

The All-rounder series

MAGDOS LP - solenoid-diaphragm dosing pumps 0.5 – 15 l/h, up to 16 bar



Reliable dosing of chemicals

The solenoid-diaphragm dosing pump MAGDOS LP stands for dosing without compromises for the highest demands. The right individual solution for every application.

The power ranges cover from 0.5 – 15 l/h with back pressures up to 16 bar. Double-ball valves ensure accurate dosing. The dosing power can be adapted by varying the stroke frequency manually, via an external control contact or using a 0/4 – 20 mA signal.

Several different materials and connections are available for suction and discharge side, depending on the specific applications. A coordinated accessory set consisting of hoses, injection nozzles and suction lines enables fast installation, while achieving optimum results.

Easy handling

Thanks to the sturdy, low-maintenance solenoid drive, the media being supplied (acids, alkalis, coagulants and flocculants, for example) are reliably and accurately dosed.

The MAGDOS LP doesn't just impress with its elegant design; the graphical display with a multi-language menu as well as the dosing pump's operation using the integrated keyboard simplifies its use.

The MAGDOS LP is also available with an optional Ethernet interface. This network connection enables you to control the stroke frequency and the number of strokes. In addition, all fault messages can be transmitted in the opposite direction.

The dosing pump is compact and, thanks to the small mounting area, can be integrated into every dosing system in a very space-saving way. It can be mounted in three different positions without further attachments: standing, left- or right-oriented on a wall.

Functions

- Output range from 0.5 – 15 l/h, up to 16 bar
- Long-range power supply unit 110 – 240 V, 50/60 Hz, IP65
- Dosing head ventilation (plastic version)
- Suitable for wall and floor mounting
- Material finishes PVC, PP, PVDF and stainless steel
- Stroke frequency can be adjusted via the keyboard
- Graphic display with multi-language menu
- Analogue input and pulse input (increase and reduction)
- Level input with early warning and main alarm
- Release input
- Supply amount displayed in various units
- Energy-saving "Eco-mode" is available
- Stroke feedback output
- Batch dosing with interval and timer functions
- Dosing control input
- Alarm relay output
- Diaphragm failure input for leak monitoring
- Ethernet interface (optional)
- CSA and UL certified
- Maximum delivery rate can be limited

