

# Product Information Solenoid Diaphragm Dosing Pump MAGDOS LP

## Reliable dosing of chemicals

Solenoid diaphragm dosing pumps play an important role in the reliable and accurate dosing of liquids in process sequences. They are appropriate for low-pressure applications and small dosing quantities.

Dosing pumps are used in many branches of industry that work with liquid chemicals - not excluding toxic and aggressive media.

## Wide range of applications

MAGDOS LP is available in seven power ranges. The power ranges cover from 0.5 to 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 matching accessory set with hoses, injection points and suction lines means that nothing stands in the way of a quick installation, and you get the best results.

## Simple to use and space-saving

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 error 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.

## In Short

- Capacity range 0.5 to 15 l/h, up to 16 bar
- Multi-voltage power supply unit 110 to 240 V, 50/60 Hz, IP 65, 18 W
- Graphical display with multi-language menu
- Precise pump adjustments using the keyboard
- Calibration functionality
- Supply amount displayed in various units
- Two eco-mode settings
- External control via standard signal 0/4 – 20 mA
- External control via floating contacts with impulse increase and reduction
- Batch dosing with interval and timer functions
- Ethernet interface (optional)
- Integrated dosing head venting device (plastic version)
- Diaphragm breakage detection and reporting (optional)
- Materials available: PVC, PP, PVDF and stainless steel
- Supplied with connection sets (plastic version)
- Material consistency for the pumps and accessories
- Dosing heads and valves for high-viscosity media



## Model variants

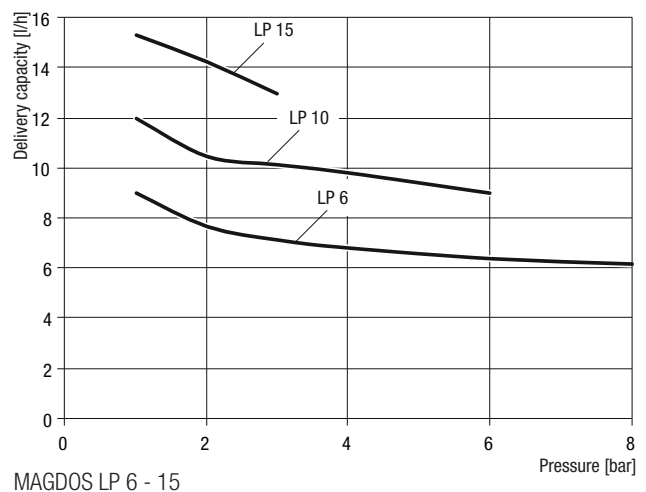
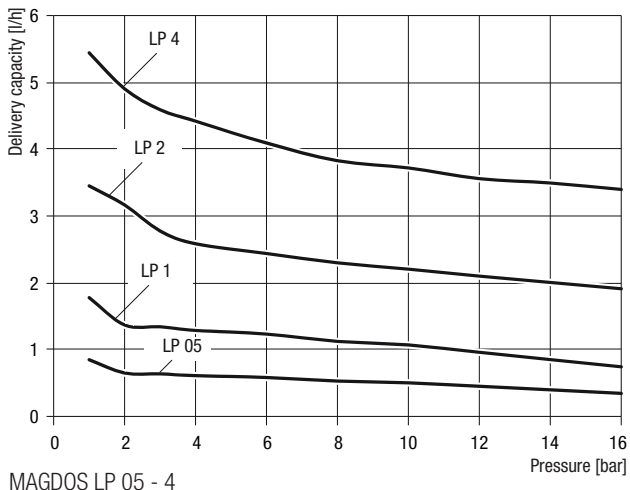
MAGDOS	Material			
	PVC	PP	PVDF	Stainless steel
LP 05	10231001	10231015	10231008	10231022
LP 1	10231002	10231016	10231009	10231023
LP 2	10231003	10231017	10231010	10231024
LP 4	10231004	10231018	10231011	10231025
LP 6	10231005	10231019	10231012	10231026
LP 10	10231006	10231020	10231013	10231027
LP 15	10231007	10231021	10231014	10231028

## Technical data

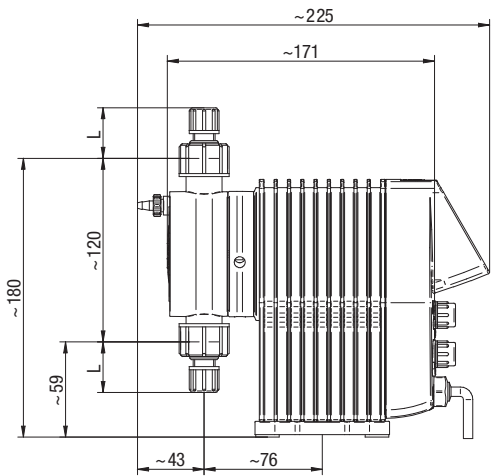
MAGDOS LP		05	1	2	4	6	10	15	
Delivery capacity at max. pressure	l/h	0.36	0.76	1.9	3.4	6.2	9.0	13.0	
	ml/stroke	0.05	0.05	0.2	0.31	0.57	0.83	0.86	
Max. supply pressure	bar	16				8	6	3	
Delivery capacity at medium pressure	l/h	0.54	1.1	2.3	3.8	6.8	10.0	15.0	
	ml/stroke	0.08	0.07	0.24	0.35	0.63	0.92	1.0	
Average back pressure	bar	8				4	3	1	
Max. stroke frequency	RPM	120	250	160	180		250		
Suction head for non-gassing media	mWS	5		3		2			
Max. supply pressure	mbar	800							
Nominal valve width		DN3			DN4				
Voltage supply		110 to 240 V AC, -10% / +5%, 50/60 Hz							
Power consumption	W	10	15	21	27	28	29	26	
Protection class		IP 65 (with covering caps on the connections)							
Insulation class		F							
Weight	PVC, PP, PVDF	kg						~ 3.2	
	1.4571	kg						~ 4.3	
Max. ambient temperature	°C	45 (40 with PVC parts)							
Max. temperature of the medium	°C	80 (with PVC parts 35; with PP parts 60)							

