FLUIDPUMPS

PREMIUM - Double Diaphragm Pumps, - High Pressure Double Diaphragm Pumps, - Electrically Piston Pumps, - Pneumatic Piston Pumps
Timmer GmbH is your reliable partner in the area of pneumatics, vacuum technology as well as pumping and dosing technology. With more than 130 employees, we develop, manufacture and sell an extensive array of products at two factories - ranging from custom-specific solutions through to technical accessories. In short: we offer you everything you need in your daily practice. Our products are known under the brand names Timmer und TIVAtec all over the world.
## Overview fluidpumps

### PREMIUM double diaphragm pumps 1:1

<table>
<thead>
<tr>
<th>Construction size</th>
<th>Type</th>
<th>Output</th>
<th>Operating pressure</th>
<th>Material design</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>PTI-MEM1060</td>
<td>60 l/min</td>
<td>1 - 8 bar</td>
<td>stainless steel</td>
<td>10</td>
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<tr>
<td></td>
<td>PTI-MEM1060-AL</td>
<td>60 l/min</td>
<td>1 - 8 bar</td>
<td>AL</td>
<td>14</td>
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<tr>
<td></td>
<td>PTI-MEM1060V-PPS</td>
<td>60 l/min</td>
<td>1 - 8 bar</td>
<td>PPS</td>
<td>18</td>
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<td></td>
<td>PTI-MEM1060V-PP</td>
<td>60 l/min</td>
<td>1 - 8 bar</td>
<td>PP</td>
<td>22</td>
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<tr>
<td>1&quot;</td>
<td>PTI-MEM1150-VA</td>
<td>150 l/min</td>
<td>1 - 8 bar</td>
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<td></td>
<td>PTI-MEM1150-AL</td>
<td>150 l/min</td>
<td>1 - 8 bar</td>
<td>Alu</td>
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### PREMIUM high pressure double diaphragm pumps

<table>
<thead>
<tr>
<th>Construction size</th>
<th>Type</th>
<th>Output</th>
<th>Operating pressure</th>
<th>Material design</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;</td>
<td>PTI-MHD1030</td>
<td>30 l/min</td>
<td>1 - 6 bar</td>
<td>stainless steel</td>
<td>34</td>
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<tr>
<td>1/2&quot;</td>
<td>PTI-MHD1050</td>
<td>50 l/min</td>
<td>1 - 6 bar</td>
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<td>38</td>
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<tr>
<td>1/2&quot;</td>
<td>PTI-MHD1065</td>
<td>65 l/min</td>
<td>1 - 6 bar</td>
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<td>42</td>
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<tr>
<td>1&quot;</td>
<td>PTI-MHD1110</td>
<td>110 l/min</td>
<td>1 - 7 bar</td>
<td>stainless steel</td>
<td>46</td>
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</table>
### Overview fluid pumps

#### PREMIUM electrical piston pumps

<table>
<thead>
<tr>
<th>Type</th>
<th>Output</th>
<th>Operating pressure</th>
<th>Material design</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTI-KPE1020</td>
<td>20 l/min</td>
<td>16 bar</td>
<td>stainless steel</td>
<td>52</td>
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<tr>
<td>PTI-KPE1030</td>
<td>30 l/min</td>
<td>16 bar</td>
<td>stainless steel</td>
<td>56</td>
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<tr>
<td>PTI-KPE1040</td>
<td>40 l/min</td>
<td>20 bar</td>
<td>stainless steel</td>
<td>60</td>
</tr>
<tr>
<td>PTI-KPE1060</td>
<td>60 l/min</td>
<td>16 bar</td>
<td>stainless steel</td>
<td>64</td>
</tr>
</tbody>
</table>

#### back pressure regulator

<table>
<thead>
<tr>
<th>Type</th>
<th>Flow rate</th>
<th>Fluid pressure</th>
<th>Material design</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTI-MDRP</td>
<td>40 l/min</td>
<td>25 bar</td>
<td>stainless steel</td>
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</table>

#### PREMIUM pneumatic piston pumps

<table>
<thead>
<tr>
<th>Type</th>
<th>Output</th>
<th>Operating pressure</th>
<th>Material design</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumatic Coagulant Pump</td>
<td>0,18 l/min</td>
<td>3 - 6 bar</td>
<td>POM</td>
<td>74</td>
</tr>
</tbody>
</table>
Timmer has earned a good reputation as a reliable partner and manufacturer of reliable pumps, especially in the areas of paint supply and the printing industry for many years now. Timmer is at the cutting edge and works closely with its partners. Thus, it could again and again improve its position with innovative ideas and individual product solutions.

Timmer products from the timECO, timBOOST, timPRO and timCOA series are characterized by their high quality. Since these products are all “Made in Germany”, the production processes can also be closely supervised. In addition, the Timmer products are permanently improved, so that the products always show process-optimizing solutions, such as improved rinsing capability, better residue emptying, etc. With the developments of the timECO series, for instance the electric piston pumps, the intelligent sensor, etc., Timmer is now taking the next step towards Industry 4.0 and has set itself the task to further develop its own products for the upcoming digital expansion in the future.

Pneumatic double diaphragm pumps 1:1 (PTI-MEM)

Pneumatic double diaphragm pumps with pressure intensification (PTI-MHD)

Electrical piston pumps (PTI-KPE)

Pneumatic piston pumps for glue conveyance (PTI-D)

Pneumatic coagulant pumps (PTI-E)
Timmer offers with the timBOOST series pneumatic double diaphragm pumps with pressure intensifier in different versions, which are ideally suited for the supply of small and medium paint supply systems. In addition to the timBoost series, Timmer offers with the timPRO series reliable, pneumatic process and transfer pumps without pressure intensifier.
Stroke counting:

At the customer’s request, all Timmer PREMIUM double diaphragm pumps can be provided with optional stroke counting. The stroke counting is also approved for the explosion protection area (ATEX). The signal of the sensor enables the following evaluations in conjunction with a connected control system:

- Frequency monitoring
- Stroke counting
- Calculation of flow rates
- Monitoring of pump function
- Detection of process changes
- Display of maintenance intervals

Optional with magnetic sensor for stroke counting
Even in the supply of larger paint supply systems, Timmer’s timECO series includes electric piston pumps that allow to reproducibly and reliably adapt paint supply.
PTI-MEM1060

Output approx. 60 l/min
ATEX (for further information see operating manual)

1/2" double diaphragm pumps

60 l/min

www.timmer-pumps.com/en/double_diaphragm_pumps_1to1

INLINE-Version MEM1060I & MEM1060VI

Gravity-loaded valve balls

Spring-loaded media valves

Technical and visual modifications are reserved.
### PREMIUM Double diaphragm pumps PTI-MEM1060

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Alignment of suction pipes</th>
<th>Alignment of pressure pipes</th>
<th>Material design</th>
<th>ATEX</th>
</tr>
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<tbody>
<tr>
<td>53507114</td>
<td>PTI-MEM1060-VA-TF-VA-VA-VIEX-AL</td>
<td>forward</td>
<td>forward</td>
<td>stainless steel</td>
<td>✓</td>
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<tr>
<td>53507002</td>
<td>PTI-MEM1060I-VA-TF-VA-VA-VIEX-AL</td>
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<td>upward</td>
<td>stainless steel</td>
<td>✓</td>
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<tr>
<td>53507108</td>
<td>PTI-MEM1060V-VA-TF-TF-VA-VIEX-AL</td>
<td>forward</td>
<td>forward</td>
<td>stainless steel</td>
<td>✓</td>
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<tr>
<td>53507113</td>
<td>PTI-MEM1060VI-VA-TF-TF-VA-VIEX-AL</td>
<td>downward</td>
<td>upward</td>
<td>stainless steel</td>
<td>✓</td>
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</tbody>
</table>

Optional with magnetic sensor for stroke counting

*53507108

**www.timmer-pumps.com/en/double-diaphragm-pumps-1-to-1-service**
### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>1 to 1</td>
</tr>
<tr>
<td>Output (max.)</td>
<td>approx. 60 l/min (with water)</td>
</tr>
<tr>
<td>with PTFE-compound diaphragm</td>
<td></td>
</tr>
<tr>
<td>Drive</td>
<td>pneumatic</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>3/4&quot; Female thread 90° rotable</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>1 - 8 bar compressed air, unoiled, filtered or oiled</td>
</tr>
<tr>
<td>Compressed air connection</td>
<td>hose external Ø 8 mm, internal Ø 6 mm</td>
</tr>
<tr>
<td>Suction height dry (max.)</td>
<td>4 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 6.2 kg</td>
</tr>
<tr>
<td>Viscosity of pumped medium</td>
<td>up to 15,000 mPas</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>+65 °C</td>
</tr>
<tr>
<td>Noise level</td>
<td>68 dB (A)</td>
</tr>
<tr>
<td>Strokes (max.)</td>
<td>8 doublestrokes /s</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

### Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
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</thead>
<tbody>
<tr>
<td>Side part</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Middle section of the housing</td>
<td>aluminium</td>
</tr>
<tr>
<td>Fluid seals</td>
<td>FEPM</td>
</tr>
<tr>
<td>Pneumatic seals</td>
<td>NBR</td>
</tr>
<tr>
<td>Valve seats</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve balls</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>PTFE / NBR as composite</td>
</tr>
<tr>
<td>Control valves</td>
<td>ceramic flat slide / POM</td>
</tr>
<tr>
<td>Screws</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Cover sheet</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve pipes</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Springs</td>
<td>spring steel</td>
</tr>
</tbody>
</table>
Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
PTI-MEM1060

Output approx. 60 l/min
ATEX (for further information see operating manual)
PREMIUM-Double diaphragm pumps PTI-MEM1060

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Typee</th>
<th>Alignment of suction pipes</th>
<th>Alignment of pressure pipes</th>
<th>Material design</th>
<th>ATEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>53507271</td>
<td>PTI-MEM1060-AL-TF-POM-VA-EPDM-AL</td>
<td>forward</td>
<td>forward</td>
<td>AL</td>
<td>✓</td>
</tr>
<tr>
<td>53507460</td>
<td>PTI-MEM1060I-AL-TF-POM-VA-EPDM-AL</td>
<td>downward</td>
<td>upward</td>
<td>AL</td>
<td>✓</td>
</tr>
</tbody>
</table>

Optional with magnetic sensor for stroke counting

G 3/4” Pressure connection female thread

G 1/2” Exhaust

G 3/8” Air supply

G 3/4” Suction connection

1/2”
60 l/min

www.timmer-pumps.com/en/double-diaphragm-pumps-1to1-service

Technical and visual modifications are reserved.
The timPRO series pumps have been successfully used for many years as process and transfer pumps in the area of paint supply and in the printing machine industry. They are characterized in particular by their process reliability, easy servicing, small and compact design, good workmanship and long service life. All versions are also available on request with sensors that allow real-time testing of stroke signals via a customer PLC.

### Technical data

| **Transmission** | 1 to 1 |
| **Output (max.)** | approx. 60 l/min (with water) with PTFE-compound diaphragm |
| **Drive** | pneumatic |
| **Fluid connections** | 3/4” Female thread 90° rotatable |
| **Operating pressure** | 1 - 8 bar compressed air, unoiled, filtered or oiled |
| **Compressed air connection** | hose external Ø 8 mm, internal Ø 6 mm |
| **Suction height dry (max.)** | 4 m |
| **Weight** | approx. 4,5 kg |
| **Viscosity of pumped medium** | up to 15,000 mPas |
| **Temperature of fluids (max.)** | +65 °C |
| **Noise level** | 68 dB (A) |
| **Strokes (max.)** | 8 doublestrokes /s |
| **Ex-Protection** | ATEX (for further information see operating manual) |

### Materials

| **Side part** | aluminium |
| **Middle section of the housing** | aluminium |
| **Fluid seals** | EPDM |
| **Pneumatic seals** | NBR |
| **Valve seats** | stainless steel |
| **Valve balls** | POM |
| **Diaphragm** | PTFE / NBR as composite material |
| **Control valves** | ceramic flat slide / POM |
| **Screws** | stainless steel |
| **Cover sheet** | stainless steel |
| **Valve pipes** | aluminium |
| **Springs** | spring steel |
Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
PTI-MEM1060
Output approx. 60 l/min
ATEX (for further information see operating manual)

Polyphenylene-sulfid (PPS)

1/2"
60 l/min

www.timmer-pumps.com/en/
double_diaphragm_pumps_1to1

INLINE-Version MEM1060VI
Gravity-loaded valve balls
### PREMIUM-Double diaphragm pumps PTI-MEM1060

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Alignment of suction pipes</th>
<th>Alignment of pressure pipes</th>
<th>Material design</th>
<th>ATEX</th>
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<tbody>
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<td>forward</td>
<td>PPS</td>
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<tr>
<td>53507075</td>
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<td>upward</td>
<td>PPS</td>
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<tr>
<td>53507402*</td>
<td>PTI-MEM1060V-PPS-TF-TF-PPS-VIEX-AL</td>
<td>downward</td>
<td>upward</td>
<td>PPS</td>
<td>✔</td>
</tr>
</tbody>
</table>

Optional with magnetic sensor for stroke counting

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**1/2” 60 l/min**

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**Other versions on request**

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www.timmer-pumps.com/en/double-diaphragm-pumps-1to1-service

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The timPRO series pumps have been successfully used for many years as process and transfer pumps in the area of paint supply and in the printing machine industry. They are characterized in particular by their process reliability, easy servicing, small and compact design, good workmanship and long service life. All versions are also available on request with sensors that allow real-time testing of stroke signals via a customer PLC.

### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Transmission</td>
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<tr>
<td>Output (max.)</td>
<td>approx. 60 l/min (with water)</td>
</tr>
<tr>
<td></td>
<td>with PTFE-compound diaphragm</td>
</tr>
<tr>
<td>Drive</td>
<td>pneumatic</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>3/4” Female thread 90° rotatable</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>1 - 8 bar compressed air, unoiled, filtered or oiled</td>
</tr>
<tr>
<td>Compressed air connection</td>
<td>hose external Ø 8 mm, internal Ø 6 mm</td>
</tr>
<tr>
<td>Suction height dry (max.)</td>
<td>4 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 4.4 kg</td>
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<tr>
<td>Viscosity of pumped medium</td>
<td>up to 15,000 mPas</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>+65 °C</td>
</tr>
<tr>
<td>Noise level</td>
<td>68 dB (A)</td>
</tr>
<tr>
<td>Strokes (max.)</td>
<td>8 doublestrokes /s</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

### Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side part</td>
<td>PPS</td>
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<tr>
<td>Middle section of the housing</td>
<td>aluminium</td>
</tr>
<tr>
<td>Fluid seals</td>
<td>FEPM</td>
</tr>
<tr>
<td>Pneumatic seals</td>
<td>NBR</td>
</tr>
<tr>
<td>Valve seats</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve balls</td>
<td>PTFE</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>PTFE / NBR as composite material</td>
</tr>
<tr>
<td>Control valves</td>
<td>ceramic flat slide / POM</td>
</tr>
<tr>
<td>Screws</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Cover sheet</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve pipes</td>
<td>PPS</td>
</tr>
<tr>
<td>Springs</td>
<td>spring steel</td>
</tr>
</tbody>
</table>
Fluid flow rate

Features

- Process reliable
- Simple exchange of the diaphragm
- Chemically resistant diaphragm (high durability)
- Diaphragm CIP-capable
- Optimized flushability
- Small compact design
- Reliable starting due to spring valve
- Low-wear pneumatic ceramic valve (process reliable)
- Low maintenance
- Suction and pressure connection 90° rotatable
- Suitable for dry running

Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
PTI-MEM1060-PP

Output approx. 60 l/min

Polypropylene (PP)

www.timmer-pumps.com/en/double_diaphragm_pumps_1to1
PREMIUM-Double diaphragm pump PTI-MEM1060

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
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<th>Alignment of pressure pipes</th>
<th>Material design</th>
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</thead>
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<tr>
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<td>forward</td>
<td>forward</td>
<td>PP</td>
</tr>
</tbody>
</table>

Optional with magnetic sensor for stroke counting

www.timmer-pumps.com/en/double-diaphragm-pumps-1to1-service
The timPRO series pumps have been successfully used for many years as process and transfer pumps in the area of paint supply and in the printing machine industry. They are characterized in particular by their process reliability, easy servicing, small and compact design, good workmanship and long service life.

All versions are also available on request with sensors that allow real-time testing of stroke signals via a customer PLC.

