

Double diaphragm pump

2"

Max. 600 l/min



Aluminium



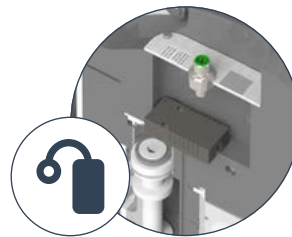
Ready for Future



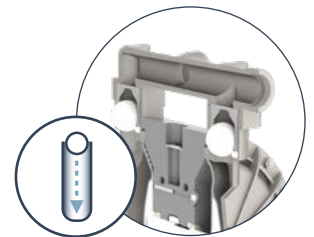
www.timmer-pumps.com/en/double_diaphragm_pumps_1to1/



2" BSP connection



Integrated intelligent sensor (iHZ)

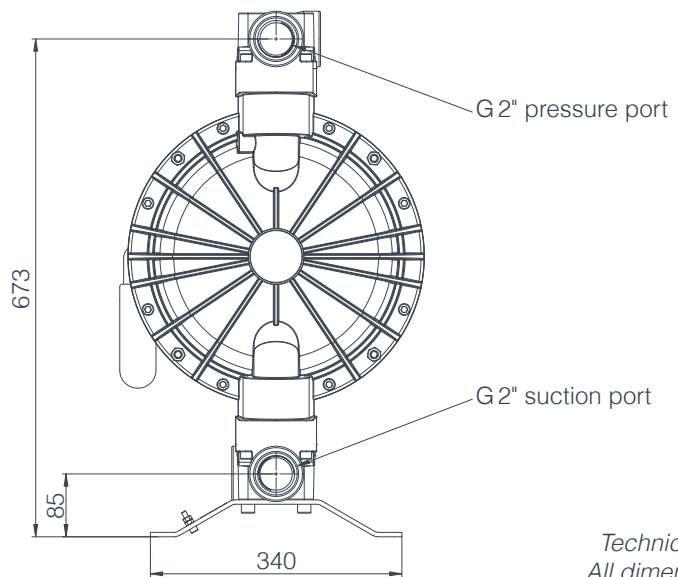
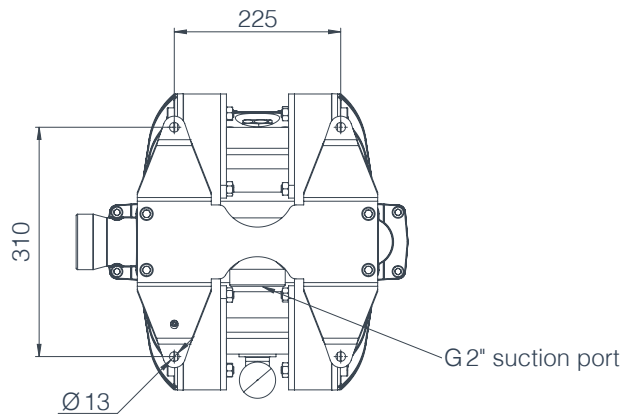
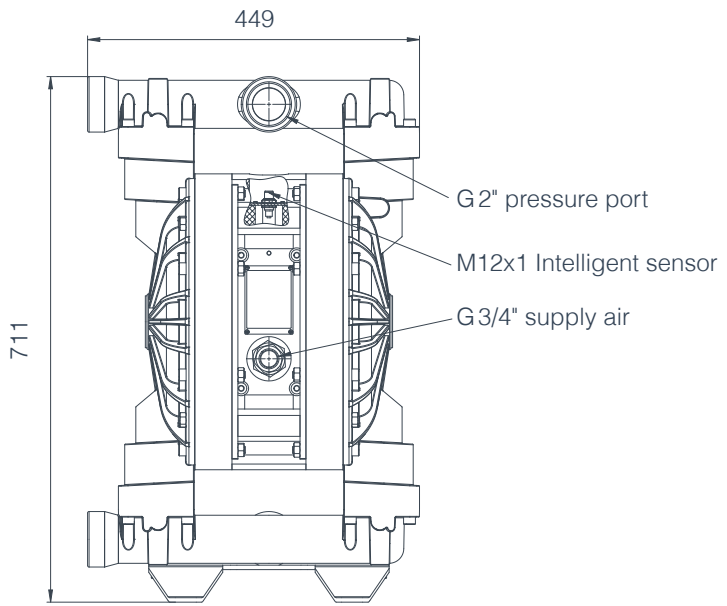


