VANE PUMPS

TYPICAL PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>PUMP SIZE</th>
<th>4B</th>
<th>6B</th>
<th>8B</th>
<th>10B</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLUMETRIC DISPLACEMENT*</td>
<td>cu. in./rev.</td>
<td>0.7</td>
<td>0.9</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>m³/rev.</td>
<td>11.5</td>
<td>14.8</td>
<td>19.7</td>
</tr>
<tr>
<td>PUMP DELIVERY</td>
<td>6.3 bar</td>
<td>gpm</td>
<td>lpm</td>
<td>gpm</td>
</tr>
<tr>
<td>AT 1750 RPM</td>
<td>19.7</td>
<td>26.5</td>
<td>34</td>
<td>41</td>
</tr>
<tr>
<td>COMPENSATED PRESSURE</td>
<td>Max. psi</td>
<td>2000</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td>Rated psi</td>
<td>2000</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td>Min. psi</td>
<td>500</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>OPERATING SPEEDS**</td>
<td>Max. rpm</td>
<td>1750</td>
<td>1750</td>
<td>1800</td>
</tr>
<tr>
<td>POWER INPUT AT RATED FLOW &amp; PRESSURE</td>
<td>kW</td>
<td>5.2</td>
<td>6.7</td>
<td>8.2</td>
</tr>
<tr>
<td></td>
<td>hp</td>
<td>7</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>PRESSURE</td>
<td>Max. psi</td>
<td>2000</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td>Min. psi</td>
<td>500</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>FLUID VELOCITY</td>
<td>Max. ft/sec.</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Max. m/sec.</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOMINAL FLOW</td>
<td>Max. cpm</td>
<td>31</td>
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<tr>
<td></td>
<td>Min. cpm</td>
<td>10</td>
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</tr>
<tr>
<td></td>
<td>Max. mlpm</td>
<td>500</td>
<td>600</td>
<td>24</td>
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<tr>
<td></td>
<td>Min. mlpm</td>
<td>170</td>
<td>170</td>
<td>390</td>
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<tr>
<td>MAXIMUM CASE PRESSURE</td>
<td>psi</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>bar</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEIGHT</td>
<td>lbs.</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>kg</td>
<td>9</td>
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</tr>
</tbody>
</table>

NOTES:
* Volumetric displacement is measured displacement at 91.5 psi (6.3 bar) and rated rpm. Volumetric displacement varies with both pressure and rpm. Flow rates at any rpm other than the rated rpm may be approximated as follows:
Q2 = Q1 (N-142)/1667 where Q1 = Flow (gpm) at rated rpm at 91.5 psi (6.3 bar).
Q2 = Flow (gpm) at N rpm.
N = rpm at which Q2 is to be determined.
** When operating above 1500 psi (103 bar), it is recommended that a direct-acting differential relief valve be used at the pump to relieve pressure spikes and surges.
6B - Maximum rpm at full displacement - 2800 rpm. For higher rpms up to 3600 rpm, pump displacement must be reduced to limit flow to 9.5 gpm (36 lpm) maximum.
8B - Maximum rpm at full displacement - 2100 rpm. For higher rpms up to 3600 rpm, pump displacement must be reduced to limit flow to 9.5 gpm (36 lpm) maximum.
10B - Maximum rpm at full displacement - 1800 rpm. For higher rpms up to 3600 rpm, pump displacement must be reduced to limit flow to 9.5 gpm (36 lpm) maximum.

CAUTION: Turning the Maximum Volume Control in too far can force the cam ring over-center, causing damage.
NOTE: Typical performance curves are based on ISO VG46 oil at 120°F (49°C). Above 400 SUS (84 CS), add 2% hp/100 SUS.

NOTE: Deadhead horsepower is read from curves at 0 gpm flow and pressure compensator setting psi.
NOTE: Typical performance curves are based on ISO VG46 oil at 120° F. (49° C.). Above 400 SUS (84 CS), add 2% hp/100 SUS.

6B3L (at 1750 rpm)

6B5L (at 1750 rpm)

8B06 (at 1750 rpm)

8B15 (at 1750 rpm)

NOTE: Deadhead horsepower is read from curves at 0 gpm flow and pressure compensator setting psi.
VANE PUMPS
VARIABLE DISPLACEMENT PRESSURE COMPENSATED

CROSS HYDRAULICS PTY LTD

NOTE: Typical performance curves are based on ISO VG46 oil at 120° F. (49° C.). Above 400 SUS (84 CS), add 2% hp/100 SUS.

8B20 (at 1750 rpm)

8B3L (at 1750 rpm)

8B5L (at 1750 rpm)

10B10* (at 1750 rpm)

NOTE: Deadhead horsepower is read from curves at 0 gpm flow and pressure compensator setting psi.

* NOTE: Not to be used with water, glycol or emulsion fluids.
NOTE: Typical performance curves are based on ISO VG46 oil at 120° F.
(49° C.). Above 400 SUS (84 CS), add 2% hp/100 SUS.

NOTE: Deadhead horsepower is read from curves at 0 gpm flow and
pressure compensator setting psi.

10B3L (at 1750 rpm)

10B5L (at 1750 rpm)
MECHANICAL OPTIONS

Dimensions shown in: Inches (millimeters)

NOTE: This includes Maximum Volume Control - Code 6.
MECHANICAL OPTIONS

Dual pump operation without additional mounting flanges and couplings

Permits mounting of another PVR6 or PVA6 pump (with Code 12*) or any SAE "A"-bolt flange mount pump incorporating a 30° involute, 16/32 pitch, 9 tooth external spline drive shaft. Maximum rating of internal spline is 8-1/2 hp at 1750 rpm.

SIDE LOAD DRIVES

i.e. Belt, Chain, Gear

NOT ACCEPTABLE

PREFERRED FULL H.P. & PRESSURE

ACCEPTABLE TO 1000 PSI MAX, 6 H.P.

NOTES:
1. SHAFT END VIEW
2. 1750 RPM RATED
3. LOAD IS TO RADIATE OUT FROM SHAFT

TANDEM OPTIONS

CODE 21

Dimensions shown in:  Inches
(millimeters)
ORDERING INFORMATION
Right Hand (CW) Rotation

TYPICAL ORDERING CODE:
PVR6-8B15-RF-0-1-H

*NOTE: Do not use water, glycol or emulsion fluids with the PVR6-10B pump.

*NOTE: For PVR6-4B Code 21 or 1221, consult the factory for price and delivery.