170L

Slurry Cartridge Single Seal

*Designed to fit Warman® AH® series pump*

*Engineered to operate in harsh, heavy consistency slurry environments and eliminate costly external seal flushes in the majority of applications*

The 170L is designed for sealing mineral-based process materials such as ores, limestone, coal, sugar, and phosphates. The innovative, non-clog seal utilizes a unique coil spring design in which the springs are located entirely outside the seal.

The 170L uses a single clamping screw which simplifies seal removal in sticky or viscous fluids or where solids clog up the set screws.

The 170L has large clearance and rugged components designed to resist the effects of heavy slurry environments. Plant optimization can be achieved through reduced product dilution and higher production rates.

**Runs longer in heavy, abrasive slurries without the need for flush or quench water**
- Non-clog design
- Innovative pressure plate design
- Springs located outside the seal

**Reliable design that addresses real life slurry pumping conditions**
- Micropolished O-Ring surfaces eliminate O-Ring hang-up
- Optimal balance for slurries
- Line-to-line slurry faces
- Stationary springs
- High strength drives

**Easy to maintain**
- Single clamping screw simplifies seal installation and removal
- Integrated centering tabs
- Washable in-service
- In-field repairable
- No quench and drain needed

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Operating Parameters</th>
<th>Sizes</th>
<th>50 mm – 220 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td>711 mm (28&quot;) Hg Vacuum to 17 bar g (250 psig)*</td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>-55°C – 300°C (-67°F – 570°F)</td>
<td></td>
</tr>
<tr>
<td>Speed</td>
<td>11 m/s or 2200 fpm</td>
<td></td>
</tr>
</tbody>
</table>

**Materials of Construction**

<table>
<thead>
<tr>
<th>Rotary Faces</th>
<th>SSC</th>
<th>TC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationary Faces</td>
<td>SSC</td>
<td>TC</td>
</tr>
<tr>
<td>Elastomers</td>
<td>FKM</td>
<td>EPDM</td>
</tr>
<tr>
<td>Metal Parts</td>
<td>316 Stainless Steel (EN 1.4401)</td>
<td>A2205 (EN 1.4462)</td>
</tr>
<tr>
<td>Springs</td>
<td>Alloy C-276 (EN 2.4819)</td>
<td></td>
</tr>
</tbody>
</table>

* Seal pressure capabilities are dependent on the fluid sealed, temperature, speed, and seal face combinations. For operation outside the limits and additional materials consult Chesterton Mechanical Seal Engineering.
### Warman® AH® Pump Frame Sizes – 170L Slurry Seal Availability

#### Dry End Version

<table>
<thead>
<tr>
<th>AH® Pump Model/Frame</th>
<th>Shaft Size (mm)</th>
<th>Standard</th>
<th>Quench/Drain and Lip Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/2 C&amp;P-AH</td>
<td>60</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4/3 C&amp;P-AH</td>
<td>85</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>8/6 E&amp;R-AH</td>
<td>100</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>10/8 E&amp;R-M</td>
<td>130</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>12/10 E&amp;R-M</td>
<td>145</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>10/8 G&amp;T-AH</td>
<td>180</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>12/10 G&amp;T-AH</td>
<td>220</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>

#### Wet End Version

<table>
<thead>
<tr>
<th>AH® Pump Model/Frame</th>
<th>Shaft Size (mm)</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5/1 B-AH</td>
<td>50</td>
<td>✓</td>
</tr>
<tr>
<td>2/1.5 B-AH</td>
<td>60</td>
<td>✓</td>
</tr>
<tr>
<td>4/3 C-AH</td>
<td>85</td>
<td>✓</td>
</tr>
<tr>
<td>6/4 D-AH</td>
<td>100</td>
<td>✓</td>
</tr>
<tr>
<td>8/6 E-AH</td>
<td>130</td>
<td>✓</td>
</tr>
<tr>
<td>10/8 ST-AH</td>
<td>180</td>
<td>✓</td>
</tr>
</tbody>
</table>

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*Diagram illustrates 100 mm seal design.*