

RO

Single, unbalanced, multi-spring pusher seal for general purpose applications

A simple, proven and dependable design features an open, rotating compression unit that imparts a turbulent flow of the process fluid which helps keep solids away from the seal faces and removes seal generated heat. The flexibly mounted insert compensates for misalignment to ensure seal face contact. Off-the-shelf availability in standard configurations for most chemical pumps.



Features and Benefits

- **Rotating Seal Ring**

Self centers around the shaft independent of compression unit. Designed to withstand the harsh physical demands of cyclic operation or continuous duty. Multiple springs and drive pins evenly distribute the load. Available in a wide range of materials; in fact, this part can be built to stand up to nearly any known chemical.

- **Compression Unit**

Sturdy, robust design. Built to perform in aggressive, even abrasive, fluids. Available in any machinable metallurgy.

- **Shaft Packing**

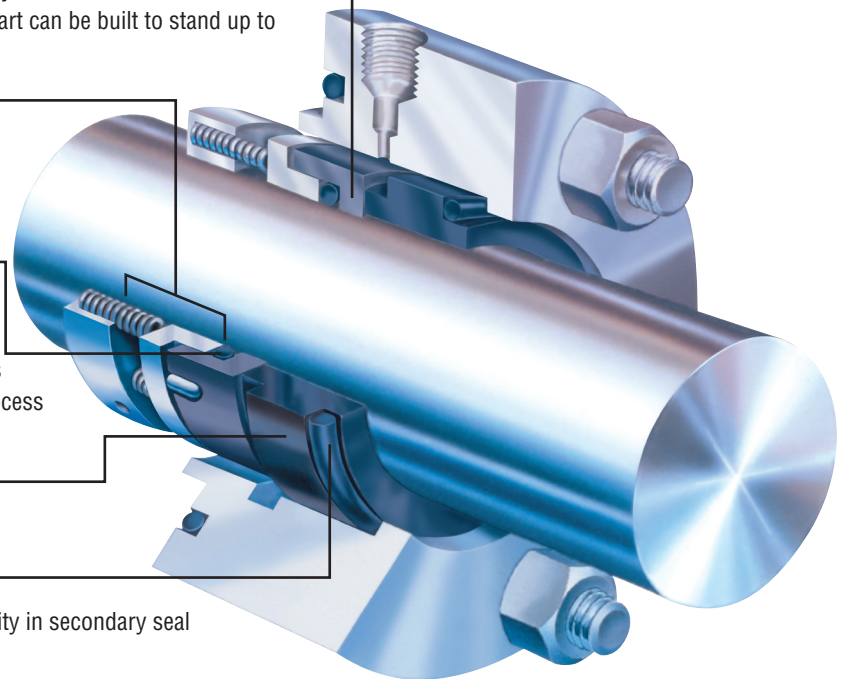
Completely interchangeable materials without changing other components. Available in a wide range of configurations and materials for compatibility with all process fluids and process temperatures.

- **Stationary Insert**

Flexibly mounted to prevent distortion.

- **Insert Mounting**

Dimensionally interchangeable for versatility in secondary seal material selections.



Available Materials of Construction

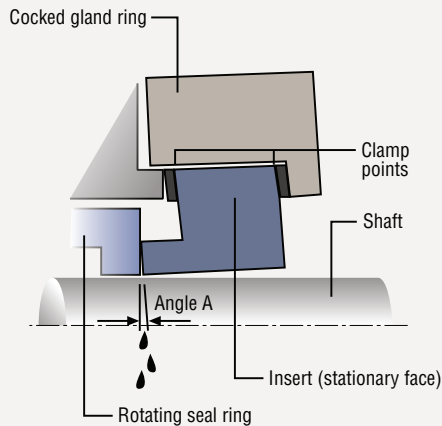
Metal Components	Seal Rings or Inserts	Secondary Seals (shaft packing and insert mounting)
304, 316 or 20 Stainless Steel	Tungsten Carbide	Fluoroelastomer
Alloy 400	Silicon Carbide	Buna N
Alloy C-276 or B-2	Peramic	Ethylene Propylene Rubber (EPR)
Titanium	Durchrome	Perfluoroelastomer
Nickel	Bronze	Ethylene Propylene Terpolymer (EPT)
Tantalum	No. 5 Carbon	Neoprene
		PTFE

Operating Parameters

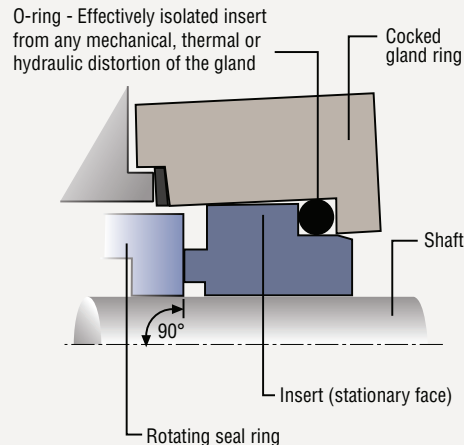
- Maximum Pressure: Up to 20 bar (300 psi)
- Temperature: cryogenics to 260°C (500°F)
- Speed: Up to 23 mps (4500 fpm)

Here's how the RO seal self-compensates for any installation misalignment or gland irregularities

With a clamped insert, a cocked gland ring can cause seal faces to misalign (angle A) and leakage can occur.



With Flowserve's flexibly mounted insert, the gland ring can be cocked and the insert remains square with the axis of the shaft.



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