

Reliable dosing of chemicals

Solenoid diaphragm dosing pumps play an important role in the reliable and accurate dosing of liquids.

Lutz-Jesco metering pumps are specifically designed for water treatment and the process industry.

Wide range of applications

The MAGDOS LP is available in seven sizes for metering applications up to 4 gph with back pressures up to 260 psig. Double-ball valves ensure accurate, consistent dosing. The dosing rate can be adjusted by changing the stroke frequency manually, via external control contact or by using a 0/4 - 20 mA signal.

Several different materials and connections are available for wetted-end components. By using appropriate and recommended materials, the MAGDOS LP can be used in a wide variety of process applications.

Matching accessory sets with tubing, injection nozzles and suction lines allow quick installation and reliable operation.

Simple to use and space-saving

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

The combination of the MAGDOS LP's solid design and the easy-to-use digital controls allow for short set up times and efficient operation.

The compact design and the small footprint allow for easy integration into dosing systems even for installations with limited space available.

Wall mounting is possible provided the check valves remain in a vertical orientation by rotating the head.

The MAGDOS LP is also available with an optional Ethernet interface. This network connection enables you to control stroke frequency. In addition, all error messages can be transmitted back to the external controller.



In Short

- Capacity range to 4 gph, up to 260 psig
- Wide range power supply unit 110-240 VAC, 50/60 Hz
- Multi-language menu support
- Easy-logic menu controls with graphical display guidance
- Calibration functionality
- Multi-unit capacity indication
- Two Eco-operation settings
- External control via standard signal 0/4 - 20 mA
- External control via floating contacts with impulse increase and reduction
- Batch dosing with both interval and timer functions
- Integrated vented head (standard on plastic version)
- Wall and floor mounting possible without a bracket
- Double-ball valves ensure accurate dosing
- Materials: PVC (standard), PP, PVDF, SS
- Material consistency for pumps and accessories
- Dosing heads and valves for high-viscosity media are available

Technical Data

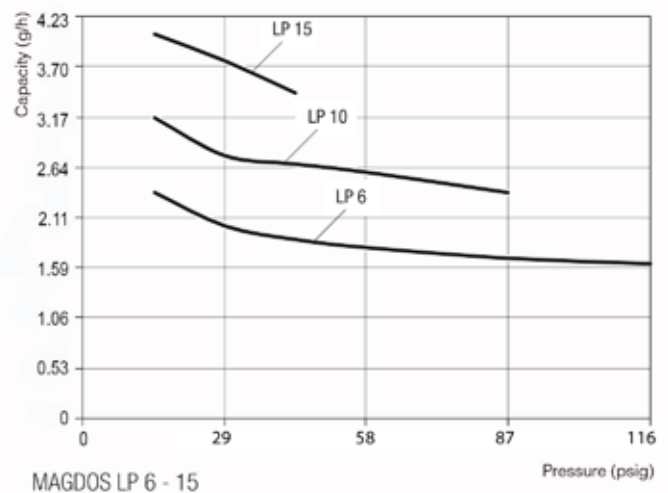
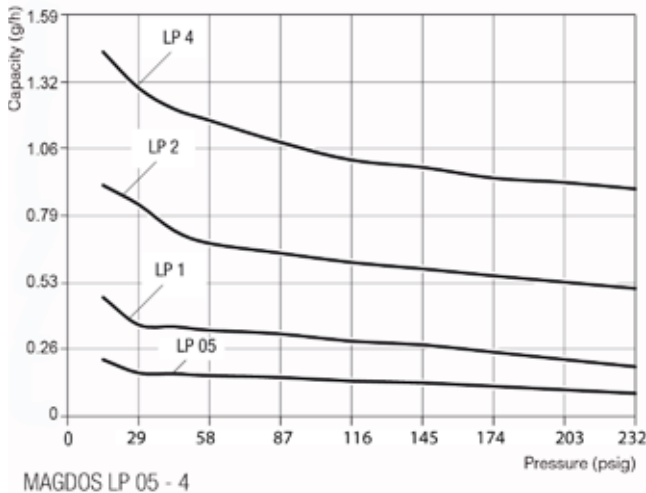
MAGDOS LP		05	1	2	4	6	10	15	
Delivery capacity at max. pressure	gph	0.09	0.20	0.50	0.89	1.60	2.40	3.43	
	ml/stroke	0.05	0.05	0.2	0.31	0.57	0.83	0.86	
Max. supply pressure*	psig	260 (label reads 232 psi)				145	87	43	
Delivery capacity at average pressure	gph	0.14	0.29	0.61	1.00	1.80	2.64	4.00	
	ml/stroke	0.08	0.07	0.24	0.35	0.63	0.92	1.0	
Average back pressure	psig	116				58	43	14	
Max. stroke frequency	SPM	120	250	160	180		250		
Suction head for non-gassing media	ft H ₂ O	16		9		6			
Max. inlet pressure	psig	11							
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	~ 7							
	Stainless Steel	~ 10							
Max. ambient temperature	°F	Stainless Steel/PVDF 41°F - 113°F (41°F - 104°F with PVC parts)							
Max. temperature of the medium	°F	Stainless Steel/PVDF 176°F (with PVC parts 95°F; with PP parts 140°F)							

*Maximum pressure 260 PSI for PVDF, PP, Stainless Steel. Maximum pressure for PVC 232 PSI.

