



- ❶ MP 400 with pressure equalisation container, material filter and material pressure regulator
- ❷ MP 100
- ❸ MP 400
- ❹ MP 560 with mobile frame
- ❺ MP 560
- ❻ Mobile frame



Diaphragm pumps MP 100

The compressed air-driven Krautzberger diaphragm pumps are specifically tailored to requirements in the field of spraying technology. The compact and sturdy design permits universal use, and the large valve cross sections also allow use with highly viscous media.

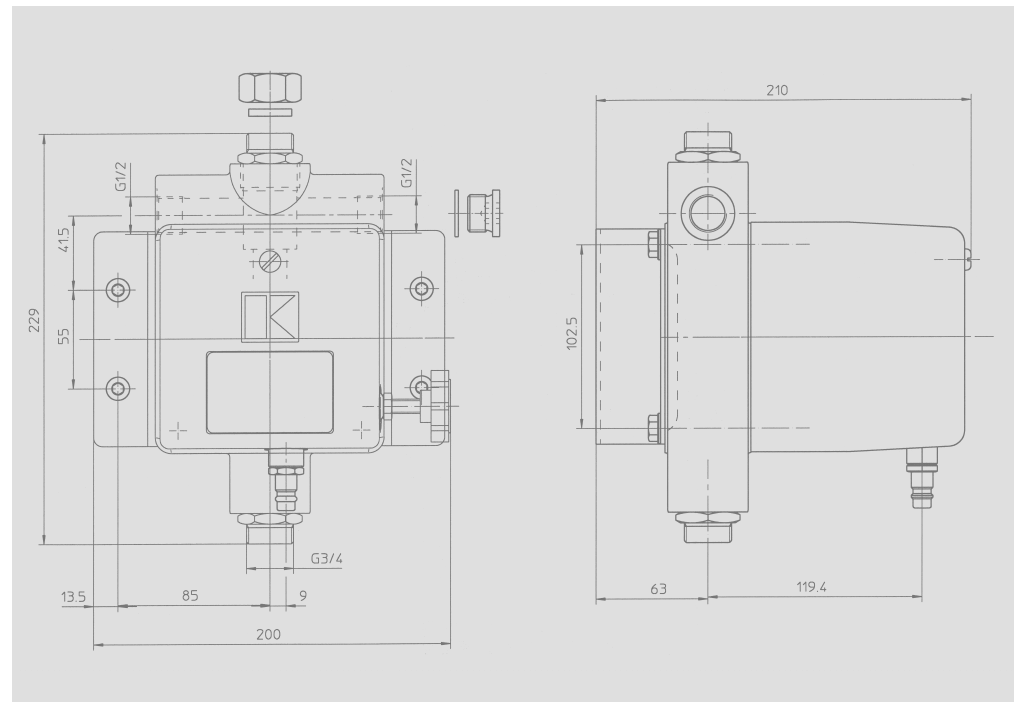
A mounted pressure equalisation container ensures smooth and low-pulsation operation. A material pressure regulator installed downstream (a suitable material filter is also recommended) permits precision setting of extremely small pressures.

The technical data are based on an air inlet pressure of 8 bar. The pumps of course also function perfectly at low pressures.

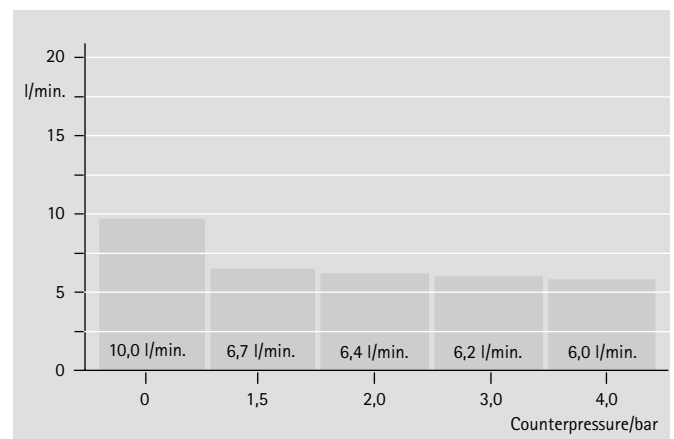
Krautzberger diaphragm pumps are also used where piston or centrifugal pumps are unsuitable – for example, for the pumping of dyes, paints, glues, dispersions, solvents, oils, glazing agents, enamels, wood preservatives, petroleum products, chocolate, sugar syrup, jam, ketchup etc.