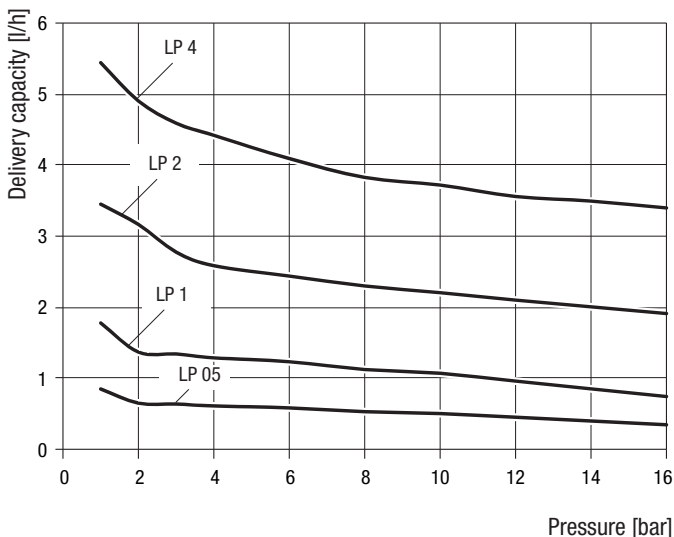
Technical specifications

| MAGDOS LP | | 05 | 1 | 2 | 4 | 6 | 10 | 15 |
|--|--------------------------|--|------|------|------|------|------|------|
| Delivery capacity at max. back pressure | l/h | 0.36 | 0.76 | 1.9 | 3.4 | 6.2 | 9 | 13 |
| | ml/stroke | 0.05 | | 0.2 | 0.32 | 0.57 | 0.83 | 0.87 |
| Max. delivery pressure | bar | 16 | | | | 8 | 6 | 3 |
| Delivery capacity at average back pressure | l/h | 0.54 | 1.1 | 2.3 | 3.8 | 6.8 | 10 | 15 |
| | ml/stroke | 0.08 | 0.07 | 0.24 | 0.35 | 0.63 | 0.92 | 1 |
| Average delivery pressure | bar | 8 | | | | 4 | 3 | 1 |
| Nominal stroke frequency | RPM | 120 | 250 | 160 | 180 | | 250 | |
| Suction lift for non-gassing media | mWS | 5 | | 3 | | 2 | | |
| Max. supply pressure | mbar | 800 | | | | | | |
| Diameter of diaphragm | mm | 24 | | 33 | | 39 | | |
| Valve size | | DN3 | | | DN4 | | | |
| Voltage supply | | 110 – 240 V, +10 % / -5 %, 50/60 Hz | | | | | | |
| Power consumption | W | 10 | 15 | 21 | 27 | 28 | 29 | 26 |
| Protection class | | IP65 (with covering caps on the connections) | | | | | | |
| Insulation class | | F | | | | | | |
| Material | | PVC, PP, PVDF, 1.4571 | | | | | | |
| Weight | PVC, PP, PVDF | kg | | | | | | |
| | Stainless steel (1.4571) | kg | | | | | | |
| Permitted ambient temperature | °C | 5 – 45 (with PVC parts 5 – 40) | | | | | | |
| Permitted media temperature | °C | 80 (with PVC parts 35; with PP parts 60) | | | | | | |

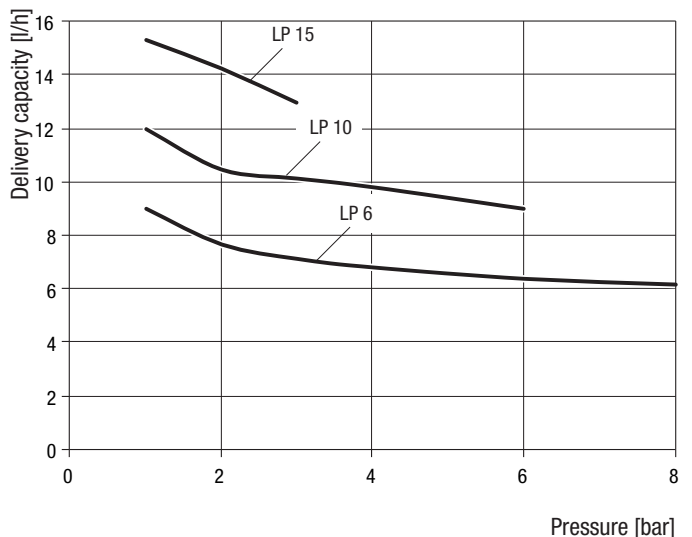
Delivery characteristic curves

These delivery capacities were determined on the manufacturer's test stands. They apply at 20 °C (68 °F) for water, at 100 % stroke frequency. The delivery capacity depends on the medium (density and viscosity) and temperature. Since these conditions vary at every installation location, you should calibrate the dosing pump.