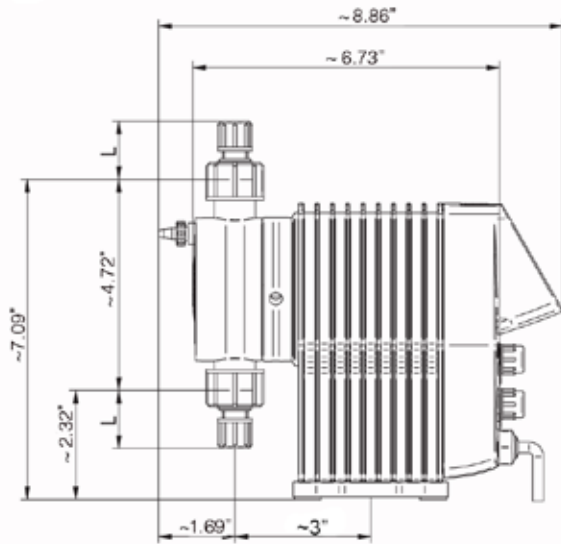
Note: delivery ratings can differ on Magdos with PMMI head. Consult factory for details.

Flow Curves

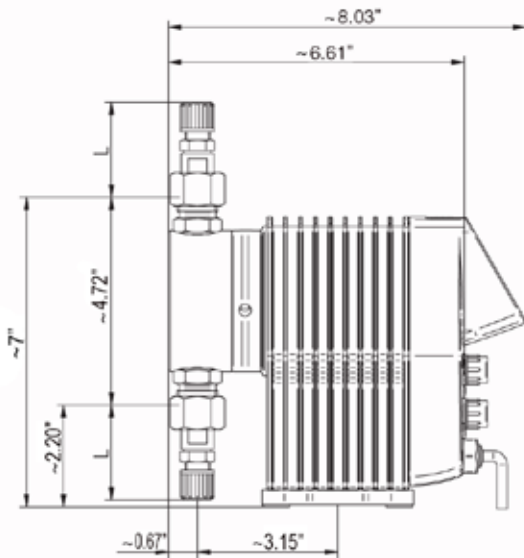
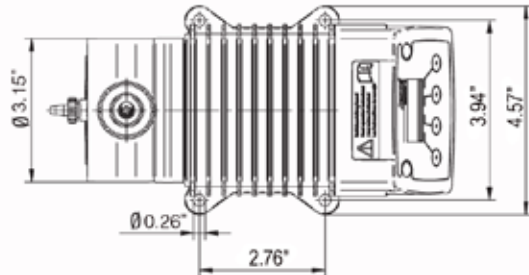
The flow curves are valid for ambient temperatures of 68 °F (20 °C) and dosing water at 100% stroke frequency. The delivery capacities depend on the medium (density and viscosity) and temperature.



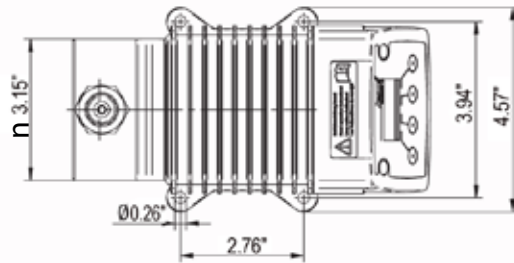
MAGDOS LP Dimensions



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



MAGDOS LP with dosing head made of stainless steel



Material	Size	L
PVC, PP, PVDF	1/4" x 3/8"	1.34"
	1/4" x 7/16"	1.34"
	1/4" FNPT	1.34"
Stainless Steel/ PVDF	1/4" FNPT	1.96"
	1/4" FNPT	2.12"

Accessories

Even the best pump can be improved – simply by the addition of appropriate accessories.

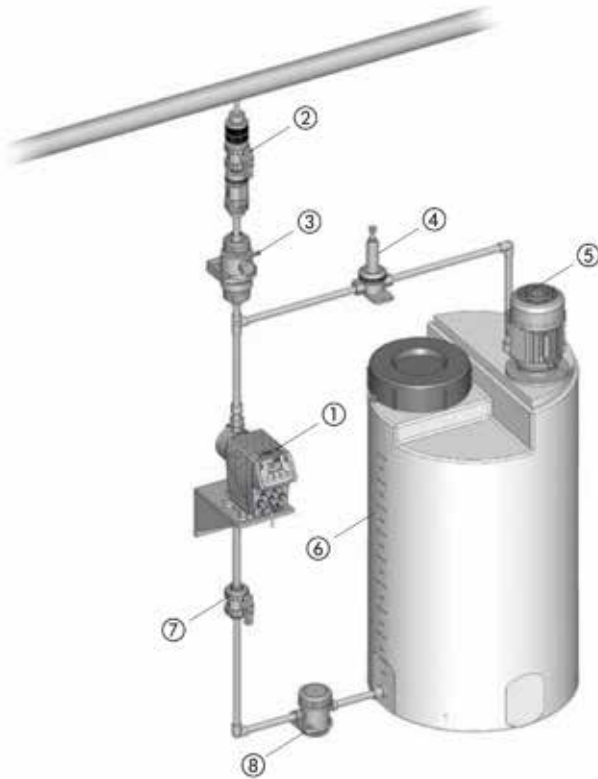
Suitable sets of accessories, consisting of suction/discharge tubing, foot valve and injection nozzle, are available for the dosing pumps.

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

- Injection nozzles - to dose the medium into the main line and to prevent it from flowing back into the pressure line
- Back pressure and pressure relief valves - to increase dosing accuracy or to protect the system against excessive pressure

- Pulsation dampener - to dampen supply flow as well as to reduce discharge flow pulsations
- Priming aids - to significantly ease priming of dosing pumps with low supply volumes per stroke, for large suction heights, highly viscous dosing media, for initial priming or when priming after the system has been 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 failure

Please contact us for more information on accessories and metering pump systems.



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 |