Variable Pitch, Screw-Type Dry Vacuum Pump

Models: SDV-120  SDV-200

Features
- Patented variable pitch rotor design
- Lower gas discharge temperatures – no cooling purges needed
- No oil or water in contact with process gases
- No metal-to-metal contact between operating parts
- Space saving C-face motor design eliminates need for motor coupling and guard
- Short gas path through the pump for quick discharge
- Quiet operation ≤ 72 dB(A)

Materials of Construction:
- CASING, END PLATES, COVERS: Ductile iron, uncoated
- ROTORS: Ductile iron, uncoated
- NIFA or NiFlon Coatings (optional)
- TIMING GEARS: Alloy steel, precision ground, helical type
- SHAFT SEALS: Drive End: Mechanical seal & lip seal
  Non-Drive End: Triple lip seals (Double on SDV-120)
- Drive Shaft: Mechanical seal
- O-RINGS: Drive End: Mechanical seal & lip seal
  (Double on SDV-120)
  Non-Drive End: Triple lip seals
  Drive Shaft: Mechanical seal
- Kalrez® compound 4079
- Hastelloy® or Ni-Resist Seals (optional)
- Viton® A-1009 O-rings (optional)

Kalrez® and Viton® are registered trademarks of E.I. duPont de Nemours and Company.
Hastelloy® is a registered trademark of Haynes International, Inc.

Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CAPACITY (60 HZ) CPM / m³/h</th>
<th>ULTIMATE PRESSURE (60 Hz) (50 Hz) Torr / mbar</th>
<th>ROTATION SPEED 60 Hz / 50 Hz</th>
<th>MOTOR HP</th>
<th>POWER CONSUMPTION 60 Hz / 50 Hz kW</th>
<th>SUCTION FLANGE (ANSI, 150# FF) in. / mm</th>
<th>DISCHARGE FLANGE (ANSI, 150# FF) in. / mm</th>
<th>COOLING WATER GPM / L/min</th>
<th>NOISE LEVEL dB(A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV-120</td>
<td>71 / 120 59 / 100</td>
<td>0.02 / 0.026 0.04 / 0.053</td>
<td>3500 / 2000</td>
<td>5</td>
<td>2.5 / 2.0</td>
<td>1.5 / 40</td>
<td>1.5 / 40</td>
<td>0.5 / 2.0</td>
<td>72</td>
</tr>
<tr>
<td>SDV-200</td>
<td>106 / 180 88 / 150</td>
<td>0.02 / 0.026 0.04 / 0.053</td>
<td>3500 / 2000</td>
<td>5</td>
<td>3.1 / 2.6</td>
<td>1.5 / 40</td>
<td>1.5 / 40</td>
<td>1.1 / 4.0</td>
<td>72</td>
</tr>
</tbody>
</table>

Typical Pumping Speed Curves

SDV-120, SDV-200 PERFORMANCE CURVES (60 Hz)

SDV-120, SDV-200 PERFORMANCE CURVES (50 Hz)
**Models**

<table>
<thead>
<tr>
<th></th>
<th>SDV-120</th>
<th>SDV-200</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>in.</strong></td>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
</tr>
<tr>
<td>SDV-120</td>
<td>16.75</td>
<td>41.25</td>
</tr>
<tr>
<td>SDV-200</td>
<td>16.75</td>
<td>45.00</td>
</tr>
</tbody>
</table>

**Dimensions:** Values shown are approximate and should not be used for construction. Certified drawings are available through your local Tuthill Vacuum & Blower Systems Sales Professional.