## Delivery characteristic curves

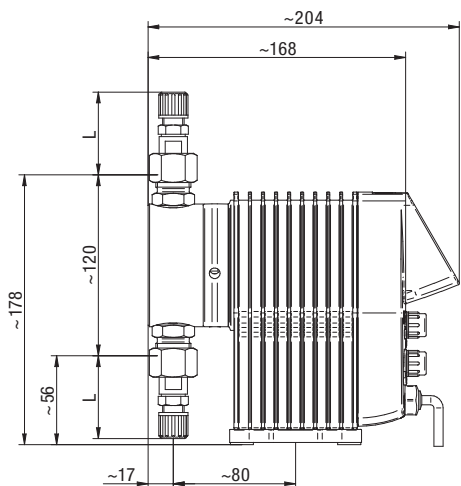
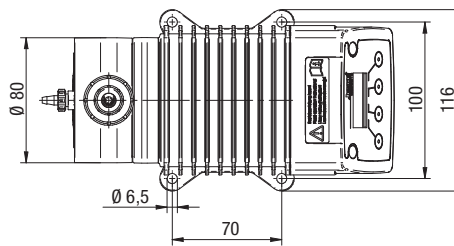
The delivery characteristic curves are valid for 20 °C (68 F) for water at 100% stroke frequency. The delivery capacity depends on the medium (density and viscosity) and temperature. Dosing pumps must therefore be gauged in litres during application.



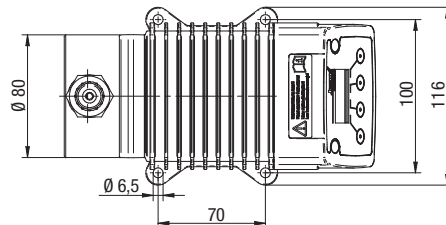
### Dimensions



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



MAGDOS LP with dosing head made of stainless steel



All dimensions in mm

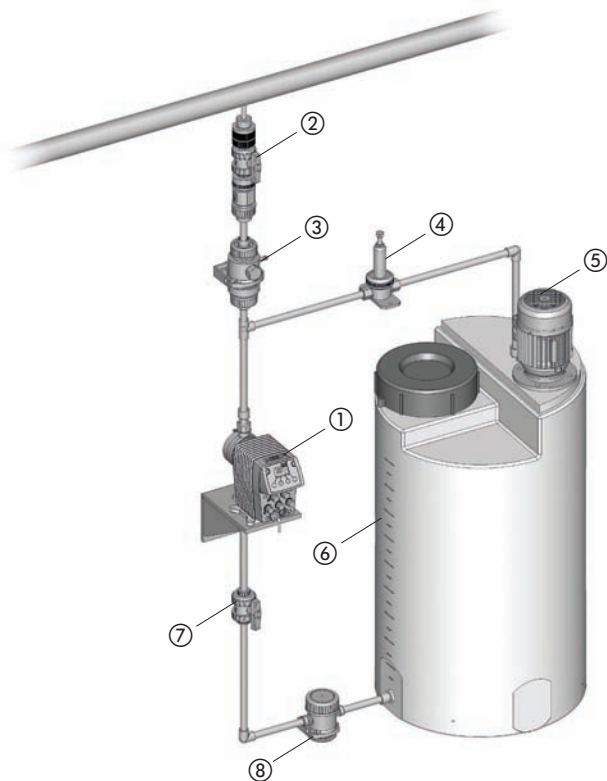
Connection	Material	Size	Nominal diameter	L
Hose clamp connection	PVC, PP, PVDF	4/6 mm	DN4	31 mm
		1/4x3/8"	1/4"	34 mm
		6/9 mm	DN6	34 mm
		6/12 mm	DN6	15 mm
	1.4571 / PVDF	4/6 mm	DN4	50 mm
		6/9 mm	DN6	54 mm

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## Accessories

Suitable sets of accessories, which consists of a suction line, a pressure line and an injection nozzle, are available for the dosing pumps.

Even the best pump can still be improved - namely by the right technical periphery.



### Legend

- |  |                              |
|--|------------------------------|
| ① MAGDOS LP                            | ⑤ Electrical agitator        |
| ② Injection nozzle with shut-off valve | ⑥ Dosing tank                |
| ③ Pulsation dampener                   | ⑦ Shut-off valve             |
| ④ Pressure relief valve                | ⑧ Suction pressure regulator |

To make your dosing pump into an efficient dosing system, we recommend using the following accessories:

- Injection nozzles – to dose the medium in the main line and to prevent it flowing back into the pressure line
- Pressure loading and relief valves – to increase dosing accuracy or to protect the system against too high a pressure
- Pulsation dampener – to damp supply currents as well as to reduce the flow resistance in long pipelines.
- Priming aids – to significantly ease priming of dosing pumps with low supply volumes per stroke, for large suction heights, for highly-viscous dosing media or for initial priming or when priming after the system has been laying idle
- Suction pressure regulator – to prevent medium flow when the dosing pump is not running or to prevent a vacuum being formed in the event of a pipe burst

For further accessories for your dosing pump, please refer to our dosing pump brochure.