Liquid lubricated dual mechanical seal reliability is vitally dependent on the continuous supply of clean, cool buffer or barrier fluid. E8 Series seal support reservoirs are well-suited to maintain an optimum environment for Plan 52 unpressurized and Plan 53A pressurized dual mechanical seals.

E8 Series seal support reservoirs are an effective and versatile element of a dual mechanical seal system. Configurable with many popular features, the 11-liter reservoir is easy to install and maintain with water or other lubricating fluids. The E8 Series is available for a variety of industry services, including applications in chemical, corn processing, pulp and paper, municipal water and sewage.

### Design parameters

<table>
<thead>
<tr>
<th></th>
<th>Material</th>
<th>Pressures</th>
<th>Temperature</th>
<th>Volume</th>
<th>PED (2014/68/EU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>304 stainless</td>
<td>316 stainless</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure</td>
<td>11 bar (160 psi)</td>
<td>20 bar (290 psi)</td>
<td>-29°C to 100°C (-20°F to 212°F)</td>
<td>11 liter (3 gal)</td>
<td>Cat II</td>
</tr>
<tr>
<td>Temperature</td>
<td>-29°C to 100°C</td>
<td>-29°C to 200°C</td>
<td>-20°F to 212°F</td>
<td>11 liter (3 gal)</td>
<td>Cat III</td>
</tr>
<tr>
<td>Volume</td>
<td>11 liter (3 gal)</td>
<td>11 liter (3 gal)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PED (2014/68/EU)</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Standard and optional equipment

<table>
<thead>
<tr>
<th>Component</th>
<th>Plan 52</th>
<th>Plan 53A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level indicator</td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td>Ball valve (2)</td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td>Orifice</td>
<td>standard</td>
<td>none</td>
</tr>
<tr>
<td>Pressure switch</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td>Level switch</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td>Cooling coil</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td>Stand kit</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td>Hose kit</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td>Hand pump</td>
<td>optional</td>
<td>optional</td>
</tr>
</tbody>
</table>
E8 Series Seal Support Reservoir

Piping plans and applications

<table>
<thead>
<tr>
<th>Piping Plan</th>
<th>Description</th>
<th>Purpose</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan 52</td>
<td>Unpressurized buffer fluid circulation with an orifice in the vent.</td>
<td>Reduces opportunity for process emissions by allowing the outboard seal to act as a safety backup.</td>
<td>Critical process fluids in applications that don’t require complete isolation but the added safety of an installed spare seal is advantageous. Used in general industry services.</td>
</tr>
<tr>
<td>Plan 53A</td>
<td>Pressurized barrier fluid circulation set 1–2 bar above process pressure.</td>
<td>Barrier fluid effectively isolates the process fluid for zero process emissions operation.</td>
<td>Hazardous, toxic, aggressive and dirty fluids that are not allowed to leak to the atmosphere. Used in chemical and general industry services.</td>
</tr>
</tbody>
</table>

Features

- 11-liter reservoir in 304 or 316 SS contains enough buffer/barrier fluid for sufficient seal face lubrication and heat transfer (standard)
- Fluid level indicator in aluminum or 316 SS provides a quick visual measure of fluid level (standard)
- Cooling coil in 316 SS controls the reservoir temperature by means of heating or cooling with water to maintain the optimum seal operating temperature (optional)
- Pressure indicator with stainless steel case and 62 mm (2.4 in) dial accurately displays barrier/buffer pressure in the reservoir (standard)
- Pressure switch triggers a low-pressure alarm if the reservoir pressure decreases on a Plan 53A system or a high-pressure alarm if the reservoir pressure increases on a Plan 52 system (optional)
- Ultrasonic level switches monitor the barrier/buffer fluid level and activate a low or high level alarm, alerting the operator to adjust the fluid level (optional)
- Stand kit of durable painted carbon steel securely supports the reservoir system and accommodates mounting of the optional hand pump (optional)