**Description**

The neMESYS mid pressure syringe pump suits perfect for high precise dosing tasks with more viscous fluids, high pressure or high throughput demands. High precision, flexibility and robustness are the perfect basis for sophisticated tasks in laboratory or production environment.

---

### Mechanical Data

- **Weight**: 1.8 kg
- **Dimensions (L x W x H)**: 310 x 69.5 x 99.3 mm

### Electrical Data

- **Peak Power Use**: 24 W
- **Power Supply Voltage**: 24 V DC

### Environment

- **Operating Temperature**: 0 – 45°C
- **Storage Temperature**: -40 – 75°C
- **Operating Humidity**: 20 – 80%, Noncondensing
- **Storage Humidity**: 20 – 80%, Noncondensing

### Interfaces

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

### Equipment Configuration

- **Check Valve (Optional)**: MAGCHEX™ / cetoni standard
- **Syringe Material**: Glass / SST / Polymer lining
- **Pump Head Material**: SST / Polymers
- **Gaskets**: FPM / FPM / EPDM
- **Port Connection**: ¼”-28 UNF or custom

### Dosing Performance

- **Min. Pusher Velocity**: 65 mm/s
- **Max. Pusher Velocity**: 95 mm/s
- **Min. Increment**: 0.5 µm
- **Step Frequency Pulsation Free**: 30 increments/s
- **Max. Shear Force**: 1000 N

---

### Syringes – Pressures & Flow Rates

#### Steel (optional lining or coating available)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>51.26</td>
<td>200</td>
<td>0.02</td>
<td>7.0</td>
</tr>
<tr>
<td>2.5</td>
<td>49.99</td>
<td>200</td>
<td>0.05</td>
<td>18.0</td>
</tr>
<tr>
<td>5</td>
<td>52.85</td>
<td>100</td>
<td>0.09</td>
<td>34.6</td>
</tr>
<tr>
<td>10</td>
<td>49.89</td>
<td>50</td>
<td>0.20</td>
<td>72.2</td>
</tr>
<tr>
<td>25</td>
<td>50.86</td>
<td>20</td>
<td>0.49</td>
<td>176.9</td>
</tr>
<tr>
<td>50</td>
<td>51.91</td>
<td>10</td>
<td>0.97</td>
<td>346.8</td>
</tr>
</tbody>
</table>

*... pressure restricted by force of pump module
**... pulsation-free flow, without using check valves

#### Glass

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>60</td>
<td>37</td>
<td>0.02</td>
<td>6.0</td>
</tr>
<tr>
<td>2.5</td>
<td>60</td>
<td>23</td>
<td>0.04</td>
<td>15.0</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
<td>17</td>
<td>0.08</td>
<td>30.0</td>
</tr>
<tr>
<td>10</td>
<td>60</td>
<td>13</td>
<td>0.17</td>
<td>60.0</td>
</tr>
<tr>
<td>25</td>
<td>60</td>
<td>11</td>
<td>0.42</td>
<td>150.0</td>
</tr>
</tbody>
</table>

*... pressure restricted by strength of syringe
**... pulsation-free flow, without using check valves

### Accessories

**MAGCHEX™ - High Versatility Check Valve**

- Low flow rate capability (< 10 µl/min)
- High system pressures (200 bar)
- Adjustable cracking pressure (0.16 – 0.5 bar)
- Metal-free & highly resistant

### Coatings for Equipment

- High resistant - PTFE lining
- Extreme resistant - Tantalum-coating (e.g. hot acids)
- Ideal for continuous flow applications and long term dosing use