### Technical data

<table>
<thead>
<tr>
<th>Transmission</th>
<th>1 to 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output (max.)</td>
<td>approx. 60 l/min (with water)</td>
</tr>
<tr>
<td>Drive</td>
<td>pneumatic</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>G 3/4” Female thread</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>1 - 7 bar compressed air, unoiled, filtered or oiled</td>
</tr>
<tr>
<td>Compressed air connection</td>
<td>G 1/2”</td>
</tr>
<tr>
<td>Suction height dry (max.)</td>
<td>4 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 4 kg</td>
</tr>
<tr>
<td>Viscosity of pumped medium</td>
<td>up to 15,000 mPas</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>5 °C up to 60 °C</td>
</tr>
<tr>
<td>Noise level</td>
<td>64 dB(A) 20 DH/min 0.1 MPa</td>
</tr>
<tr>
<td>Strokes (max.)</td>
<td>7 doublestrokes /s</td>
</tr>
</tbody>
</table>

### Materials

<table>
<thead>
<tr>
<th>Side part</th>
<th>PP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle section of the housing</td>
<td>aluminium</td>
</tr>
<tr>
<td>Fluid seals</td>
<td>FKM</td>
</tr>
<tr>
<td>Pneumatic seals</td>
<td>NBR</td>
</tr>
<tr>
<td>Valve seats</td>
<td>PVDF</td>
</tr>
<tr>
<td>Valve balls</td>
<td>PTFE</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>EPDM</td>
</tr>
<tr>
<td>Control valves</td>
<td>ceramics / POM</td>
</tr>
<tr>
<td>Screws</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Cover sheet</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve pipes</td>
<td>PP</td>
</tr>
<tr>
<td>Springs</td>
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</tr>
</tbody>
</table>
Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
PTI-MEM1150

Output approx. 150 l/min
ATEX (for further information see operating manual)

www.timmer-pumps.com/en-double_diaphragm_pumps_1to1
## PREMIUM-Double diaphragm pumps PTI-MEM1150

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Alignment of suction pipes</th>
<th>Alignment of pressure pipes</th>
<th>Material design</th>
<th>ATEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>53507500</td>
<td>PTI-MEM1150-VA-TF-VA-VA-Viex-AL</td>
<td>forward</td>
<td>forward</td>
<td>stainless steel</td>
<td></td>
</tr>
<tr>
<td>53507502</td>
<td>PTI-MEM1150I-VA-TF-VA-VA-Viex-AL</td>
<td>downward</td>
<td>upward</td>
<td>stainless steel</td>
<td></td>
</tr>
</tbody>
</table>

Optional with magnetic sensor for stroke counting

---

### Technical and visual modifications are reserved.
The timPRO series pumps have been successfully used for many years as process and transfer pumps in the area of paint supply and in the printing machine industry. They are characterized in particular by their process reliability, easy servicing, small and compact design, good workmanship and long service life. All versions are also available on request with sensors that allow real-time testing of stroke signals via a customer PLC.

### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>1 to 1</td>
</tr>
<tr>
<td>Output (max.)</td>
<td>approx. 150 l/min (with water)</td>
</tr>
<tr>
<td></td>
<td>with PTFE-compound diaphragm</td>
</tr>
<tr>
<td>Drive</td>
<td>pneumatic</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>G1(\frac{1}{4})&quot; Female thread 90° rotable</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>1 - 8 bar compressed air, unoiled, filtered or oiled</td>
</tr>
<tr>
<td>Compressed air connection</td>
<td>G1/2&quot;</td>
</tr>
<tr>
<td>Suction height dry (max.)</td>
<td>4 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 15 kg</td>
</tr>
<tr>
<td>Viscosity of pumped medium</td>
<td>up to 15,000 mPas</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>+65 °C</td>
</tr>
<tr>
<td>Noise level</td>
<td>68 dB (A)</td>
</tr>
<tr>
<td>Strokes (max.)</td>
<td>7 doublestrokes /s</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

### Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Material Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side part</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Middle section of the housing</td>
<td>aluminium</td>
</tr>
<tr>
<td>Fluid seals</td>
<td>FEPM</td>
</tr>
<tr>
<td>Pneumatic seals</td>
<td>NBR</td>
</tr>
<tr>
<td>Valve seats</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve balls</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>PTFE / NBR as composite material</td>
</tr>
<tr>
<td>Control valves</td>
<td>ceramic flat slide / POM</td>
</tr>
<tr>
<td>Screws</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Cover sheet</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve pipes</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Springs</td>
<td>spring steel</td>
</tr>
</tbody>
</table>
**Features**

- Process reliable
- Simple exchange of the diaphragm
- Chemically resistant diaphragm (high durability)
- Diaphragm CIP-capable
- Optimized flushability
- Small compact design
- Reliable starting due to spring valve
- Low-wear pneumatic ceramic valve (process reliable)
- Low maintenance
- Suction and pressure connection 90° rotatable
- Suitable for dry running

**Fluids**

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
PTI-MEM1150

Output approx. 150 l/min
ATEX (for further information see operating manual)

1"
150 l/min

Aluminium (AL)

Spring-loaded media valves

www.timmer-pumps.com/en/double_diaphragm_pumps_1to1

INLINE-Version MEM1150I
PREMIUM-Double diaphragm pumps PTI-MEM1150

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Alignment of suction pipes</th>
<th>Alignment of pressure pipes</th>
<th>Material design</th>
<th>ATEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>53507599</td>
<td>PTI-MEM1150-AL-TF-POM-VA-EPDM-AL</td>
<td>forward</td>
<td>forward</td>
<td>AL</td>
<td>✓</td>
</tr>
<tr>
<td>53507612</td>
<td>PTI-MEM1150I-AL-TF-POM-VA-EPDM-AL</td>
<td>downward</td>
<td>upward</td>
<td>AL</td>
<td>✓</td>
</tr>
</tbody>
</table>

Optional with magnetic sensor for stroke counting

www.timmer-pumps.com/en/double-diaphragm-pumps-1to1-service

Technical and visual modifications are reserved.
The timPRO series pumps have been successfully used for many years as process and transfer pumps in the area of paint supply and in the printing machine industry. They are characterized in particular by their process reliability, easy servicing, small and compact design, good workmanship and long service life. All versions are also available on request with sensors that allow real-time testing of stroke signals via a customer PLC.

### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>1 to 1</td>
</tr>
<tr>
<td>Output (max.)</td>
<td>approx. 150 l/min (with water) with PTFE-compound diaphragm</td>
</tr>
<tr>
<td>Drive</td>
<td>pneumatic</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>G1\¼&quot; Female thread 90° rotatable</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>1 - 8 bar compressed air, unoiled, filtered or oiled</td>
</tr>
<tr>
<td>Compressed air connection</td>
<td>G1/2&quot;</td>
</tr>
<tr>
<td>Suction height dry (max.)</td>
<td>4 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 15 kg</td>
</tr>
<tr>
<td>Viscosity of pumped medium</td>
<td>up to 15,000 mPas</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>+65 °C</td>
</tr>
<tr>
<td>Noise level</td>
<td>68 dB (A)</td>
</tr>
<tr>
<td>Strokes (max.)</td>
<td>7 doublestrokes /s</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

### Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side part</td>
<td>aluminium</td>
</tr>
<tr>
<td>Middle section of the housing</td>
<td>aluminium</td>
</tr>
<tr>
<td>Fluid seals</td>
<td>EPDM</td>
</tr>
<tr>
<td>Pneumatic seals</td>
<td>NBR</td>
</tr>
<tr>
<td>Valve seats</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve balls</td>
<td>POM</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>PTFE / NBR as composite material</td>
</tr>
<tr>
<td>Control valves</td>
<td>ceramic flat slide</td>
</tr>
<tr>
<td>Screws</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Cover sheet</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve pipes</td>
<td>aluminium</td>
</tr>
<tr>
<td>Springs</td>
<td>spring steel</td>
</tr>
</tbody>
</table>
Fluid flow rate

![Fluid flow rate graph](image)

**Features**

- Process reliable
- Simple exchange of the diaphragm
- Chemically resistant diaphragm (high durability)
- Diaphragm CIP-capable
- Optimized flushability
- Small compact design
- Reliable starting due to spring valve
- Low-wear pneumatic ceramic valve (process reliable)
- Low maintenance
- Suction and pressure connection 90° rotatable
- Suitable for dry running

**Fluids**

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
PTI-MHD1030

Output approx. 30 l/min
ATEX (for further information see operating manual)

www.timmer-pumps.com/en/pneumatic-high-pressure-pumps
PREMIUM-High pressure double diaphragm pumps PTI-MHD1030

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Alignment of suction pipes</th>
<th>Alignment of pressure pipes</th>
<th>Material design</th>
<th>ATEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>53508574</td>
<td>PTI-MHD1030-VA-TF-VA-TF-VIEX-AL</td>
<td>forward</td>
<td>forward</td>
<td>stainless steel</td>
<td>✓</td>
</tr>
<tr>
<td>53508576</td>
<td>PTI-MHD1030I-VA-TF-VA-TF-VIEX-AL</td>
<td>upward</td>
<td>downward</td>
<td>stainless steel</td>
<td>✓</td>
</tr>
</tbody>
</table>

Optional with magnetic sensor for stroke counting

www.timmer-pumps.com/en/pneumatic-high-pressure-pumps-service
The pneumatic, pressure-intensified double diaphragm pumps from the timBOOST series have been successfully used for years in the area of paint supply, to supply small and medium-sized systems.