MAGDOS LP 05 – 4



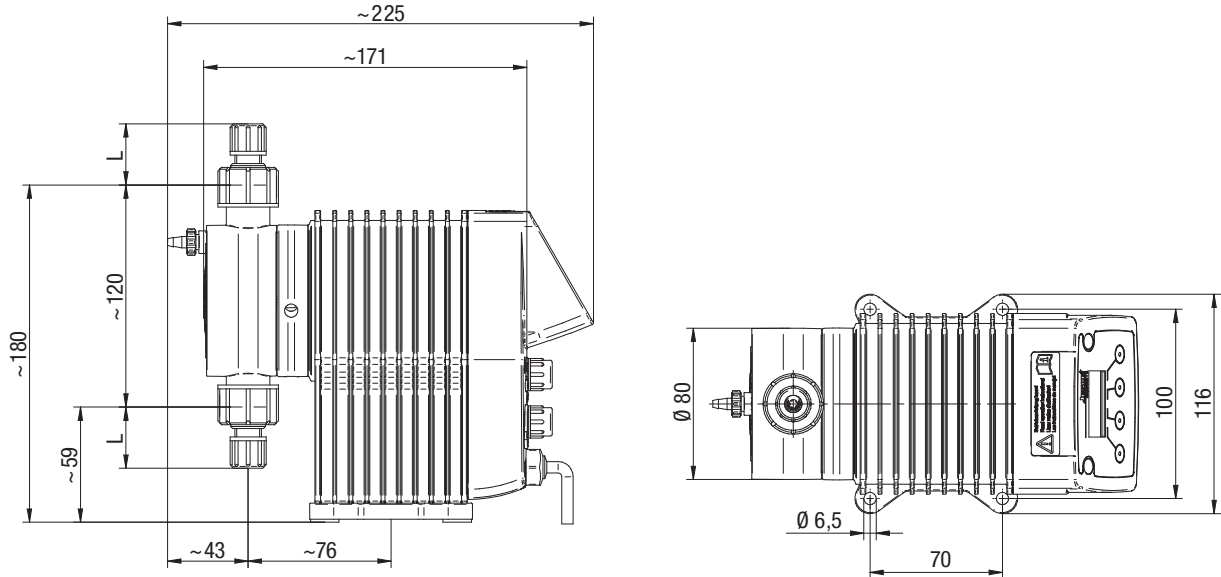
MAGDOS LP 6 – 15



Dimensions

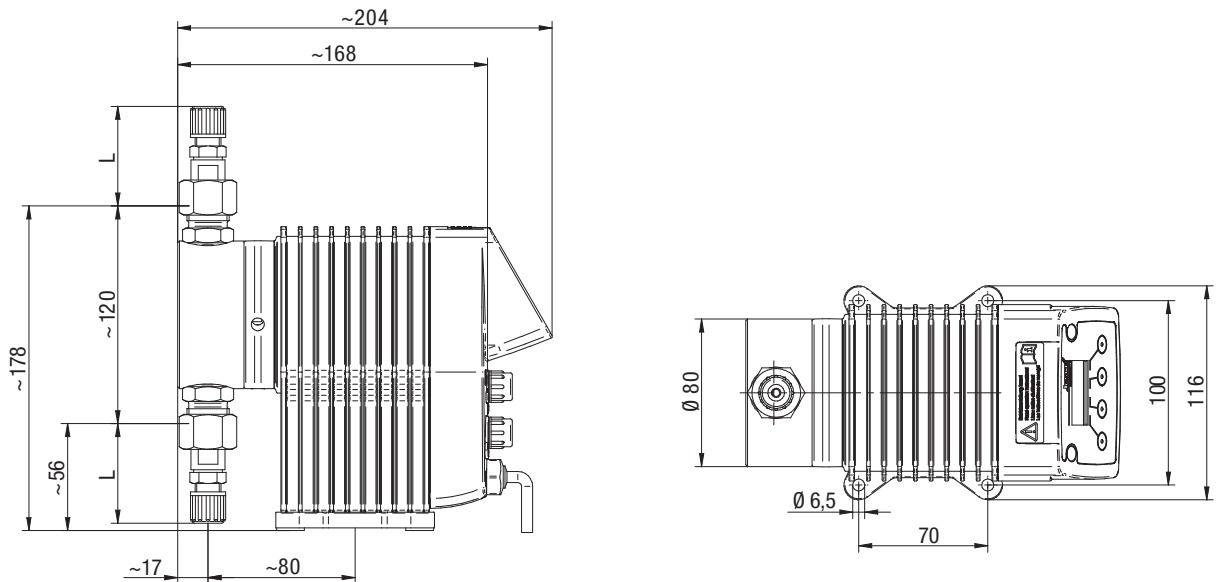
MAGDOS LP with dosing head made of PVC, PP or PVDF

