

UO Series

Single spring pusher seals

UO Series seals are built for extended reliability in high pressure and highly viscous services such as mainline crude oil and finished product pipeline pumps. UO seals are balanced, single coil spring seals with drive mechanisms and seal face geometries engineered for high torque loads and long-term performance.



Features and Benefits

- Large, low spring rate single coil spring tolerates axial setting dimensions while reducing opportunity for clogging and hang-up from solids.
- Rotating seal face is seated squarely against a lapped support surface to sustain a flat seal face for low emissions performance.
- Robust U-cup seal flexibly mounts the rotating seal face while compensating for minor misalignment of the shaft and maintaining consistent seal face contact.
- Hard-coated sleeve under the U-cup seal resists fretting and wear to realize long term seal face tracking performance.
- Spring holder enables a strong drive linkage from the sleeve to the seal face while isolating the spring from torque.
- Containment device arrangements help safely direct process leakage to the drain and allow instrumentation connections for seal condition monitoring.
- Seal installation is simplified with a cartridge seal assembly or, as special equipment requirements demand, the seal can be installed by components.

Operating Parameters

Pressure

UO:	Up to 69 bar (1000 psi)
UOP:	Up to 103.4 bar (1500 psi)

Temperature

-40 to 204°C (-40 to 400°F)

Specific Gravity

0.45 and higher

Shaft Speed

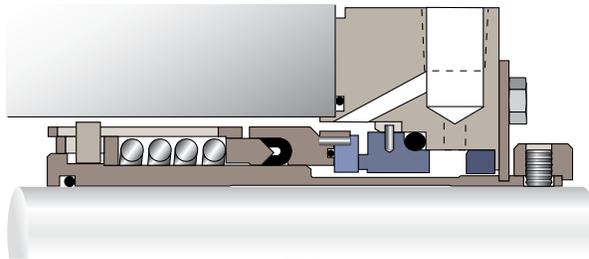
Up to 23 m/s (75 fps)

Shaft Size

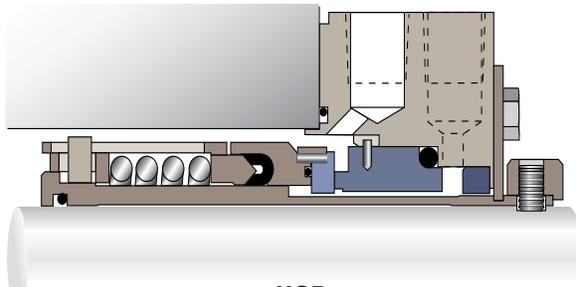
14.12 to 148.29 mm
(0.556 to 5.838 inch)

Materials of Construction

Metal Components	316 Stainless Steel, Alloy C-276
Rotating Face	Silicon Carbide, Tungsten Carbide
Stationary Face	Carbon, Silicon Carbide
Gaskets	Fluoroelastomer, Perfluoroelastomer
Spring	316 Stainless Steel
Bushing	Carbon



UO

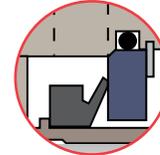


UOP

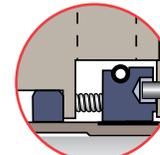
Specialized designs for specific applications

- UOP** Low deflection stationary face maintains face flatness in high pressure services up to 103.4 bar (1500 psi)
- UZO** Short axial length design for short seal chambers

Containment Devices



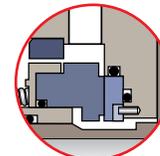
Lip Seal



Dual Throttle Bushing



Balanced Segmented Bushing



GSL Containment Seal

FSD255eng ORG 01-13 Printed in USA

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