LD23 and LD18 Power End Conversions

Designed for direct fitup to Goulds\(^1\) and Durco\(^2\) ANSI pumps

Provides superior LD ratio for maximum reliability

**Construction**

1. Micrometer adjustment nuts fine tune impeller setting for maximum efficiency
2. Positive locking thrust bearing retainer cover for maximum bearing holding power and minimum axial movement
3. Labyrinth Seals provide non-wearing lifetime protection for radial and thrust bearings
4. 7310 (pair) angular contact bearings are standard for high thrust capability
5. Full support rear leg assures bearing frame remains upright during pump disassembly. Full adjustability aids in alignment
6. Two magnetic plugs are provided to maintain clean oil and are removable for insertion of cooling oil
7. Solid shaft (no sleeve) with minimal overhang provides superior resistance to deflection. Lowest L\(^3\)/D\(^4\) stiffness ratio in the industry
8. Rabbit for C-Frame (NEMA) or D-Flange (IEC) motor adapter for rapid and precise motor alignment
9. Large oil inlet for easy filling of oil; the sealed cover minimizes dirt and moisture entry
10. Flinger filter constantly cleans oil during pump operation
11. Oil sight glass for constant monitoring of oil level and condition
12. Optional throat bushing available for specific seals
13. Optional System One taper bore back cover accepts most standard mechanical seals (OEM cover, if used, requires modification due to thicker shaft.)

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1. Goulds is a registered trademark
2. Durco is a registered trademark
## L³/D⁴ and Bearing End Comparison

<table>
<thead>
<tr>
<th>Pump Model</th>
<th>System One LD23/LD18</th>
<th>Goulds MT¹</th>
<th>Durco Group II²</th>
<th>System One Frame S</th>
<th>Goulds ST¹</th>
<th>Durco Group I²</th>
<th>System One Frame M</th>
<th>Goulds XLT¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without sleeve</td>
<td>23 Gld/18 Dur</td>
<td>62 (2.3)</td>
<td>37 (1.7)</td>
<td>46 (1.9)</td>
<td>64 (2.5)</td>
<td>127 (4.4)</td>
<td>19 (0.7)</td>
<td>25 (0.9)</td>
</tr>
<tr>
<td>With sleeve</td>
<td>N/A</td>
<td>116 (4.4)</td>
<td>65 (2.5)</td>
<td>N/A</td>
<td>143 (4.5)</td>
<td>346 (14.3)</td>
<td>N/A</td>
<td>61 (2.3)</td>
</tr>
<tr>
<td>Bearings:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>radial</td>
<td>6310</td>
<td>6309</td>
<td>6310</td>
<td>6308</td>
<td>6207</td>
<td>6206.7</td>
<td>6314</td>
<td>313</td>
</tr>
<tr>
<td>thrust</td>
<td>7310 (2)</td>
<td>5309</td>
<td>5310</td>
<td>5308</td>
<td>5306</td>
<td>5305.6</td>
<td>7314 (2)</td>
<td>5313</td>
</tr>
<tr>
<td>shaft diameter at seal</td>
<td>1.875 (48)</td>
<td>1.750 (45)</td>
<td>1.875 (48)</td>
<td>1.500 (38)</td>
<td>1.375 (35)</td>
<td>1.125 (29)</td>
<td>2.625 (67)</td>
<td>2.50 (64)</td>
</tr>
</tbody>
</table>

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**Features**

**Stronger Shaft Resists Damaging Vibration**

The System One power ends increase resistance to deflection and vibration. With a solid shaft (no sleeve) and shorter overhang, System One pumps offer the lowest LD ratio in the industry and are especially suited for maximizing seal/bearing life and operation off the BEP.

**Superior Bearing Retention**

Positive locking thrust bearing retainer cover for maximum bearing holding power and minimum axial movement.

**Quality Motor Alignments**

The System One power end features C-frame motor adapter capability that provides precise alignment for quick and repeatable motor mounting and eliminates vibration. And, skill level, temperature concerns, and time constraints are all eliminated with the simplified motor mounting.

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**Optional Bearing Oil Temperature Monitors**

Early warning helps prevent bearing failures and improve equipment reliability

- Constant monitoring of lubrication environment
- Adapts to any type of oil-lubricated machinery by screwing into a 1/4" NPT connection
- Corrosion-resistant hermetically sealed stainless steel housing
- Polycarbonate lens and easy-to-read color coded dial
- Calibrated in both Fahrenheit and Celsius scales

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¹ Goulds is a registered trademark
² Durco is a registered trademark

Note: Some features of Frame S and Frame M power end conversions differ from LD23/18 described on page 1.