All dimensions in mm



MAGDOS LP with dosing head made of stainless steel 1.4571

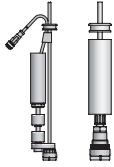
All dimensions in mm



| Connection | Material | Scale | Nominal width | L |
|-----------------------|--------------------------------|----------|---------------|-------|
| Hose clamp connection | PVC, PP, PVDF | 4/6 mm | DN4 | 31 mm |
| | | 1/4x3/8" | 1/4" | 34 mm |
| | | 6/9 mm | DN6 | 34 mm |
| | | 6/12 mm | DN6 | 15 mm |
| | Stainless steel (1.4571), PVDF | 4/6 mm | DN4 | 50 mm |
| | | 6/9 mm | DN6 | 54 mm |

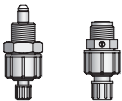
You will receive further connection possibilities for your dosing pump upon request.

MAGDOS LP standard - accessories



Suction lines

Type SL-2 with ceramic reinforcement piece, cable length 3,000 mm, tube length 2,500 mm. Level monitoring and pre-alarm with 2 switching points, switching distance approx. 50 mm. Switching function: Closer on rising level, electrical connection to dosing pump via plug connector M12x1. Flexible suction line, SA model with foot valve and load part made from ceramic and 2,500 mm hose length.



Injection nozzles

From the connection of the dosing line to the dosing point.
Injection nozzle type S, hose-loaded, opening pressure 1.1 bar
Injection nozzle type R, spring-loaded, opening pressure 0.1 bar



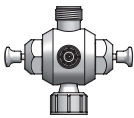
Suction and pressure tube

Permissible operating pressure at 20 °C in accordance with DIN EN ISO 7751, chemical resistance and correct connection are assumed.



FLOWCON LP 1

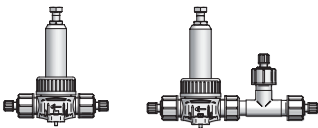
- Efficient monitoring of pulsating volume flows
- Compact design, highly robust product
- Easy handling
- Capacity between 0.36 and 13 l/h
- Electric analysis using MAGDOS LP, or performed externally using SPS



PENTABLOC

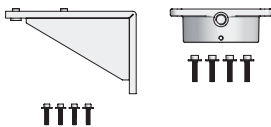
The PENTABLOC multi-function valve is installed directly on the dosing head of the pump and contains the following features:

- Back pressure function, opening pressure 3 bar
- Pressure relief function, opening pressure 11 bar
- Antisiphon function
- Dosing monitoring function



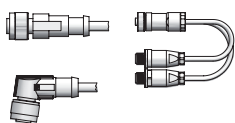
Back pressure and pressure relief valves

Back pressure valves to be mounted in the dosing line.
Adjustable pressure 1 – 16 bar
Pressure relief valves to be mounted in the dosing line.
Adjustable pressure: Plastic 1 – 16 bar, stainless steel 1 – 25 bar



Wall bracket and connecting piece

Wall bracket including mounting material for mounting pumps. Material: PP
Connecting piece and mounting hardware required to fit the pump to a water meter. Material: Cast aluminium, coated



Various cables, plugs and adapters

Cable for: external release and pulse output A-coded, 0/4 – 20 mA and pulse input A-coded, cable for alarm B-coded, level monitoring A-coded, Ethernet network connection D-coded.
Plug connector: for retrofitting existing suction lines or level monitors.
Y-cable: for parallel use of FLOWCON LP 1 and a leakage detector in the MAGDOS LP's common socket.
Adapter: when using older suction lines with a 3.5 mm jack plug; when using a suction line with M12x1 plug connector.