**neMESYS Low Pressure Syringe Pump**

**DESCRIPTION**

The neMESYS pump doses liquids with extreme accuracy down into the nanoliter range. Special motors inside the pump move the syringe piston without vibration and thereby allow liquids to be delivered extremely smoothly. neMESYS follows a modular design concept and adapts to your needs. You can even combine multiple pumps. In this way your dosing system can grow along with your application. Versatile operation modes are provided by the intuitive control software, e.g. discrete volume injection, long-term continuous injection or custom injection task (script based).

**FLOW PERFORMANCE**

<table>
<thead>
<tr>
<th>SYRINGE</th>
<th>14:1* GEAR BOX</th>
<th>29:1 GEAR BOX</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 µl</td>
<td>0.012</td>
<td>0.06</td>
</tr>
<tr>
<td>250 µl</td>
<td>0.290</td>
<td>1.58</td>
</tr>
<tr>
<td>1 ml</td>
<td>1.1</td>
<td>6.3</td>
</tr>
<tr>
<td>2.5 ml</td>
<td>2.9</td>
<td>15.8</td>
</tr>
<tr>
<td>5 ml</td>
<td>5.9</td>
<td>31.6</td>
</tr>
<tr>
<td>10 ml</td>
<td>11.8</td>
<td>63.3</td>
</tr>
<tr>
<td>50 ml</td>
<td>59.2</td>
<td>316.4</td>
</tr>
</tbody>
</table>

Other volumes available on request.

**MECHANICAL DATA**

- Weight .......................................................... 1.3 kg
- Dimensions (L x W x H) ............... 310 x 47 x 56 mm

**ENVIRONMENT**

- Operating Temperature .................. 0 – 45 °C
- Storage Temperature .................. -40 – 75 °C
- Operating Humidity ................. 20 – 80 %, non-condensing
- Storage Humidity ................. 20 – 80 %, non-condensing

**ELECTRICAL DATA**

- Peak Power Consumption .................. 14.5 W
- Power Supply Voltage (Input) .............. 24 V DC

**INTERFACES**

- CAN ........................................... max. 1 Mbit/s
- RS232 ........................................... max. 115200 bit/s

**MODULE PERFORMANCE**

- Max. Pusher Velocity .................. 6 mm/s*
- Min. Pusher Velocity .................. 1 nm/s*
- Min. Pusher Travel .................. 17 nm
- Max. Linear Force .................. 290 N / 65 lbs

**MODULE CONFIGURATION**

- Gear Box Translation .................. 14:1* / 29:1
- Syringe Holder (Syr. Diameter) ........... 6–30* / 40 mm
- Optional I/O Port res. (12 Pin) ............. 12 bit

*default configuration