The pump body is made of aluminium with hard-coated surface as standard. This makes the pump extremely hardwearing as well as resistant to media with a pH of between 3.0 and 8.0. The pumps are also suitable for use in the food industry.

The valves are available in either stainless steel or tungsten carbide (stainless steel), the diaphragms in PTFE or NBR. The



pumps are equipped for wall mounting as standard but are also available on request as a unit mounted on a trolley with storage space for the material drum or as a portable unit mounted on a cover (for mounting on the material feed container (e.g. euro hobbock). Suitable stirrers for mounting on this cover are also available.



[Delivery volume, measured using water with 100 pump strokes/minute (recommended max. output)]

Technical data

Pump body: aluminium, hard-coated
 Pressure equalisation tank: fibre glass-reinforced polyamide, with detachable cover and pressure gauge
 Delivery: 10 litres/min.
 Pressure: max. 6.5 bar
 Stroke rate: max. 120/min.
 Recommended stroke rate: 100/min.
 Air inlet pressure: min. 4 bar, max. 8 bar
 Air consumption at 8 bar: approx. 80 litres/min.
 Weight: 5.3 kg

Diaphragm pumps MP 400

The compressed air-driven Krautzberger diaphragm pumps are specifically tailored to requirements in the field of spraying technology. The compact and sturdy design permits universal use, and the large valve cross sections also allow use with highly viscous media.

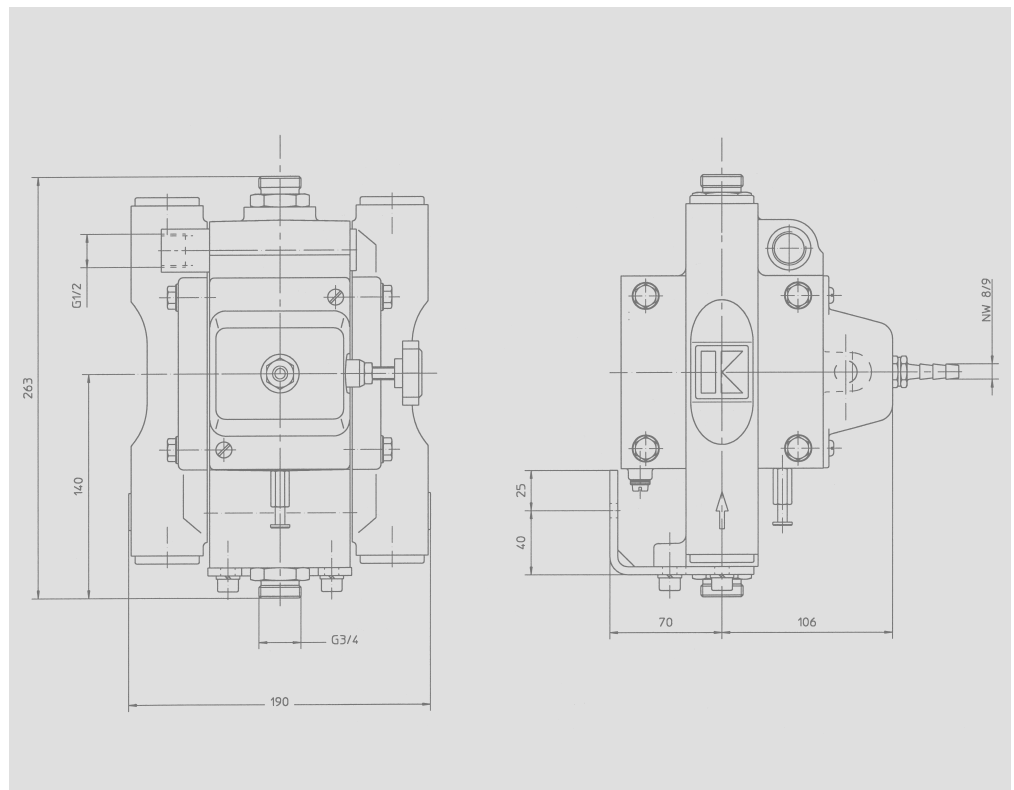
A mounted pressure equalisation container ensures smooth and low-pulsation operation. A material pressure regulator installed downstream (a suitable material filter is also recommended) permits precision setting of extremely small pressures.