Gravity-loaded valve balls

Optional





Diaphragm rupture monitoring



Technical drawing:
All dimensions in mm

PREMIUM double diaphragm pumps PTI-MEM5600V-AL

Order no.	Type	Media pipes	Material design	ATEX
53503600	PTI-MEM5600V-AL-TE-TF-TF-FEP-PE1-iHZ	 Rotatable by 180° Thread 2" with optional lateral outlet	Alu	✓
53503601	PTI-MEM5600V-AL-EP-EP-TF-EPDM-PE1-iHZ	 Rotatable by 180° Thread 2" with optional lateral outlet	Alu	✓

This pump is a further development of the original tim@PRO series, which has been highly regarded for many years in the paint supply sector and the printing machine industry for its process reliability and easy maintenance. In addition to these advantages the tim@PRO pump is particularly characterised by its good rinsing capability and thus it

is ideally suited for use in the paint and varnishing industry. These variants are delivered with an intelligent IoT-enabled sensor, which allows real-time testing of the stroke signals, incl. process-relevant data (total of all strokes, average frequency, frequency histogram) via a customer PLC. With connection of our tim@IOT smartbox we enable many useful new

features that increase profitability, process reliability and facilitate preventive maintenance. Simply integrate our tim@IOT smartbox in your system and benefit from these advantages.

Technical data

Transmission ratio	: 1 to 1
Output (max.)	: Approx. 600 l/min (for water)
Drive	: Pneumatic
Fluid connections	: 2" BSP
Operating pressure	: 1 to 7 bar compressed air, unooled, filtered, or oiled
Compressed air connection	: G 3/4" internal thread
Suction height, dry	: Max. 6 m
Weight	: Approx. 48 kg
Viscosity of pumped medium	: to 10,000 mPas
Medium temperature	: +5 to +120 °C (depending on the version and application)
Strokes	: Max. 2 double strokes/s
Ex protection	: ATEX (see operating manual for more information)

Media

The pump is suitable for pumping a wide variety of fluids (media). Resistance to the media that will be pumped must be checked on a case-by-case basis.

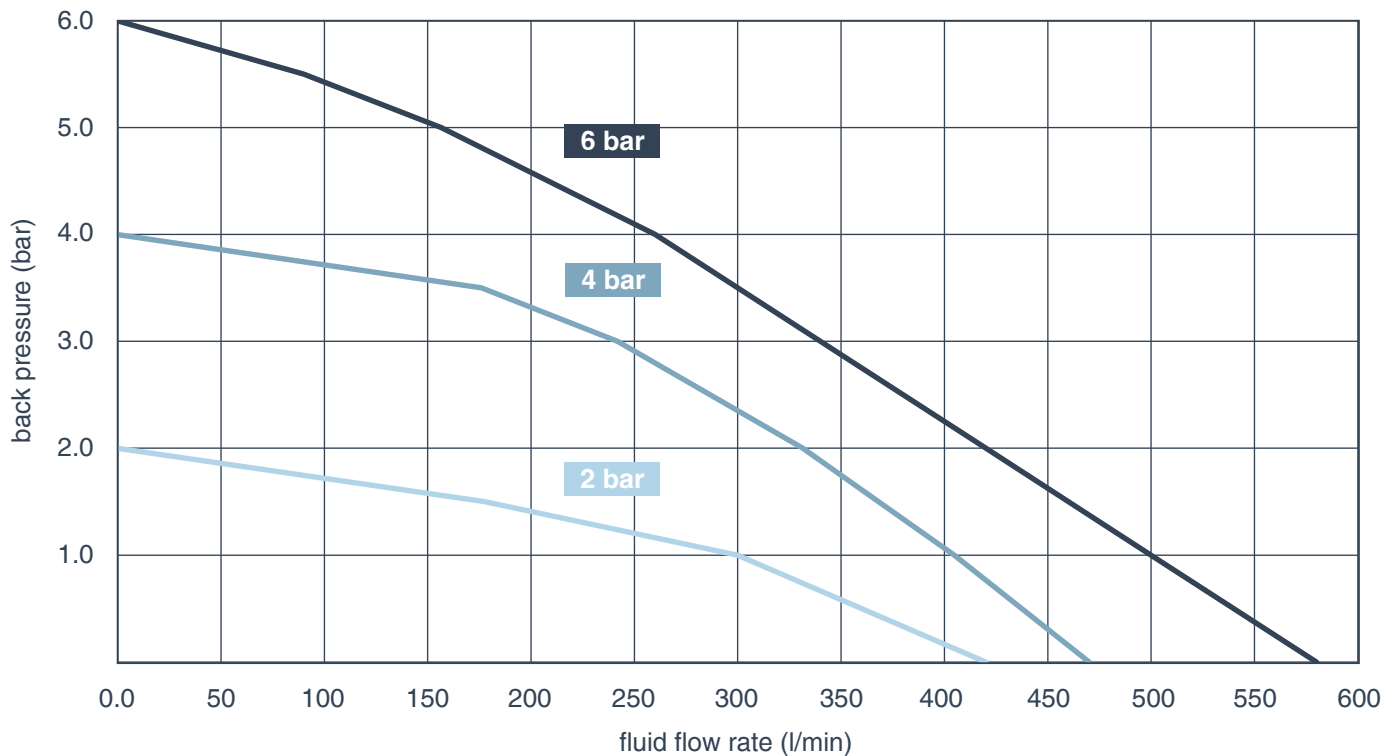
We would be happy to advise you on the suitability for your specific application.

