$ (0.0005 in./in) of seal chamber bore diameter.
- v) Fluid seal can be obtained on the Stuffing Box face.
- (vi) There are no sharp edges over which the seal Graphite (2) must pass.

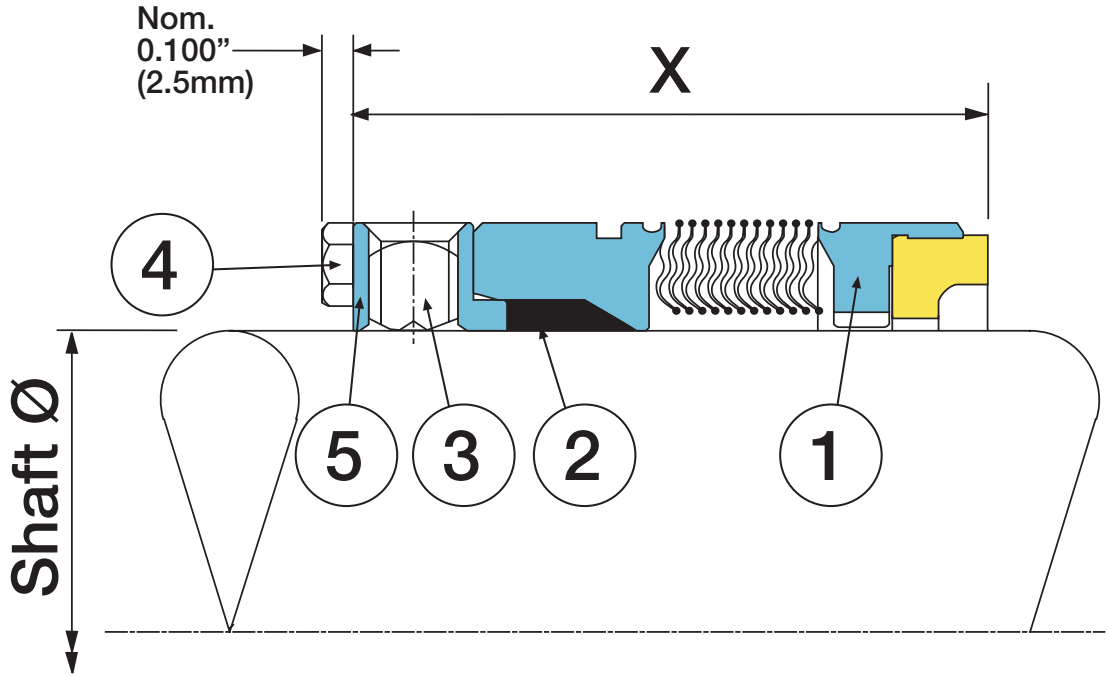
NOTE: During installation protect the seal faces at all times. Do not touch, lubricate or allow dirt on the seal faces.

Installation instructions.

1. Mark shaft directly underneath lapped stationary face.
2. Obtain access within the Stuffing Box to allow the seal to be clamped to the shaft.
3. Measure seal working length from the first mark on the shaft to where the back of the seal is to be situated and mark the shaft again.
4. Lubricate the shaft with the grease provided.
5. NOTE: Overall seal assembly length = working length (x) + stationary protrusion inside the Stuffing Box.
6. Remove clamp ring (5) from rotary (1) and fit graphite ring (2) into cavity. Reassemble the clamp ring (5) onto the rotary (1) **DO NOT TIGHTEN ROTARY DRIVE SCREWS (4). The rotary drive screws (4) should be loosely fitted.**
7. Align back of seal with second mark on the shaft and secure drive screws (3).
8. Secure rotary drive screws (4) thereby compressing graphite (2) .
9. Assemble Stuffing Box housing on to equipment (avoid damage to seal).
10. Remove protective coating from seal faces.
11. Offer stationary and gland follower to the Stuffing Box.
12. Use shims to centre the stationary to the shaft by placing them between the stationary and the shaft in three equi-spaced positions.
13. Tighten the gland follower down evenly.
14. Spin the shaft by hand. Listen and feel for any shaft binding, etc.
15. Ensure the pump is primed prior to start up.



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.



Imperial Seal Size	X
1.125" - 1.375"	1.500"
1.500" - 2.500"	1.688"
2.625" - 2.875"	1.875"
3.000" - 4.000"	2.000"

Metric Seal Size	X
24mm - 35mm	38.1mm
38mm - 63mm	42.9mm
65mm - 70mm	47.6mm
75mm - 100mm	50.8mm

Item	Description	Material-SHS Bellows Materials
1	Rotary Bellows Assembly	316L SS - Alloy 276 - 316L SS - Car. / Ant. Car. / TC / SiC
2	Graphite Packing	Graphite
3	Drive Screws	Stainless Steel
4	Rotary Drive Screws	Stainless Steel
5	Clamp Ring	316L Stainless Steel

Item	Description	Material-SAC Bellows Materials
1	Rotary Bellows Assembly	316L SS - AM 350 - C42 - Car. / Ant. Car. / TC / SiC
2	Graphite Packing	Graphite
3	Drive Screws	Stainless Steel
4	Rotary Drive Screws	Stainless Steel
5	Clamp Ring	316L Stainless Steel

Item	Description	Material-HHH Bellows Materials
1	Rotary Bellows Assembly	Alloy 276 - Alloy 276 - Alloy 276 - Car. / Ant. Car. / TC / SiC
2	Graphite Packing	Graphite
3	Drive Screws	Alloy 276
4	Rotary Drive Screws	Alloy 276
5	Clamp Ring	Alloy 276



INSTALLATION INSTRUCTIONS

II 2 G D Ex h Gb/Db

ENVIRONMENTAL TECHNOLOGY

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