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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>UO: Up to 69 bar (1000 psi)</th>
<th>UOP: Up to 103.4 bar (1500 psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>-40 to 204°C (-40 to 400°F)</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.45 and higher</td>
<td></td>
</tr>
<tr>
<td>Shaft Speed</td>
<td>Up to 23 m/s (75 fps)</td>
<td></td>
</tr>
<tr>
<td>Shaft Size</td>
<td>14.12 to 148.29 mm (0.556 to 5.838 inch)</td>
<td></td>
</tr>
</tbody>
</table>

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
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