HDP 250 L High Pressure Pump series

**Design criteria**

Hammelmann high pressure pumps are built to operate at the continuous maximum duty stated in the performance parameters. Just compare the crankshaft speed, average plunger speed, plunger diameter and power rating.

**Features**

- Power ratings up to 335 HP
- Horizontal 5 cylinder design
- Wide variety of complementary ancillaries

**Quality and reliability**

- Stainless steel pump head free of alternating stress
- Cross head piston bellows seal
- Choice of application specific seal assemblies
- Solid ceramic or tungsten carbide plungers
- Choice of bronze or stainless steel suction chamber
- Crank section calculation by ‘Finite element method’ ensures long working life under continuous load
- Crankshaft supported by 3 bearings and incorporating twin helical speed reducing gears
- Pressurised oil lubrication system with oil cooler/filter

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**High pressure pump**

Weight: approx. 2300 lbs

Dimensions: inches
## Technical data, series HDP 250 L

### Performance parameters

<table>
<thead>
<tr>
<th>Q [GPM]*</th>
<th>150</th>
<th>175</th>
<th>215</th>
<th>270</th>
<th>335</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating pressure [psig]</td>
<td>8.4</td>
<td>10.0</td>
<td>12.1</td>
<td>11.1</td>
<td>15.8</td>
</tr>
<tr>
<td>Rod force: 18,430 lbf</td>
<td>26100</td>
<td>21800</td>
<td>18100</td>
<td>19600</td>
<td>16700</td>
</tr>
<tr>
<td>Stroke: 2.95 inch</td>
<td>32600</td>
<td>32600</td>
<td>32600</td>
<td>23900</td>
<td>24700</td>
</tr>
<tr>
<td>Mean piston speed at n2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>390 r.p.m. = 3.2 feet/sec</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>465 r.p.m. = 3.8 feet/sec</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>555 r.p.m. = 4.6 feet/sec</td>
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</tbody>
</table>

*At pressures over 29,000 psi approx. 5% of the flow rate is lost due to the compressibility factor of water.

<table>
<thead>
<tr>
<th>D</th>
<th>r.p.m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>n1</td>
<td>n2</td>
</tr>
</tbody>
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- Rod force: 18,430 lbf
- Stroke: 2.95 inch
- Mean piston speed at n2:
  - 390 r.p.m. = 3.2 feet/sec
  - 465 r.p.m. = 3.8 feet/sec
  - 555 r.p.m. = 4.6 feet/sec

### Energy efficient

Hammelmann plunger pumps convert 93 to 98% of the shaft power to hydraulic energy.

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Hammelmann Corp. 436 Southpointe Drive  Phone (001) 937-859-8777
Miamisburg, Ohio 45342 Fax: (001) 937-859-9188
eMail: mail@hammelmann.com http://www.hammelmann.com

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