The technical data are based on an air inlet pressure of 8 bar. The pumps of course also function perfectly at low pressures.

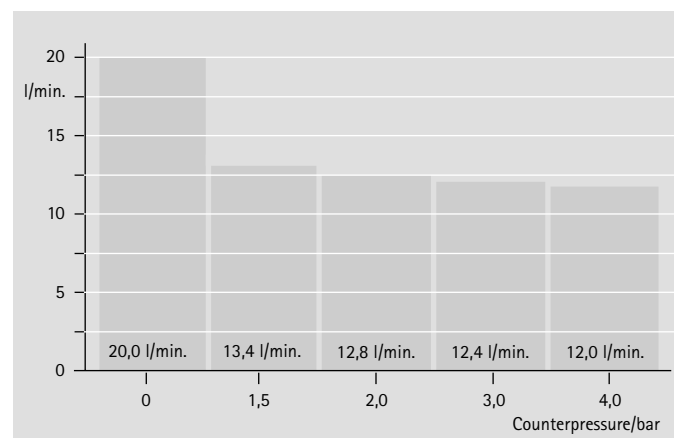
Krautzberger diaphragm pumps are also used where piston or centrifugal pumps are unsuitable – for example, for the pumping of dyes, paints, glues, dispersions, solvents, oils, glazing agents, enamels, wood preservatives, petroleum products, chocolate, sugar syrup, jam, ketchup etc.

The pump body is made of aluminium with hard-coated surface as standard. This makes the pump extremely hardwearing as well as resistant to media with a pH of between 3.0 and 8.0. The pumps are also suitable for use in the food industry.

The valves are available in either stainless steel or tungsten carbide (stainless steel), the dia-



phragms in PTFE or NBR. The pumps are equipped for wall mounting as standard but are also available on request as a unit mounted on a trolley with storage space for the material drum or as a portable unit mounted on a cover (for mounting on the material feed container (e.g. euro hobcock). Suitable stirrers for mounting on this cover are also available.



[Delivery volume, measured using water with 100 pump strokes/minute (recommended max. output)]

Technical data

Pump body: aluminium, hard-coated
 Pressure equalisation tank: fibre glass-reinforced polyamide, with detachable cover and pressure gauge
 Delivery: 20 litres/min.
 Pressure: max. 8 bar
 Stroke rate: max. 120/min.
 Recommended stroke rate: 100/min.
 Air inlet pressure: min. 4 bar, max. 8 bar
 Air consumption at 8 bar: approx. 160 litres/min.
 Weight: 7.5 kg