In addition to the process reliability, serviceability, small and compact design, good workmanship and long service life, the pumps are characterized in particular by the high media pressures that can be achieved.

Furthermore, the series has been extended by the 50l (MHD1050) and 110 l (MHD1110) models, so that the operating range for the pneumatic, pressure-intensified pumps has significantly increased, making the timBOOST series more versatile. All versions are also available on request with sensors that allow real-time testing of stroke signals via a customer PLC.

### Technical data

- **Transmission**: approx. 3,5 to 1
- **Output (max.)**: approx. 30 l/min (with water)
- **Discharge pressure (max.)**: 20 bar
- **Drive**: pneumatic
- **Fluid connections**: 1/2” BSP-Female thread 90° rotable (different pipe versions required!)
- **Operating pressure**: 1 - 6 bar compressed air, unoiled, filtered or oiled
- **Compressed air connection**: 1/2” BSP-Female thread
- **Suction height dry**: approx. 4 meters self-priming
- **Weight**: approx. 10 kg
- **Temperature of fluids (max.)**: +5 °C up to + 65 °C
- **Ex-Protection**: ATEX (for further information see operating manual)

### Materials

- **Side part**: stainless steel
- **Middle section of the housing**: aluminium
- **Fluid seals**: FEPM
- **Pneumatic seals**: NBR
- **Valve seats**: stainless steel/PTFE
- **Valve balls**: stainless steel
- **Diaphragm**: PTFE / NBR as composite material
- **Control valves**: ceramic flat slide / POM
- **Screws**: stainless steel
- **Cover sheet**: stainless steel
- **Valve pipes**: stainless steel
Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.

Features

- Chemically resistant and durable diaphragm at pressures up to 20 bar
- Diaphragm CIP-capable
- Suitable for dry running
- Small compact construction size
- Low-wear pneumatic ceramic valve with safe start-up behavior in every position
- Low maintenance
- High durability of TIM-Flex-Diaphragm
- The use of spring actuated fluid valves offers advantages such as:
  - good intake behavior, low pulsation, various selectable installation positions,
  - usability even with highly viscous fluids.
- Optimized flow through the fluid valves and diaphragm chambers, thus low fluid shear
PTI-MHD1050

Output approx. 50 l/min
ATEX (for further information see operating manual)

www.timmer-pumps.com/en/pneumatic-high-pressure-pumps
PREMIUM-High pressure double diaphragm pump PTI-MHD1050

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Alignment of media pipes</th>
<th>Material design</th>
<th>ATEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>53509050</td>
<td>PTI-MHD1050-VA-TF-VA-VA-VIEX-AL</td>
<td>Connections mountable right-or left sided</td>
<td>stainless steel</td>
<td>✓</td>
</tr>
</tbody>
</table>

Optional with magnetic sensor for stroke counting

1/2”
High pressure double diaphragm pump 3,5:1
approx. 50 l/min

www.timmer-pumps.com/en/pneumatic-high-pressure-pumps-service

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The pneumatic, pressure-intensified double diaphragm pumps from the timBOOST series have been successfully used for years in the area of paint supply, to supply small and medium-sized systems.

In addition to the process reliability, serviceability, small and compact design, good workmanship and long service life, the pumps are characterized in particular by the high media pressures that can be achieved.

Furthermore, the series has been extended by the 50 l (MHD1050) and 110 l (MHD1110) models, so that the operating range for the pneumatic, pressure-intensified pumps has significantly increased, making the timBOOST series more versatile. All versions are also available on request with sensors that allow real-time testing of stroke signals via a customer PLC.

## Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>approx. 3.5 to 1</td>
</tr>
<tr>
<td>Output (max.)</td>
<td>approx. 50 l/min (with water)</td>
</tr>
<tr>
<td>Discharge pressure (max.)</td>
<td>20 bar</td>
</tr>
<tr>
<td>Drive</td>
<td>pneumatic</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>1 - 6 bar compressed air, unoiled, filtered or oiled</td>
</tr>
<tr>
<td>Compressed air connection</td>
<td>1/2&quot; BSP-Female thread</td>
</tr>
<tr>
<td>Suction height dry</td>
<td>approx. 4 meters self-priming</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 15 kg</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>+5 °C up to + 65 °C</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

## Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side part</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Middle section of the housing</td>
<td>Aluminium</td>
</tr>
<tr>
<td>Fluid seals</td>
<td>FEPM</td>
</tr>
<tr>
<td>Pneumatic seals</td>
<td>NBR</td>
</tr>
<tr>
<td>Valve seats</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve balls</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>PTFE / NBR as composite material</td>
</tr>
<tr>
<td>Control valves</td>
<td>ceramic flat slide</td>
</tr>
<tr>
<td>Screws</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Cover sheet</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve pipes</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Springs</td>
<td>spring steel</td>
</tr>
</tbody>
</table>
Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.

Features

- Chemically resistant and durable diaphragm at pressures up to 20 bar
- Diaphragm CIP-capable
- Suitable for dry running
- Small compact construction size
- Low-wear pneumatic ceramic valve with safe start-up behavior in every position
- Low maintenance
- High durability of TIM-Flex-Diaphragm
- The use of spring actuated fluid valves offers advantages such as: good intake behavior, low pulsation, various selectable installation positions, usability even with highly viscous fluids.
- Optimized flow through the fluid valves and diaphragm chambers, thus low fluid shear
PTI-MHD1065

Output approx. 65 l/min
ATEX (for further information see operating manual)

www.timmer-pumps.com/en/pneumatic-high-pressure-pumps

INLINE-Version MHD1065I
Spring-loaded media valves
## PREMIUM-High pressure double diaphragm pumps PTI-MHD1065

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Alignment of suction pipes</th>
<th>Alignment of pressure pipes</th>
<th>Material design</th>
<th>ATEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>53508066</td>
<td>PTI-MHD1065-VA-TF-VA-VA-VIEX-AL</td>
<td>forward</td>
<td>forward</td>
<td>stainless steel</td>
<td>✔</td>
</tr>
<tr>
<td>53508140</td>
<td>PTI-MHD1065I-VA-TF-VA-VA-VIEX-AL</td>
<td>downward</td>
<td>upward</td>
<td>stainless steel</td>
<td>✔</td>
</tr>
</tbody>
</table>

Optional with magnetic sensor for stroke counting.

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The pneumatic, pressure-intensified double diaphragm pumps from the timBOOST series have been successfully used for years in the area of paint supply, to supply small and medium-sized systems.

In addition to the process reliability, serviceability, small and compact design, good workmanship and long service life, the pumps are characterized in particular by the high media pressures that can be achieved.

Furthermore, the series has been extended by the 50 l (MHD1050) and 110 l (MHD1110) models, so that the operating range for the pneumatic, pressure-intensified pumps has significantly increased, making the timBOOST series more versatile. All versions are also available on request with sensors that allow real-time testing of stroke signals via a customer PLC.

### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>approx. 3,5 to 1</td>
</tr>
<tr>
<td>Output (max.)</td>
<td>approx. 65 l/min (with water)</td>
</tr>
<tr>
<td>Discharge pressure (max.)</td>
<td>20 bar</td>
</tr>
<tr>
<td>Drive</td>
<td>pneumatic</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>1“ BSP-Female thread 90° rotatable</td>
</tr>
<tr>
<td></td>
<td>(Different pipe versions required!)</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>1 - 6 bar compressed air, unoiled, filtered or oiled</td>
</tr>
<tr>
<td>Compressed air connection</td>
<td>1/2“ BSP-Female thread</td>
</tr>
<tr>
<td>Suction height dry</td>
<td>approx. 4 meters self-priming</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 15.5 kg</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>+5 °C up to + 65 °C</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

### Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side part</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Middle section of the housing</td>
<td>aluminium</td>
</tr>
<tr>
<td>Fluid seals</td>
<td>FEPM</td>
</tr>
<tr>
<td>Pneumatic seals</td>
<td>NBR</td>
</tr>
<tr>
<td>Valve seats</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve balls</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>ceramic flat slide / POM</td>
</tr>
<tr>
<td>Control valves</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Screws</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Cover sheet</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve pipes</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Springs</td>
<td>spring steel</td>
</tr>
</tbody>
</table>
Fluid flow rate

Features

- Chemically resistant and durable diaphragm at pressures up to 20 bar
- Diaphragm CIP-capable
- Suitable for dry running
- Improved flushability of the pump with low detergent consumption
- Small compact construction size
- Low-wear pneumatic ceramic valve with safe start-up behavior in every position
- No icing, therefore process-reliable
- Low maintenance
- High durability of TIM-Flex-Diaphragm
- The use of spring actuated fluid valves offers advantages such as:
  good intake behavior, low pulsation, various selectable installation positions,
  usability even with highly viscous fluids.

Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
PTI-MHD1110
Output approx. 110 l/min
ATEX (for further information see operating manual)

www.timmer-pumps.com/en/
pneumatic-high-pressure-pumps
## PREMIUM-High pressure double diaphragm pump PTI-MHD1110

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Material</th>
<th>Alignment of media pipes</th>
<th>ATEX</th>
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</thead>
<tbody>
<tr>
<td>53509544</td>
<td>PTI-MHD1110V-VA-TF-VA-TF-FEMP-AL</td>
<td>stainless steel</td>
<td>180° rotatable</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Technical and visual modifications are reserved.**

![Diagram of the pump](image-url)

**www.timmer-pumps.com/en/pneumatic-high-pressure-pumps-service**

**Technical and visual modifications are reserved.**

---

**1” high pressure double diaphragm pump 4:1 approx. 110 l/min**

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The pneumatic, pressure-intensified double diaphragm pumps from the timBOOST series have been successfully used for years in the area of paint supply, to supply small and medium-sized systems.

In addition to the process reliability, serviceability, small and compact design, good workmanship and long service life, the pumps are characterized in particular by the high media pressures that can be achieved.

Furthermore, the series has been extended by the 50 l (MHD1050) and 110 l (MHD1110) models, so that the operating range for the pneumatic, pressure-intensified pumps has significantly increased, making the timBOOST series more versatile.

All versions are also available on request with sensors that allow real-time testing of stroke signals via a customer PLC.

### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>4 to 1</td>
</tr>
<tr>
<td>Output (max.)</td>
<td>approx. 110 l/min (with water)</td>
</tr>
<tr>
<td>Discharge pressure (max.)</td>
<td>25 bar</td>
</tr>
<tr>
<td>Drive</td>
<td>pneumatic</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>1” BSP</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>1 - 7 bar compressed air, unoiled, filtered or oiled</td>
</tr>
<tr>
<td>Compressed air connection</td>
<td>G1/2”</td>
</tr>
<tr>
<td>Suction height dry</td>
<td>approx. 4 meters</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 45 kg</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>+5 °C up to + 65 °C</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

### Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side part</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Middle section of the housing</td>
<td>aluminium</td>
</tr>
<tr>
<td>Fluid seals</td>
<td>FEPM</td>
</tr>
<tr>
<td>Pneumatic seals</td>
<td>NBR/PUR</td>
</tr>
<tr>
<td>Valve seats</td>
<td>PTFE</td>
</tr>
<tr>
<td>Valve balls</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>PTFE / NBR as composite material</td>
</tr>
<tr>
<td>Control valves</td>
<td>ceramics</td>
</tr>
<tr>
<td>Screws</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Cover sheet</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve pipes</td>
<td>stainless steel</td>
</tr>
</tbody>
</table>
Features

- Chemically resistant and durable diaphragm at pressures up to 25 bar
- Diaphragm CIP-capable
- Suitable for dry running
- Removable modular pneumatic valve
- Low-wear pneumatic ceramic valve with safe start-up behavior in every position
- Low maintenance
- High durability of TIM-Flex-Diaphragm
- Optimized flow through the fluid valves and diaphragm chambers, thus low fluid shear

Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
The intelligent timECO sensor has decisive advantages over conventional sensors for stroke frequency recording. In addition to a variable switching point adjustment to the signal, i.e. where each stroke is recorded, even, for example, if constant magnetic field interference is present, the magnetism of the magnet decreases, or the distance between the magnet and the sensor is displaced*, the intelligent timECO sensor also has the option of clear allocation of pumps. This can be used to determine the life cycle of the pump (sum of all strokes, average frequency, frequency histogram).

The recording and storage of this data gives enormous potential for increasing plant or machine availability, because, among other things, maintenance intervals can be adapted to the respective specific process parameters of the pump, and preventive maintenance can be planned, i.e. the risk of a pump failure during the current process can be minimized.

In addition, the signals of the sensor can be transmitted to the customer PLC in real time, which in turn allows process monitoring. Take the opportunity to use the intelligent timECO sensor for your process and develop with us towards Industry 4.0.

* The max. displacement must not leave the reception area of the sensor.
Intelligent digital sensor

Features

- Frequency sensor with recording option of operating data (Frequency Histogram, Strokes)
- Stored data can be read out via PC program
- A Unique serial number for the pump identification inside the controller can be modulated as a switching signal
- Resettable and continuous stroke counter
- Self-adjusting sensor - Switching points are variably adjusted to the signal
- Namur-interface
- Resistant to magnetic field changes
- Plug connection free positionable
- Fully integrated into the pump housing

Advantages compared to conventional sensors:

- Variable switching point adaptation to the signal
- Assignment of the sensor to a unique serial number of the pump
- Determination and storage of:
  
  Sum of all strokes, \( \varnothing \) frequencies, frequency histogram

Technical and visual modifications are reserved.
PTI-KPE1020

Output 20 l/min
ATEX (for further information see operating manual)

PREMIUM—Electrical driven piston pump PTI-KPE1020

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Output</th>
<th>ATEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>53602000</td>
<td>PTI-KPE1020-VA-TF-PE-FEPM-400V/50Hz-1,3kW</td>
<td>20 l</td>
<td>✔</td>
</tr>
</tbody>
</table>

FURTHER DRIVES* ON REQUEST
* ex-protection has to be checked

www.timmer-pumps.com/en/piston-pumps-electric-service

Technical and visual modifications are reserved.
The electric piston pumps from the timECO series have been specially developed for larger paint supply systems. In addition to a small, compact design, which allows integrating the pumps without significant effort, especially in retrofit projects, the pumps of the series also provide many other benefits.

• Low-shear material flow that increases the service life of the fluid.
• Continuous lubricators, which ensure a continuous lubrication of the bearings.
• A synchronized piston drive kinematics ensures a uniform media flow.
• Vertically arranged pistons, which ensure a uniform load on the piston seals and thus better service life.
• Short piping lengths resulting in lower paint filling volume and thus less wetted surfaces, better rinsing capability and lower fluid consumption (paints, varnishes, solvents, ...).

Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output (max.)</td>
<td>permanent 20 l/min (with water)</td>
</tr>
<tr>
<td>Discharge pressure (max.)</td>
<td>16 bar (20 bar on request)</td>
</tr>
<tr>
<td>Drive</td>
<td>electrical gearmotor</td>
</tr>
<tr>
<td>Possible installation position</td>
<td>horizontal</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>G1&quot; female thread</td>
</tr>
<tr>
<td>Suction height dry</td>
<td>approx. 6 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 126 kg</td>
</tr>
<tr>
<td>Noise level</td>
<td>approx. &lt;70 dB(A)</td>
</tr>
<tr>
<td>Viscosity of pumped medium</td>
<td>up to 15,000 mPas</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>+5 up to +60 °C</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

Electrical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical connection</td>
<td>3 x 400V /50 Hz</td>
</tr>
<tr>
<td>Drive power (max.)</td>
<td>approx. 1.3 kW (87 Hz)</td>
</tr>
</tbody>
</table>
Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder head</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Cylinder block</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Piston</td>
<td>stainless steel / ceramic-coated</td>
</tr>
<tr>
<td>Bellows</td>
<td>PTFE-compound</td>
</tr>
<tr>
<td>Piston seals</td>
<td>PE-compound</td>
</tr>
<tr>
<td>Fluid seals</td>
<td>FEPM</td>
</tr>
<tr>
<td>Valve balls</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve seats</td>
<td>stainless steel</td>
</tr>
</tbody>
</table>

Features

- Gentle conveying
- Reliable
- Good chemical resistance
- Low-maintenance
- Easy maintenance
- Permanent lubricating system
- Small, compact design
- Ideally matched piston drive
- Constant delivery volume
- Constant high media pressures
- Low filling volume
- Short piping lengths

Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
PTI-KPE1030

Output 30 l/min
ATEX (for further information see operating manual)

PREMIUM-Electrically driven piston pump PTI-KPE1030

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Output</th>
<th>ATEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>53600007</td>
<td>PTI-KPE1030-VA-TF-PE-FEPM-400V/50Hz-1,3kW</td>
<td>30l</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Further Drives* on Request**

*Ex-protection has to be checked*

www.timmer-pumps.com/en/piston-pumps-electric-service

Technical and visual modifications are reserved.
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- Low-shear material flow that increases the service life of the fluid.
- Continuous lubricators, which ensure a continuous lubrication of the bearings.
- A synchronized piston drive kinematics ensures a uniform media flow.
- Vertically arranged pistons, which ensure a uniform load on the piston seals and thus better service life.
- Short piping lengths resulting in lower paint filling volume and thus less wetted surfaces, better rinsing capability and lower fluid consumption (paints, varnishes, solvents, ...).

## Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output (max.)</td>
<td>30 l/min (with water)</td>
</tr>
<tr>
<td>Discharge pressure (max.)</td>
<td>16 bar (20 bar on request)</td>
</tr>
<tr>
<td>Drive</td>
<td>electrical gearmotor</td>
</tr>
<tr>
<td>Possible installation position</td>
<td>horizontal</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>G1 ½” female thread</td>
</tr>
<tr>
<td>Piston diameter</td>
<td>Ø 100 mm</td>
</tr>
<tr>
<td>Stroke</td>
<td>50 mm</td>
</tr>
<tr>
<td>Suction height dry</td>
<td>approx. 6 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 195 kg</td>
</tr>
<tr>
<td>Noise level</td>
<td>approx. 70 dB(A)</td>
</tr>
<tr>
<td>Viscosity of pumped medium</td>
<td>up to 15.000 mPas</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>+5 up to +65 °C</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

## Electrical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical connection</td>
<td>3 x 400V /50 Hz</td>
</tr>
<tr>
<td>Drive power (max.)</td>
<td>approx. 1.3 kW (87 Hz)</td>
</tr>
</tbody>
</table>
Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder head</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Cylinder block</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Piston</td>
<td>stainless steel / ceramic-coated</td>
</tr>
<tr>
<td>Bellows</td>
<td>PTFE-compound</td>
</tr>
<tr>
<td>Piston seals</td>
<td>PE-compound</td>
</tr>
<tr>
<td>Fluid seals</td>
<td>FEPM</td>
</tr>
<tr>
<td>Valve balls</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve seats</td>
<td>stainless steel</td>
</tr>
</tbody>
</table>

Features

- Gentle conveying
- Reliable
- Good chemical resistance
- Low-maintenance
- Easy maintenance
- Permanent lubricating system
- Small, compact design
- Ideally matched piston drive
- Constant delivery volume
- Constant high media pressures
- Low filling volume
- Short piping lengths

Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
PTI-KPE1040

Output 40 l/min
ATEX (for further information see operating manual)

# PREMIUM - Electrically driven piston pump PTI-KPE1040

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Output</th>
<th>ATEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>53600002</td>
<td>PTI-KPE1040-VA-TF-PP-FEPM-400V/50Hz-2,6</td>
<td>40l</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Further drives* on request**

*Ex-protection has to be checked

---

**Technical and visual modifications are reserved.**

---

**Related link:**

The electric piston pumps from the timECO series have been specially developed for larger paint supply systems. In addition to a small, compact design, which allows integrating the pumps without significant effort, especially in retrofit projects, the pumps of the series also provide many other benefits.

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- Short piping lengths resulting in lower paint filling volume and thus less wetted surfaces, better rinsing capability and lower fluid consumption (paints, varnishes, solvents, ...).

### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output (max.)</td>
<td>40 l/min (with water)</td>
</tr>
<tr>
<td>Discharge pressure (max.)</td>
<td>20 bar</td>
</tr>
<tr>
<td>Drive</td>
<td>electrical gearmotor</td>
</tr>
<tr>
<td>Possible installation position</td>
<td>horizontal</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>G 1 ½&quot; female thread</td>
</tr>
<tr>
<td>Piston diameter</td>
<td>Ø 100 mm</td>
</tr>
<tr>
<td>Stroke</td>
<td>50 mm</td>
</tr>
<tr>
<td>Suction height dry</td>
<td>approx. 6 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 195 kg</td>
</tr>
<tr>
<td>Noise level</td>
<td>approx. 70 dB(A)</td>
</tr>
<tr>
<td>Viscosity of pumped medium</td>
<td>up to 15,000 mPas</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>+5 up to +65 °C</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

### Electrical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical connection</td>
<td>3 x 400V /50 Hz</td>
</tr>
<tr>
<td>Drive power (max.)</td>
<td>2.6 kW (87 Hz)</td>
</tr>
</tbody>
</table>
KPE series - electrically driven
Piston pump

40 l/min

Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder head</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Cylinder block</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Piston</td>
<td>stainless steel / ceramic-coated</td>
</tr>
<tr>
<td>Bellows</td>
<td>PTFE-compound</td>
</tr>
<tr>
<td>Piston seals</td>
<td>PE-compound</td>
</tr>
<tr>
<td>Fluid seals</td>
<td>FEPM</td>
</tr>
<tr>
<td>Valve balls</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Valve seats</td>
<td>stainless steel</td>
</tr>
</tbody>
</table>

Features

- Gentle conveying
- Reliable
- Good chemical resistance
- Low-maintenance
- Easy maintenance
- Permanent lubricating system
- Small, compact design
- Ideally matched piston drive
- Constant delivery volume
- Constant high media pressures
- Low filling volume
- Short piping lengths

Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
PTI-KPE1060

Output 60 l/min
ATEX (for further information see operating manual)

PREMIUM-Electrically driven piston pump PTI-KPE1060

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Output</th>
<th>ATEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>53605001</td>
<td>PTI-KPE1060-VA-TF-PP-FEPM-400V/50Hz-2,6</td>
<td>60l</td>
<td>✓</td>
</tr>
</tbody>
</table>

www.timmer-pumps.com/en/piston-pumps-electric-service

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- Short piping lengths resulting in lower paint filling volume and thus less wetted surfaces, better rinsing capability and lower fluid consumption (paints, varnishes, solvents, ...).

### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output (max.)</td>
<td>60 l/min (with water)</td>
</tr>
<tr>
<td>Discharge pressure (max.)</td>
<td>16 bar</td>
</tr>
<tr>
<td>Drive</td>
<td>electrical gearmotor</td>
</tr>
<tr>
<td>Possible installation position</td>
<td>horizontal</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>G 1 ½&quot; female thread</td>
</tr>
<tr>
<td>Piston diameter</td>
<td>Ø 100 mm</td>
</tr>
<tr>
<td>Stroke</td>
<td>50 mm</td>
</tr>
<tr>
<td>Suction height dry</td>
<td>approx. 6 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 195 kg</td>
</tr>
<tr>
<td>Noise level</td>
<td>approx. 70 dB(A)</td>
</tr>
<tr>
<td>Viscosity of pumped medium</td>
<td>up to 15,000 mPas</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>+5 up to +65 °C</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

### Electrical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical connection</td>
<td>3 x 400V /50 Hz</td>
</tr>
<tr>
<td>Drive power (max.)</td>
<td>2,6 kW (87 Hz)</td>
</tr>
</tbody>
</table>
Features

- Gentle conveying
- Reliable
- Good chemical resistance
- Low-maintenance
- Easy maintenance
- Permanent lubricating system
- Small, compact design
- Ideally matched piston drive
- Constant delivery volume
- Constant high media pressures
- Low filling volume
- Short piping lengths

Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
Control unit

- Operation via touch panel / buttons
- Pressure and volume flow control preselectable
- Rights and user management
- Multiple parameter settings possible
- Graphic display of the printing process
- Graphic display of the volumetric flow
- Siemens® S7® control
- Monitoring of pressure and volume flow
- Operating data acquisition (quantity and switch-on time)
- Connection: 3 x 400V, 50Hz
- Temperature monitoring of the motor
- Intrinsically safe disconnection of the pressure sensor, pressure switch and reflux regulator

PREMIUM-Control unit for electrically driven piston pumps

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Scope of supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>53601600</td>
<td>KPE1020</td>
<td>Control cabinet (completely assembled), operating panel: TFT colour display with touch operation and keys incl. software TimPRO® 20</td>
</tr>
<tr>
<td>53601678</td>
<td>KPE1030</td>
<td>Control cabinet (completely assembled), operating panel: TFT colour display with touch operation and keys incl. software TimPRO® 30</td>
</tr>
<tr>
<td>53601601</td>
<td>KPE1040</td>
<td>Control cabinet (completely assembled), operating panel: TFT colour display with touch operation and keys incl. software TimPRO® 40</td>
</tr>
<tr>
<td>53601602</td>
<td>KPE1060</td>
<td>Control cabinet (completely assembled), operating panel: TFT colour display with touch operation and keys incl. software TimPRO® 60</td>
</tr>
</tbody>
</table>
Cost-effective design

Savings potential due to energy saving powerful drive for highly dynamic media conveyance. Permanent lubricants ensure a permanent lubrication of the bearings in the drive train for approx. one year.

Minimum piping routes ensure good flushing and low paint volumes within the pump.

G1 ½ internal thread allows versatile and individual connection options.

Vertical arrangement of the pistons ensures low wear of the valves and make springs inside of the valve redundant.

Innovative piston drive kinematics

Camshaft drive ensures absolutely low-pulsation media flow.