Material

Housing	: Aluminium
Middle housing section	: PE electrically conductive
Valve ball seats	: PTFE
Valve balls	: PTFE / EPDM
Diaphragms	: PTFE composite with EPDM-back / EPDM
Seals	: FEP / EPDM



Fluid delivery volume



Added values



Easy installation

Easy replacement of the valve balls without dismantling the side cover or the unperforated diaphragms. Special tools are not required for mounting / dismantling. Only 4 sealing rings are installed on the media side.



Reduced compressed air costs

Optimised geometries with minimal dead spaces, as well as the extremely low start-up pressures <math><0.7\text{ bar}</math>, reduce energy consumption to a minimum.



Maximisation of service life

The ceramic slide valve that is used works virtually free of wear. The durable diaphragms enable maximisation of service life.



Minimal maintenance costs

The durable diaphragms, the low-wear ceramic slide valve and the easy-maintenance structure of the pump guarantee extremely low service costs.



Increased process reliability

Safe start-up of the pump is ensured, even in critical operating situations. The bistable, latching valve prevents problematic intermediate positions of the control valve.



Minimum pulsation

Minimal changeover times in conjunction with the short-stroke principle of the pumps reduce pulsation to a minimum and ensure a more uniform media flow.

Double diaphragm pump with complete emptying

2"

Max. 600 l/min



Complete emptying



Aluminium



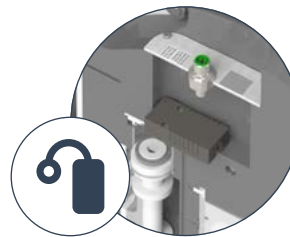
Ready for Future



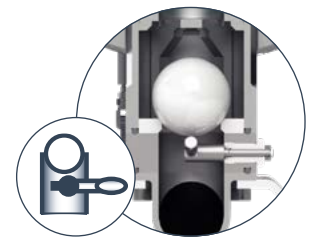
www.timmer-pumps.com/en/double_diaphragm_pumps_1to1/



2" BSP connection



Integrated intelligent sensor (iHZ)



