Versatility

We offer an extensive range of metering pumps for almost every situation where liquids have to be accurately metered or blended together. Our NOVADOS metering pumps comprise diaphragm and plunger pumps, with drives to accommodate single or multi-stream applications using horizontal or vertical configurations.

Nearly all gear sizes in the NOVADOS series can be combined for process and metering pumps to achieve the required flow rate and pressure parameters. Manual or automatic control options for flow rate adjustment are available, with various liquid end materials and complemented by a variety of accessories to suit the process.

These numerous possible combinations provide solutions custom tailored to fit your needs.

Installation and Operating Conditions*

- **Hazardous area:**
  up to Zone 1 IIC T4 (Zone 22 upon request)

- **Ambient temperature range:**
  from -40°C to +50°C (-40°F to 120°F) (special solutions upon request)

- **Fluid temperature range:**
  from -40°C up to +150°C (-40°F to 300°F) (special solutions upon request)

* These are limit values, please state actual conditions with enquiry.

Technical Data

- Flow rate up to 17064 l/h (5,409 gph)
- Pressure up to 1000 bar (14,500 psig)
# Flow Rate Table (for Single Module) \(^1\)

<table>
<thead>
<tr>
<th>PUMP HEAD TYPE</th>
<th>DIAPHRAGM</th>
<th>PLUNGER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pump Head</strong></td>
<td><strong>PTFE</strong></td>
<td><strong>Stainless Steel</strong></td>
</tr>
<tr>
<td><strong>Housing Material</strong></td>
<td>Stainless Steel/Plastic</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td><strong>Flow rate at 200 spm(^1)</strong></td>
<td><strong>max. operating pressure(^2) bar (psig)</strong></td>
<td><strong>max. operating pressure(^2) bar (psig)</strong></td>
</tr>
<tr>
<td>0...56.4 (17.9)</td>
<td>-</td>
<td>1000 (14,500)</td>
</tr>
<tr>
<td>0...81.3 (25.8)</td>
<td>-</td>
<td>700 (10,000)</td>
</tr>
<tr>
<td>0...145 (46)</td>
<td>400 (5800)</td>
<td>-</td>
</tr>
<tr>
<td>0...226 (71.6)</td>
<td>250 (3625)</td>
<td>250 (3625)</td>
</tr>
<tr>
<td>0...353 (112)</td>
<td>160 (2320)</td>
<td>-</td>
</tr>
<tr>
<td>0...509 (161)</td>
<td>-</td>
<td>110 (1695)</td>
</tr>
<tr>
<td>0...579 (184)</td>
<td>100 (1450)</td>
<td>-</td>
</tr>
<tr>
<td>0...733 (232)</td>
<td>80 (1160)</td>
<td>-</td>
</tr>
<tr>
<td>0...905 (287)</td>
<td>63 (915)</td>
<td>-</td>
</tr>
<tr>
<td>0...997 (316)</td>
<td>-</td>
<td>58 (840)</td>
</tr>
<tr>
<td>0...1414 (448)</td>
<td>40 (580)</td>
<td>-</td>
</tr>
<tr>
<td>0...1773 (562)</td>
<td>32 (465)</td>
<td>-</td>
</tr>
<tr>
<td>0...2244 (711)</td>
<td>25 (360)</td>
<td>25 (360)</td>
</tr>
<tr>
<td>0...2615 (829)</td>
<td>-</td>
<td>22 (320)</td>
</tr>
<tr>
<td>0...3181 (1008)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>0...3619 (1147)</td>
<td>16 (230)</td>
<td>-</td>
</tr>
<tr>
<td>0...5542 h (1757)</td>
<td>10 (145)</td>
<td>-</td>
</tr>
<tr>
<td>0...6729 h (2133)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>0...8729 h (2765)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>0...1249 h (3959)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>0...17064 h (5409)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

1) The table shows an excerpt of all possibilities and serves as an initial guideline. Pumps will be sized for the specific requirements.
2) Max. operating pressure of actual pumps may vary from figures stated. Pumps with housing material plastic are generally limited to max. 10 bar operating pressure.
3) Piston (double-acting) pump head at 100 min\(^{-1}\).
4) 240 spm@60 Hz

- Flow rates at 100% volumetric efficiency. Please allow for transmission losses.
- Metering accuracy: as good as ±0.5 %
- Selectable stroking speeds (50 Hz): 50, 63, 72, 85, 100, 127, 144, 170, 200 min\(^{-1}\). Different stroking speeds for 60 Hz.

## General Specification

### Materials of construction of liquid-wetted parts
- Housing of stainless steel 1.4571 (316 Si SS) or 1.4462 (316 SS) or plastic PVC or PP
- Diaphragms of PTFE or stainless steel 1.4310 (301 SS)
- Plungers of stainless steel or ceramic
- Options: materials such as Super Duplex, Hastelloy, Titanium and other material

### Pump gear design
- Worm gear with different reduction ratios
- Splash lubrication
- Stroke length adjustment via eccentric (Z-shape) crankshaft

### Flow rate control
- Manual, electric, pneumatic or speed variation

### Drive
- Electric motor with fixed or variable speed
- Other drives on request

We reserve the right to make technical changes without notice.

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