Cost savings

- No compressed air systems required
- Reduced operating costs due to low power consumption
- Longer service life due to low wear
- Full control of pump performance
- Low shear forces
- High process reliability
- Simple maintenance due to modular design
WTI-MDRP
Flow rate approx. 40 l/min
ATEX (for further information see operating manual)
Back pressure regulator WTI-MDRP

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Material design</th>
<th>ATEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>53504050</td>
<td>WTI-MDRP-3/4-20-VA-TF</td>
<td>VA</td>
<td>✓</td>
</tr>
</tbody>
</table>

Back pressure regulator 3/4" (pneumatic control) approx. 40 l/min

Technical and visual modifications are reserved.
The timECO material dynamic pressure controller from Timmer was specially developed for a low-shear process in the area of paint supply. Since discharge volumes in the operation of the ring circuit system are time-independent, or in other words unrhythmic, there are pressure fluctuations within the ring circuit system.

The pneumatically adjustable material dynamic pressure controller solves this problem and ensures that a constant dynamic pressure is achieved through automatic flow cross-section adjustments. Compared with conventional dynamic pressure controllers, the timECO material dynamic pressure controller significantly lowers the shear stress of the fluid due to its diaphragm arrangement. The fluid can thus be significantly longer used in the process. The material dynamic pressure controller can be supplied with individual connections if required.

### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow rate (max.)</td>
<td>40 l/min (with water)</td>
</tr>
<tr>
<td>Transmission</td>
<td>approx. 3:1</td>
</tr>
<tr>
<td>Compressed air connection</td>
<td>G1/4&quot;</td>
</tr>
<tr>
<td>Fluid pressure (max.)</td>
<td>25 bar</td>
</tr>
<tr>
<td>Control range fluid sided</td>
<td>3-20 bar; 5-40 l/min</td>
</tr>
<tr>
<td>Fluid connections</td>
<td>M28x1,5 thread for receiving individual connections (standard: clamp connections)</td>
</tr>
<tr>
<td>Operating air pressure (max.)</td>
<td>1 - 8 bar compressed air, unoiled, filtered or oiled</td>
</tr>
<tr>
<td>Total weight</td>
<td>approx. 2.8 kg</td>
</tr>
<tr>
<td>Ambient temperature (max.)</td>
<td>+5 up to +35°C at a maximum of 80% relative humidity</td>
</tr>
<tr>
<td>Dimensions in mm (B x T x H)</td>
<td>160 x 130 x 61</td>
</tr>
<tr>
<td>Ex-Protection</td>
<td>ATEX (for further information see operating manual)</td>
</tr>
</tbody>
</table>

### Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Piston</td>
<td>aluminium alloy</td>
</tr>
<tr>
<td>Control diaphragm</td>
<td>PTFE (wetted side) / NBR</td>
</tr>
<tr>
<td>Air diaphragm</td>
<td>PTFE</td>
</tr>
<tr>
<td>Housing</td>
<td>stainless steel / aluminium alloy</td>
</tr>
<tr>
<td>Seal</td>
<td>PTFE</td>
</tr>
</tbody>
</table>
**Features**

- Low-shear material flow
- Good rinsing capability
- Low-maintenance
- Easy maintenance
- Good chemical resistance
- Lower paint carryover compared to conventional material dynamic pressure controllers
- Compact design
- Individual media screw connections possible
- No installation requirements regarding flow direction

**Fluids**

The back pressure regulator is suitable for conveying various fluids (media). The resistance to media must be checked in individual cases. We will be glad to advise you on the suitability for your specific application.

<table>
<thead>
<tr>
<th>Fluids</th>
<th>paints, varnishes and solvents (Resistance to conveyed media must be checked in each use case)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum viscosity of conveyed fluids</td>
<td>approx. 15,000 mPa·s</td>
</tr>
<tr>
<td>Fluid temperature (max.)</td>
<td>+5°C up to +60°C</td>
</tr>
<tr>
<td>Material of wetted parts</td>
<td>stainless steel, PTFE</td>
</tr>
</tbody>
</table>
PTI-E2-KDP-ZST

Electrical time control

www.timmer-pumps.com/en/coagulant-pumps
## PREMIUM-Pneumatic coagulant pumps PTI-E2-KDP-ZST

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Output (per doublestroke)</th>
<th>Suction pipe length</th>
<th>Control</th>
<th>Protection class</th>
</tr>
</thead>
<tbody>
<tr>
<td>52100040</td>
<td>PTI-E2-KDP-ZST-06-630-FKM</td>
<td>6 ml</td>
<td>630 mm</td>
<td>Time control</td>
<td>IP44</td>
</tr>
<tr>
<td>52100044</td>
<td>PTI-E2-KDP-ZST-06-400-FKM</td>
<td>6 ml</td>
<td>400 mm</td>
<td>Time control</td>
<td>IP44</td>
</tr>
</tbody>
</table>

www.timmer-pumps.com/en/service-coagulant-pumps
**Technical data**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive</td>
<td>pneumatic</td>
</tr>
<tr>
<td>Drive principle</td>
<td>self-priming - volumetric</td>
</tr>
<tr>
<td>Suction height</td>
<td>self-priming approx. 5 m WS</td>
</tr>
<tr>
<td>Output (with water)</td>
<td>6 cm³ / doublestroke (0,18 l/min / 10,8 l/h)</td>
</tr>
<tr>
<td>Number of Strokes (max.)</td>
<td>30 strokes / min</td>
</tr>
<tr>
<td>Temperature of fluids (max.)</td>
<td>70 °C</td>
</tr>
<tr>
<td>Viscosity of pumped medium (max.)</td>
<td>100,000 mPas</td>
</tr>
<tr>
<td>Suction side - Connection</td>
<td>suction pipe (standard length 630 mm)</td>
</tr>
<tr>
<td>Pressure side - Connection</td>
<td>hose nozzle NW 9 mm - 3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2,5 kg</td>
</tr>
<tr>
<td>Overall length</td>
<td>805 mm (other lengths on request)</td>
</tr>
<tr>
<td>Battery</td>
<td>3,6 Volt</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP44</td>
</tr>
</tbody>
</table>

**Materials**

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive housing</td>
<td>POM</td>
</tr>
<tr>
<td>Liquid housing</td>
<td>POM</td>
</tr>
<tr>
<td>Suction pipe</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Liquid seals</td>
<td>PU-modified, conditionally acid and alkali resistant</td>
</tr>
<tr>
<td>Liquid valve balls</td>
<td>stainless steel</td>
</tr>
<tr>
<td>Electrical housing</td>
<td>PE</td>
</tr>
<tr>
<td>Pressure joint</td>
<td>POM - 9 mm hose nozzle</td>
</tr>
<tr>
<td>Suction nozzle</td>
<td>POM</td>
</tr>
<tr>
<td>Liquid valve seat</td>
<td>FKM - O-Ring</td>
</tr>
</tbody>
</table>

**Pneumatic data**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressed air connection</td>
<td>PU hose 6/4 mm G1/4&quot;</td>
</tr>
<tr>
<td>Operating air pressure</td>
<td>3 - 6 bar filtered compressed air</td>
</tr>
<tr>
<td>Air consumption (max.)</td>
<td>15 l/min (continuous operation)</td>
</tr>
<tr>
<td>Solenoid valve</td>
<td>3/2-ways piezo valve</td>
</tr>
</tbody>
</table>

**Time control**

When the pre-set time has elapsed, a pumping stroke is performed automatically and the pre-set time starts over again from the beginning.

**Time storage**

The pumping stroke starts automatically once the preset time has elapsed. In this operating mode the total time consists of several individual time intervals. For example, if the total time is set to 5 minutes and the individual work process takes 1 minute, these minutes are added. Whereby the pause time between the operating processes is not included in the total time.

**Basic version**

The pump is not equipped with an own control valve. The function should be controlled with an external 5/2- or 4/2-way valve. Compressed air connection of the pump: 1/8” internal thread.