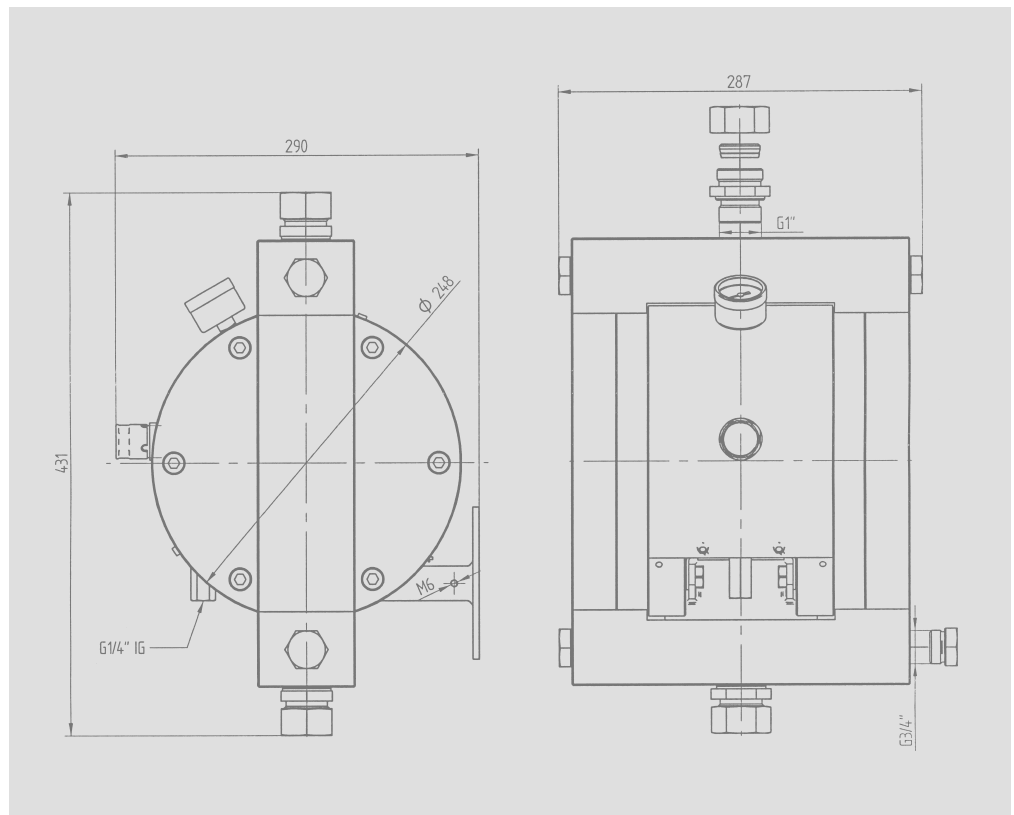
Membranpumpen MP 560

The compressed air-driven Krautzberger diaphragm pumps are specifically tailored to requirements in the field of spraying technology. The compact and sturdy design permits universal use, and the large valve cross sections also allow use with highly viscous media.

A mounted pressure equalisation container ensures smooth and low-pulsation operation. A material pressure regulator installed downstream (a suitable material filter is also recommended) permits precision setting of extremely small pressures.

The technical data are based on an air inlet pressure of 8 bar. The pumps of course also function perfectly at low pressures.

Krautzberger diaphragm pumps are also used where piston or centrifugal pumps cannot be used – for example, for the transport of paints, lacquers, glues, dispersions, solvents, oil, glazing agents, enamel, wood preservation agents, mineral oil products etc.



The pump body is made of stainless steel as standard. This makes it extremely resistant to wear.

The pumps are equipped for wall mounting as standard but can also (on request) be supplied on a trolley with a storage surface for the material container.

Technical data

| | |
|-----------------------------------|--|
| Pump body: | Stainless steel |
| Pressure equalisation tank: | fibre glass-reinforced polyamide, with detachable cover and pressure gauge |
| Delivery: | 55 litres/min. |
| Pressure: | max. 8 bar |
| Recommended stroke rate: | 100/min. |
| Air inlet pressure: | min. 4 bar, max. 8 bar |
| Weight: | 50 kg |



1



3

- 1 Type 30-20
- 2 Type 9-20 Duo
- 3 Type 22-115
- 4 Type 30-50 Airless
- 5 Type 15-50 Airless with heater



2



4

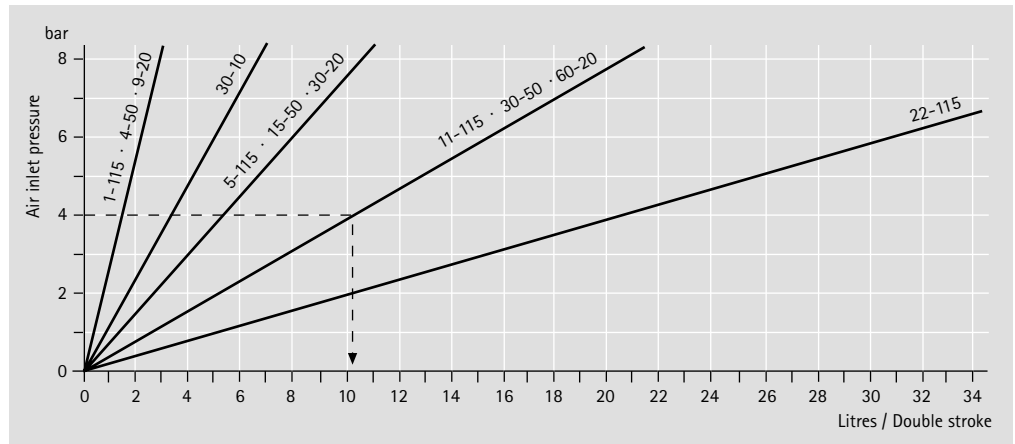


5

Piston pumps

The pneumatically driven Krautzberger piston pump sucks the coating substance from the material container through a suction hose or a suction pipe and subjects it to pressure. When it leaves the spray gun, the medium is atomised through a special nozzle by the high pressure. The hydraulic piston is a differential piston and moves up and down in the working cylinder of the hydraulic section.

