**HDP 70 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.

**High pressure pump**

Weight: approx. 215 kg

**Features**

- Power ratings up to 70 kW
- Vertical 3 cylinder design
- Wide variety of complementary ancillaries

**Quality and reliability**

- Stainless steel stress free pump head
- Bellows form hermetic seal between the suction chamber and crank section
- Choice of application specific seal assemblies
- Solid ceramic or tungsten carbide plungers
- Choice of bronze (standard) or stainless steel suction chamber
- Crank section calculation by ‘Finite element method’ ensures long working life under continuous load
- Integral speed reduction gear
- Pressurised oil lubrication system with oil cooler/filter

**Stationary unit with electric motor**

Length: 1502 mm
Width: 720 mm
Height: 1105 mm
Weight: approx. 1150 kg at 75 kW

Main dimensions without accessories such as suction line, pressure regulator etc. All shown as right side drive. Detailed dimensional drawings and weights available on request.
### HDP 70 series, technical data

#### Performance parameters

<table>
<thead>
<tr>
<th>Q (l/min)*</th>
<th>Required power rating [kW]</th>
<th>D [r.p.m.]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30</td>
<td>37</td>
</tr>
<tr>
<td>7</td>
<td>2000</td>
<td>2450</td>
</tr>
<tr>
<td>8.5</td>
<td>1650</td>
<td>2050</td>
</tr>
<tr>
<td>10</td>
<td>1400</td>
<td>1700</td>
</tr>
<tr>
<td>11</td>
<td>1250</td>
<td>1550</td>
</tr>
<tr>
<td>13</td>
<td>1050</td>
<td>1350</td>
</tr>
<tr>
<td>16</td>
<td>890</td>
<td>1190</td>
</tr>
<tr>
<td>17</td>
<td>930</td>
<td>1150</td>
</tr>
<tr>
<td>19.5</td>
<td>780</td>
<td>970</td>
</tr>
<tr>
<td>23</td>
<td>650</td>
<td>810</td>
</tr>
</tbody>
</table>

*At pressures over 2000 bar approx. 5% of the flow rate is lost due to the compressibility factor of water.

**For intermittent operation only

#### Conversion table

- 1 kW = 1.34 HP
- 1 bar = 14.5 psi
- 1 l = 0.264 US gallon
- 1 l = 0.22 Imp. gallon

#### Type designations

<table>
<thead>
<tr>
<th>Sealing system</th>
<th>D</th>
<th>HDP Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrodynamic with tungsten carbide plungers</td>
<td>12 - 17,5</td>
<td>74</td>
</tr>
<tr>
<td>Labyrinth with solid ceramic plungers</td>
<td>20 - 55</td>
<td>72</td>
</tr>
<tr>
<td>Packed sleeves with solid ceramic plungers</td>
<td>20 - 55</td>
<td>77</td>
</tr>
</tbody>
</table>

D = Piston/Plunger dia. [mm]

#### Typical high pressure pump units

- Stationary unit with electric motor
- Road going or stationary trailer units with sound damping cover
- 10 or 20 foot sound damped container versions

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