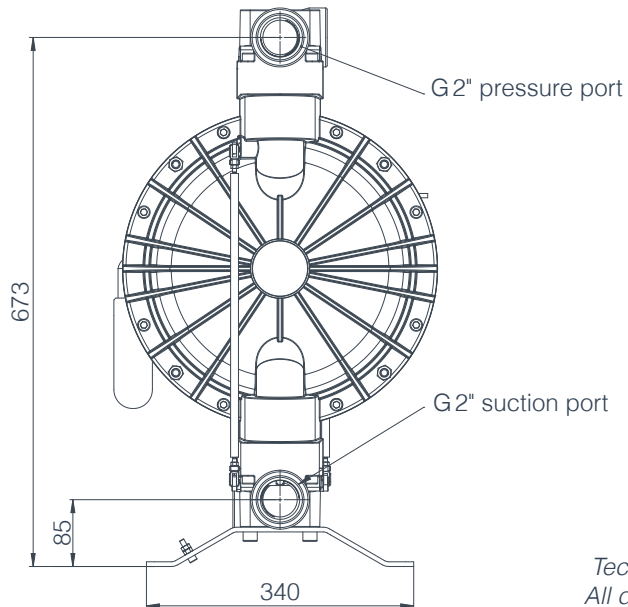
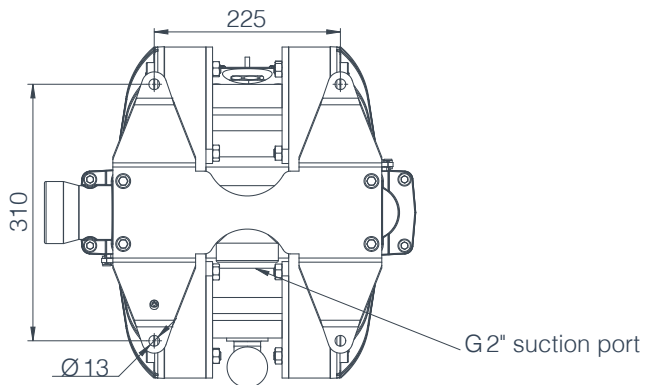
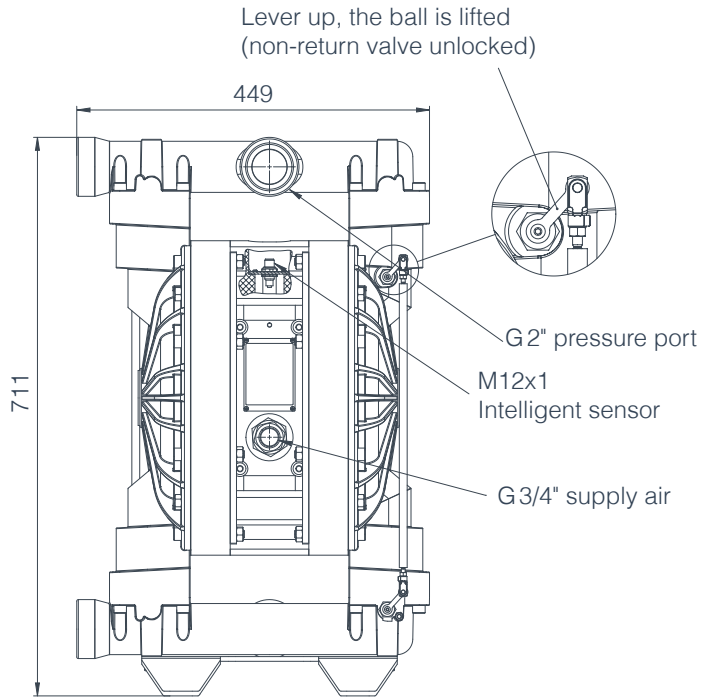
Gravity-loaded, manually piloted valve balls

Double diaphragm pump with complete emptying

Optional



Diaphragm rupture monitoring



Technical drawings:
All dimensions in mm

PREMIUM-Doppelmembranpumpen PTI-MEM5600V-AL-RE

Order no.	Type	Media pipes	Material design	ATEX
53503606	PTI-MEM5600V-AL-EP-EP-TF-EPDM-PE1-iHZ-RE 	Rotatable by 180° Thread 2" with optional lateral outlet	Alu	✓

This pump is a further development of the original tim[®]PRO series, which has been highly regarded for many years in the paint supply sector and the printing machine industry for its process reliability and easy maintenance. In addition to these advantages the tim[®]PRO pump is particularly characterised by its good rinsing capability and thus it is ideally suited for use in the paint and varnishing industry.

Via manually activated eccentric tappet the valve balls can be lifted out of the seats. This enables virtually complete return of the residual media quantity via the pump's suction pipe. These variants are delivered with an intelligent IoT-enabled sensor, which allows real-time testing of the stroke signals, incl. process-relevant data (total of all strokes, average frequency, frequency histogram) via a customer

PLC. With connection of our tim[®]IOT smartbox we enable many useful new features that increase profitability, process reliability and facilitate preventive maintenance. Simply integrate our tim[®]IOT smartbox in your system and benefit from these advantages.

Technical data

Transmission ratio	: 1 to 1
Output (max.)	: Approx. 600 l/min (for water)
Drive	: Pneumatic
Fluid connections	: 2" BSP
Operating pressure	: 1 to 7 bar compressed air, unoiled, filtered, or oiled
Compressed air connection	: G 3/4" internal thread
Suction height, dry	: Max. 6 m
Weight	: Approx. 48 kg
Viscosity of pumped medium	: to 10,000 mPas
Medium temperature	: +5 to +120 °C (depending on the version and application)
Strokes	: Max. 2 double strokes/s
Ex protection	: ATEX (see operating manual for more information)

Media

The pump is suitable for pumping a wide variety of fluids (media). Resistance to the media that will be pumped must be checked on a case-by-case basis.

