Neptune™ 500-VS Series High Viscosity Hydraulic Metering Pumps are designed to accurately meter viscous fluids up to 5,000 cP such as polymers and other thick liquids.

Variable Oil By-pass™ stroke adjustment allows an adjustable time delay between the end of the suction stroke and the beginning of the discharge stroke. This delay permits the ball to seat fully before pumping resumes, even in the heaviest liquids, so that pumping accuracy remains high.

FEATURES AND BENEFITS
- Handles viscous fluids of up to 5,000 cP
- Max capacity up to 29 gph (110 L/h)
- Max pressure up to 100 psi (8 bar)
- Materials of construction: 316SS with SS trim
  - PTFE withstands most chemicals
- Multiple diaphragms: Standard flat and PTFE
  - PTFE withstands most chemicals
- Large internal porting with a large, single ball, suction check valve

OPTIONS
- Capacity control options include electric stroke length adjustment and variable speed drives

WWW.PSGDOVER.COM/NEPTUNE
### CROSS SECTIONAL VIEW

![Cross-sectional view of Model 532-VS-N3](image)

### SELECTION CHART

#### Standard Motor: 1/3 HP-single phase-115VAC-60 cycles-TEFC

Simplex Models (Duplex Available)

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>PISTON DIAMETER INCHES (MM)</th>
<th>STROKES PER MINUTE AT 60 HZ (50 HZ)</th>
<th>MATERIAL OF CONSTRUCTION</th>
<th>CAPACITY GPH (L/H) AT 100 PSI</th>
<th>MAX. PRESSURE PSI (BAR)</th>
<th>SHIP. WEIGHT LB. (KG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P515-VS-N3</td>
<td>1/2 (13)</td>
<td>117 (97)</td>
<td>316SS</td>
<td>3.0 (1.1)</td>
<td>900 (63)</td>
<td>70 (32)</td>
</tr>
<tr>
<td>P520-VS-N3</td>
<td>11/16 (18)</td>
<td>37 (31)</td>
<td>316SS</td>
<td>2.0 (7.5)</td>
<td>400 (28)</td>
<td>70 (32)</td>
</tr>
<tr>
<td>P522-VS-N3</td>
<td>11/16 (18)</td>
<td>72 (60)</td>
<td>316SS</td>
<td>4.0 (15.1)</td>
<td>500 (35)</td>
<td>70 (32)</td>
</tr>
<tr>
<td>P525-VS-N3</td>
<td>11/16 (18)</td>
<td>117 (97)</td>
<td>316SS</td>
<td>7.0 (26.5)</td>
<td>700 (49)</td>
<td>70 (32)</td>
</tr>
<tr>
<td>P530-VS-N3</td>
<td>1-1/16 (27)</td>
<td>37 (31)</td>
<td>316SS</td>
<td>5.5 (20.8)</td>
<td>300 (21)</td>
<td>70 (32)</td>
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<tr>
<td>P532-VS-N3</td>
<td>1-1/16 (27)</td>
<td>72 (60)</td>
<td>316SS</td>
<td>11.0 (41.6)</td>
<td>300 (21)</td>
<td>70 (32)</td>
</tr>
<tr>
<td>P535-VS-N3</td>
<td>1-1/16 (27)</td>
<td>117 (97)</td>
<td>316SS</td>
<td>18.0 (68.0)</td>
<td>300 (21)</td>
<td>70 (32)</td>
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<tr>
<td>P537-VS-N3</td>
<td>1-1/16 (27)</td>
<td>144 (120)</td>
<td>316SS</td>
<td>22.0 (83.0)</td>
<td>300 (21)</td>
<td>70 (32)</td>
</tr>
<tr>
<td>P547-VS-N3</td>
<td>1-3/16 (30)</td>
<td>144 (120)</td>
<td>316SS</td>
<td>29.0 (110.0)</td>
<td>200 (14*)</td>
<td>70 (32)</td>
</tr>
</tbody>
</table>

*300 PSI (21 BAR) at 1/2 HP

### MATERIALS OF CONSTRUCTION

<table>
<thead>
<tr>
<th>MATERIAL CODE</th>
<th>PUMP HEAD</th>
<th>CHECK VALVE BODY</th>
<th>CHECK VALVE BALL</th>
<th>VALVE O-RING</th>
<th>DIAPHRAGM</th>
</tr>
</thead>
<tbody>
<tr>
<td>N3</td>
<td>316SS</td>
<td>316SS</td>
<td>316SS</td>
<td>FKM</td>
<td>PTFE</td>
</tr>
</tbody>
</table>

For more information on Neptune Series 500 Pumps and Control Options request Bulletins DP-1100 and DP-500E
For Higher Viscosity and Higher Volume Applications request Bulletin DP-7000

### DIMENSIONS

- **Discharge:** 1/2” (13 mm) NPT
- **Suction:** 3/4” (19 mm) NPT
- **1-3/4” (44 mm) APPROX**
- **3/8” X 5/8” SLOT (REAR)**
- **3/8” Dia. HOLES (REAR)**
- **2-3/4” (70 mm) APPROX**
- **2-3/4” (70 mm)**

**Dimensions**

Where Innovation Flows