**Continuous stroke**

The pump has integrated control valves for oscillating operation. Once the compressed air supply is switched on, the pump starts constantly pumping. The stroke speed can be adjusted via a throttle.
Additional versions of the pneumatic coagulant pumps PTI-E2-KDP-ZST

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Flow rate (per double stroke)</th>
<th>Suction pipe length</th>
<th>Control</th>
<th>Protection class</th>
</tr>
</thead>
<tbody>
<tr>
<td>52100041</td>
<td>PTI-E2-KDP-ZST-30-630-FKM</td>
<td>30 ml</td>
<td>630 mm</td>
<td>Time control</td>
<td>IP44</td>
</tr>
<tr>
<td>52100053</td>
<td>PTI-E2-KDP-ZST-30-400-FKM</td>
<td>30 ml</td>
<td>400 mm</td>
<td>Time control</td>
<td>IP44</td>
</tr>
<tr>
<td>52050216</td>
<td>PTI-E2-KDP-ZSP-06-630-FKM</td>
<td>6 ml</td>
<td>630 mm</td>
<td>Time storage</td>
<td>IP44</td>
</tr>
<tr>
<td>52050220</td>
<td>PTI-E2-KDP-ZSP-06-400-FKM</td>
<td>6 ml</td>
<td>400 mm</td>
<td>Time storage</td>
<td>IP44</td>
</tr>
<tr>
<td>52050217</td>
<td>PTI-E2-KDP-ZSP-30-630-FKM</td>
<td>30 ml</td>
<td>630 mm</td>
<td>Time storage</td>
<td>IP44</td>
</tr>
<tr>
<td>52050222</td>
<td>PTI-E2-KDP-ZSP-30-400-FKM</td>
<td>30 ml</td>
<td>400 mm</td>
<td>Time storage</td>
<td>IP44</td>
</tr>
<tr>
<td>52050067</td>
<td>PTI-E2-KDP-G-06-630-FKM</td>
<td>6 ml</td>
<td>630 mm</td>
<td>Basic version</td>
<td>IP44</td>
</tr>
<tr>
<td>52050115</td>
<td>PTI-E2-KDP-G-30-630-FKM</td>
<td>30 ml</td>
<td>630 mm</td>
<td>Basic version</td>
<td>IP44</td>
</tr>
<tr>
<td>52050118</td>
<td>PTI-E2-KDP-G-30-400-FKM</td>
<td>30 ml</td>
<td>400 mm</td>
<td>Basic version</td>
<td>IP44</td>
</tr>
<tr>
<td>52050006</td>
<td>PTI-E2-KDP-OS-06-630-FKM</td>
<td>6 ml</td>
<td>630 mm</td>
<td>Continuous stroke</td>
<td>IP44</td>
</tr>
<tr>
<td>52050002</td>
<td>PTI-E2-KDP-OS-06-400-FKM</td>
<td>6 ml</td>
<td>400 mm</td>
<td>Continuous stroke</td>
<td>IP44</td>
</tr>
</tbody>
</table>

Features

- Integrated pneumatic electronic control
- Separate air and fluid parts
- High vacuum during priming
- Improved liquid conveyance
- Easy operating
- Low noise
- Cost effective

Fluids

The pump is suitable for conveying various fluids (media). Material resistance has to be examined on a case-by-case basis. We will be pleased to give you advice about the suitability in your specific application.
### Suction pipes extensions (Stainless steel pipes up to max. 100 cm, suction valve)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>52060070-250-FKM</td>
<td>PTI-E2-ZUB-Z430-250-FKM</td>
<td>250 mm</td>
</tr>
<tr>
<td>52060070-330-FKM</td>
<td>PTI-E2-ZUB-Z430-330-FKM</td>
<td>330 mm</td>
</tr>
<tr>
<td>52060070-430-FKM</td>
<td>PTI-E2-ZUB-Z430-430-FKM</td>
<td>430 mm</td>
</tr>
</tbody>
</table>

### Mounting clamp ring (pump height adjustment)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Scope of supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>52060024</td>
<td>PTI-E2-ZUB-Z610-Montagering</td>
<td>plastic clamp, thrust piece, clamping screw</td>
</tr>
</tbody>
</table>

### Battery (3,6 Volt)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Service life</th>
</tr>
</thead>
<tbody>
<tr>
<td>52030250</td>
<td>PTI-E2-ZUB-Z900-Battery</td>
<td>approx. 1 year</td>
</tr>
</tbody>
</table>

### Wide neck barrel with reinforced lid (PE-Wide neck barrel, reinforced lid)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Liters</th>
<th>Required length of suction pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>52060034</td>
<td>PTI-E2-ZUB-Fass-30L</td>
<td>30</td>
<td>400 mm</td>
</tr>
<tr>
<td>52020034</td>
<td>PTI-E2-ZUB-Fass-60L</td>
<td>60</td>
<td>630 mm</td>
</tr>
</tbody>
</table>
Compressed air connection with hose (compressed air hose, nozzle for coupling DN 7)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Hose length</th>
<th>Hose ø internal</th>
<th>Hose ø external</th>
</tr>
</thead>
<tbody>
<tr>
<td>52060090</td>
<td>PTI-E2-ZUB-DLA-2M</td>
<td>2 m</td>
<td>4 mm</td>
<td>6 mm</td>
</tr>
<tr>
<td>52060091</td>
<td>PTI-E2-ZUB-DLA-5M</td>
<td>5 m</td>
<td>4 mm</td>
<td>6 mm</td>
</tr>
</tbody>
</table>

Conveying hose PVC

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Hose length</th>
<th>Scope of supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>52060095</td>
<td>PTI-E2-ZUB-Förderschlauch-2M</td>
<td>2 m</td>
<td>PVC hose 15/9, hose clamp, hose nozzle, check valve,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ball valve, fully assembled</td>
</tr>
<tr>
<td>52060096</td>
<td>PTI-E2-ZUB-Förderschlauch-5M</td>
<td>5 m</td>
<td></td>
</tr>
</tbody>
</table>

E - Dual stop valve 1/4“

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>52060054</td>
<td>PTI-E2-ZUB-Förderschlauch-2M</td>
<td>Holding of spray gun: pilot air is cut-off, time is interrupted.</td>
</tr>
</tbody>
</table>

Start-pressure valve

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Type</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>23900003</td>
<td>PTI-E2-ZUB-STDV-32-1/4-NG</td>
<td>As soon as the spray gun is used, the preset time at the pump starts running.</td>
</tr>
</tbody>
</table>
## Viscosities

### Typical dyn. viscosities

<table>
<thead>
<tr>
<th>Substance</th>
<th>Temperature</th>
<th>Viscosity (mPas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bee honey</td>
<td>40°C</td>
<td>2.000</td>
</tr>
<tr>
<td>Blood</td>
<td>37°C</td>
<td>4 up to 25</td>
</tr>
<tr>
<td>Printing ink</td>
<td>40°C</td>
<td>550 up to 2.200</td>
</tr>
<tr>
<td>Liquid egg</td>
<td>45°C</td>
<td>150</td>
</tr>
<tr>
<td>Liquid soap</td>
<td>60°C</td>
<td>85</td>
</tr>
<tr>
<td>Fruit juice</td>
<td>20°C</td>
<td>50</td>
</tr>
<tr>
<td>Vegetable soup</td>
<td>20°C</td>
<td>430</td>
</tr>
<tr>
<td>Glucose</td>
<td>20°C</td>
<td>4.300 up to 6.800</td>
</tr>
<tr>
<td>Glycol</td>
<td>20°C</td>
<td>40</td>
</tr>
<tr>
<td>Glycerin 100%</td>
<td>20°C</td>
<td>1.500</td>
</tr>
<tr>
<td>Glycerin 100%</td>
<td>0°C</td>
<td>12.100</td>
</tr>
<tr>
<td>Hand cream</td>
<td>20°C</td>
<td>8.000</td>
</tr>
<tr>
<td>Yogurt</td>
<td>40°C</td>
<td>150</td>
</tr>
<tr>
<td>Jam</td>
<td>20°C</td>
<td>8.500</td>
</tr>
<tr>
<td>Coatings (25% of pigments)</td>
<td>20°C</td>
<td>3.000</td>
</tr>
<tr>
<td>Liqueurs</td>
<td>20°C</td>
<td>10 up to 100</td>
</tr>
<tr>
<td>Milk</td>
<td>20°C</td>
<td>2</td>
</tr>
<tr>
<td>Engine Oil SAE 15W40</td>
<td>20°C</td>
<td>390</td>
</tr>
<tr>
<td>Engine Oil SAE 15W40</td>
<td>-15°C</td>
<td>3.000</td>
</tr>
<tr>
<td>Sodium hydroxide 50%</td>
<td>20°C</td>
<td>45</td>
</tr>
<tr>
<td>Olive oil</td>
<td>40°C</td>
<td>40</td>
</tr>
<tr>
<td>Petroleum</td>
<td>20°C</td>
<td>0.65</td>
</tr>
<tr>
<td>Mercury</td>
<td>20°C</td>
<td>1.55</td>
</tr>
<tr>
<td>Shampoo</td>
<td>20°C</td>
<td>3.000</td>
</tr>
<tr>
<td>Syrup</td>
<td>20°C</td>
<td>100.000</td>
</tr>
<tr>
<td>Tomato ketchup</td>
<td>30°C</td>
<td>1.000</td>
</tr>
<tr>
<td>Water</td>
<td>20°C</td>
<td>1</td>
</tr>
<tr>
<td>Water-based paint</td>
<td>20°C</td>
<td>900</td>
</tr>
<tr>
<td>Toothpaste</td>
<td>40°C</td>
<td>70.000</td>
</tr>
</tbody>
</table>
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