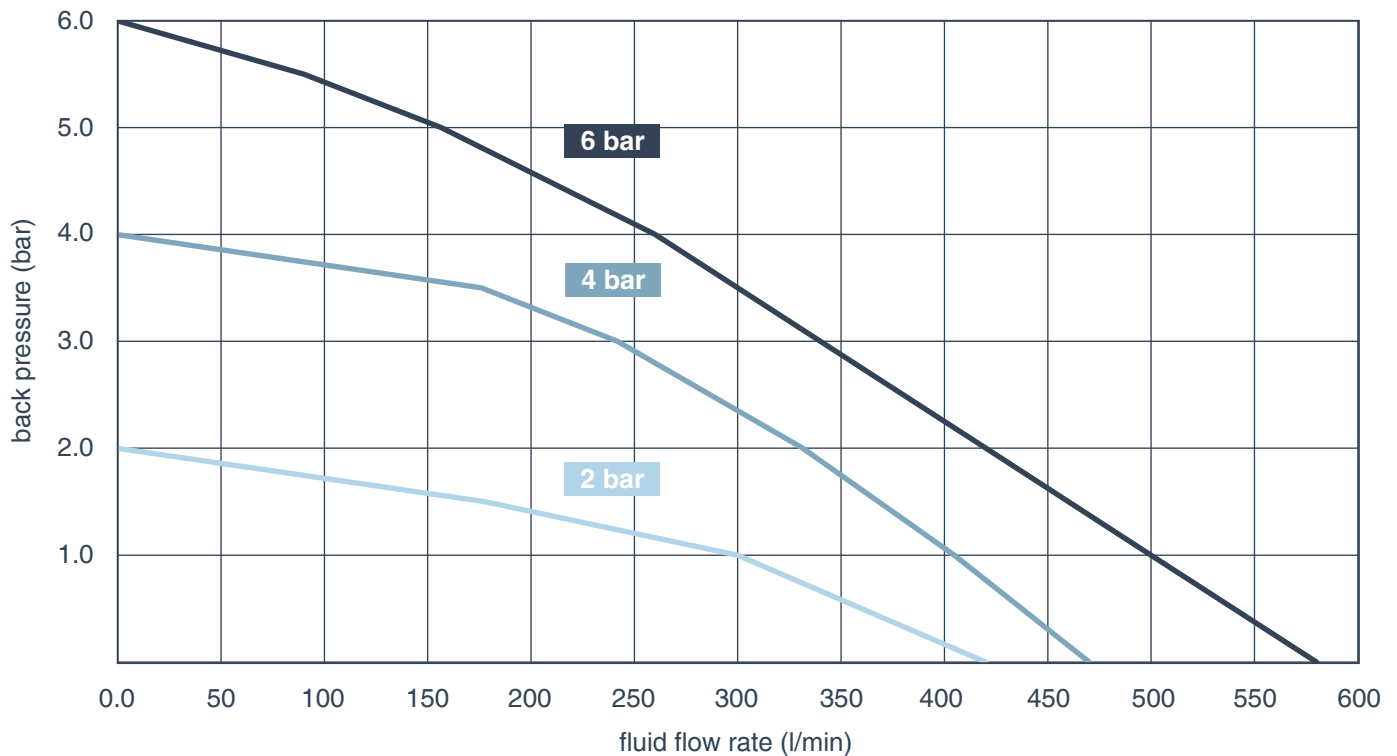
We would be happy to advise you on the suitability for your specific application.

Material

Housing	: Aluminium
Middle housing section	: PE electrically conductive
Valve ball seats	: PTFE
Valve balls	: EPDM
Diaphragms	: EPDM
Seals	: EPDM



Fluid delivery volume



Added values



Maximum media recovery

Residual quantities of the medium can be recirculated by mechanically lifting the valve balls.



Easy installation

Easy replacement of the valve balls without dismantling the side cover or the unperforated diaphragms. Special tools are not required for mounting / dismantling. Only 4 sealing rings are installed on the media side.



Reduced compressed air costs

Optimised geometries with minimal dead spaces, as well as the extremely low start-up pressures <0.7 bar, reduce energy consumption to a minimum.



Maximisation of service life

The ceramic slide valve that is used works virtually free of wear. The durable diaphragms enable maximisation of service life.



Minimal maintenance costs

The durable diaphragms, the low-wear ceramic slide valve and the easy-maintenance structure of the pump guarantee extremely low service costs.



Increased process reliability

Safe start-up of the pump is ensured, even in critical operating situations. The bistable, latching valve prevents problematic intermediate positions of the control valve.