During the upward stroke, the ball of the suction valve and the coating medium is sucked into the lower chamber of the working cylinder. At the same time, the ball of the pressure valve in the piston is pressed onto its seat and the medium displaced from the upper ring chamber of the working cylinder into the pressure line. During the downward stroke, the ball of the suction valve is pressed onto its seat and the ball of the pressure valve moves upward. The piston displaces half of the medium from the lower chamber of the working cylinder into the upper chamber and the other half into the pressure line. The piston rod of the air piston motor is connected to the pump piston and transmits the motion in a linear fashion. The piston motion is generated by the alternating feed of compressed air to the air motor piston and controlled by a four-way air valve. As long as compressed air is fed into the control section via the pressure reducing valve, the thrust piston motor continues to operate until the pump has built up a sufficient hydraulic pressure in the pressure line to counterbalance the thrust of the incoming compressed air. The pump then remains in quiescent position until the hydraulic pressure begins to fall as a result, for example, of operation of the spray gun. The pump then continues to pump



Example:
 Pump type: 30 – 50
 Air inlet pressure: 4 bar
 Air consumption/Double stroke: 10.2 litres

| Piston pumps | | | | | | | | |
|--------------|--------------------------------------|---------------------------------|-----------------------------------|---------------------------------|--------------------------------|--------------------------------|---|---|
| Type | Applications | Theoretical transmission ratios | Delivery volume per double stroke | Max. recommended double strokes | Max. air inlet pressure in bar | max. operating pressure in bar | max. recommended spraying rate l/min. ²⁾ | max. delivery volume l/min. ¹⁾ |
| per minute | | | | | | | | |
| 30 - 10 | Airless / Duo | 30 : 1 | 20 ccm | 50 | 8 bar | 240 bar | 1,0 l | 2,0 l |
| 9 - 20 | ND Airless / Duo | 9 : 1 | 40 ccm | 50 | 8 bar | 72 bar | 2,0 l | 4,0 l |
| 30 - 20 | Airless / Duo | 30 : 1 | 40 ccm | 50 | 8 bar | 240 bar | 2,0 l | 4,0 l |
| 60 - 20 | Airless | 60 : 1 | 40 ccm | 50 | 8 bar | 480 bar | 2,0 l | 4,0 l |
| 4 - 50 | Low-pressure Airless | 4 : 1 | 100 ccm | 50 | 8 bar | 32 bar | 5,0 l | 10,0 l |
| 15 - 50 | Airless / Duo / Hot | 15 : 1 | 100 ccm | 50 | 8 bar | 120 bar | 5,0 l | 10,0 l |
| 30 - 50 | Airless / Duo / Hot | 30 : 1 | 100 ccm | 50 | 8 bar | 240 bar | 5,0 l | 10,0 l |
| Mordant | Low-pressure Airless | 4 : 1 | 100 ccm | 50 | 8 bar | 32 bar | 5,0 l | 10,0 l |
| 1 - 115 | Material feed | 1,5 : 1 | 230 ccm | 50 | 6 bar | 9 bar | 11,5 l | 23,0 l |
| 5 - 115 | Low-pressure Airless / Material feed | 5 : 1 | 230 ccm | 50 | 6 bar | 30 bar | 11,5 l | 23,0 l |
| 11 - 115 | Airless / Duo / Hot | 11 : 1 | 230 ccm | 50 | 6 bar | 66 bar | 11,5 l | 23,0 l |
| 22 - 115 | Airless / Duo / Hot | 22 : 1 | 230 ccm | 50 | 6 bar | 132 bar | 11,5 l | 23,0 l |

¹⁾ measured at 100 double strokes/minute ²⁾ measured at 50 double strokes/minute

and maintains the dynamic equilibrium between air pressure and hydraulic pressure. The selected nozzle size and the set spraying pressure determine the stroke rate (strokes per minute) and the air consumption and thus also the spraying capacity of the pump. All pump components in contact with the medium are made of high-grade stainless steel.