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 3.96 gph with back pressures up to 232 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 3.96 gph, up to 232 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 available: PVC (standard), PP, PVDF and Stainless Steel
- Material consistency for pumps and accessories
- Dosing heads and valves for high-viscosity media are available

Tested and Certified to NSF/ANSI/CAN 61 and NSF/ANSI 372 by Water Quality Association (WQA) for PVDF version

Lutz-JESCO America Corp.

Solenoid Diaphragm Dosing Pump - MAGDOS LP

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	232				116	87	43
Delivery capacity at average pressure		gph	0.14	0.29	0.61	1.00	1.80	2.64	3.96
		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_2O	16		9		6		
Max. inlet pressure		psig	11 PSI						
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	lb	7						
	Stainless Steel	lb	9.5						
Ambient temperature range		°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)						

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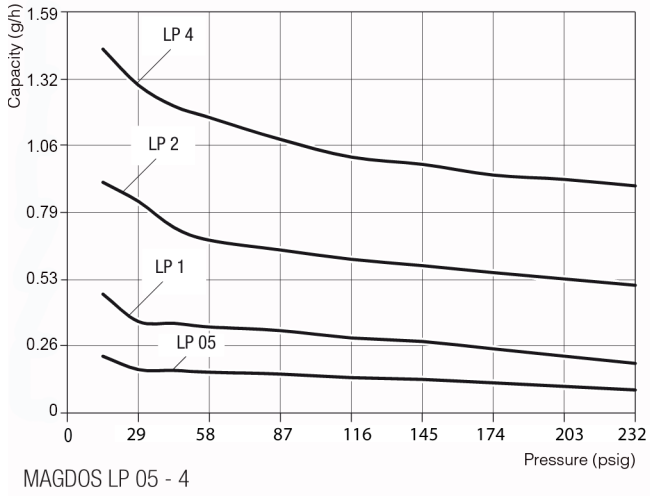
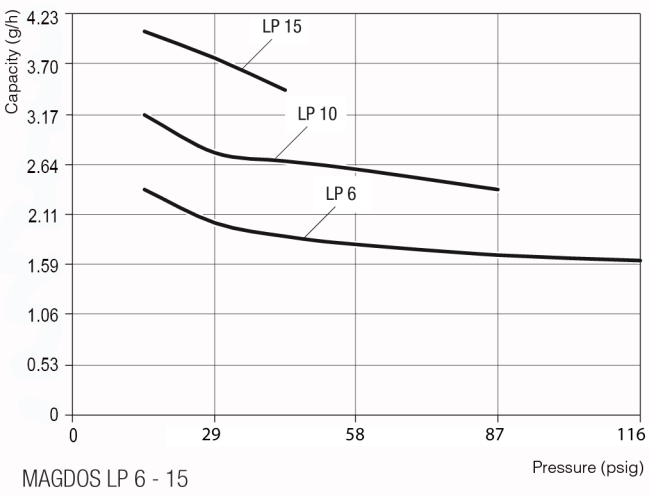
Flow Curves

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 05 - 4



MAGDOS LP 6 - 15

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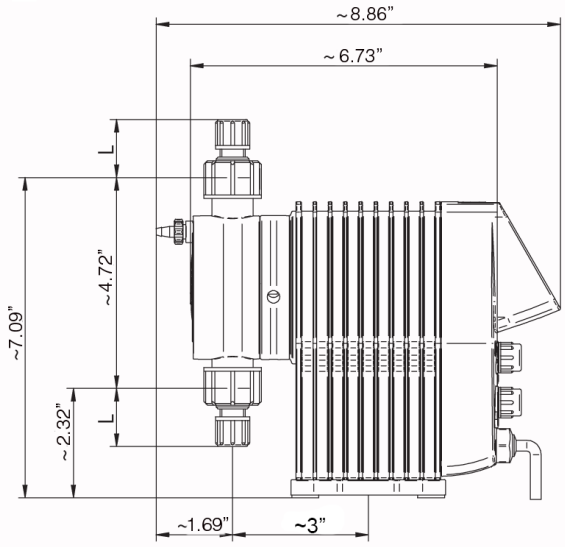
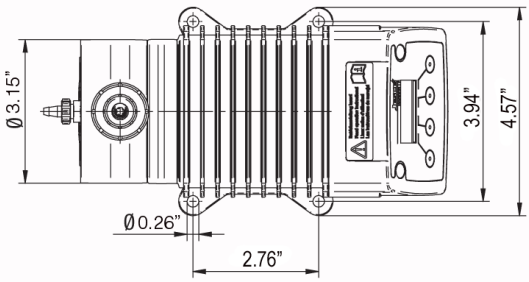
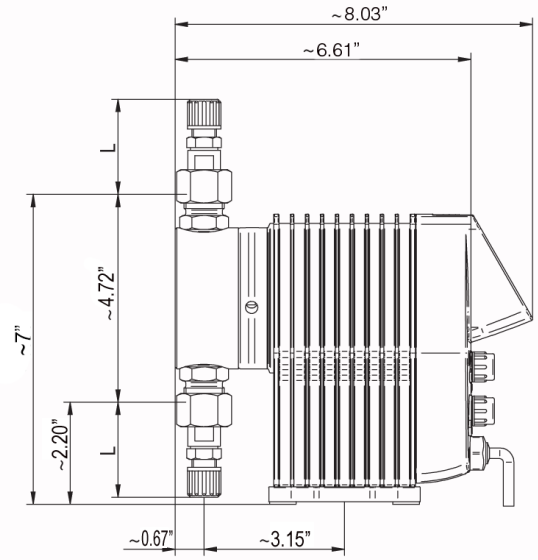
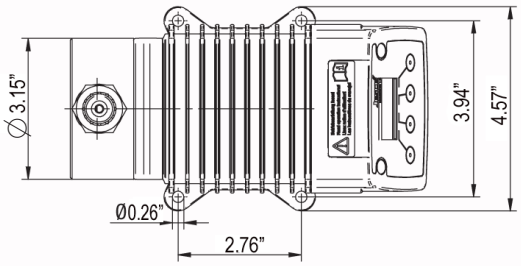
MAGDOS LP Dimensions





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

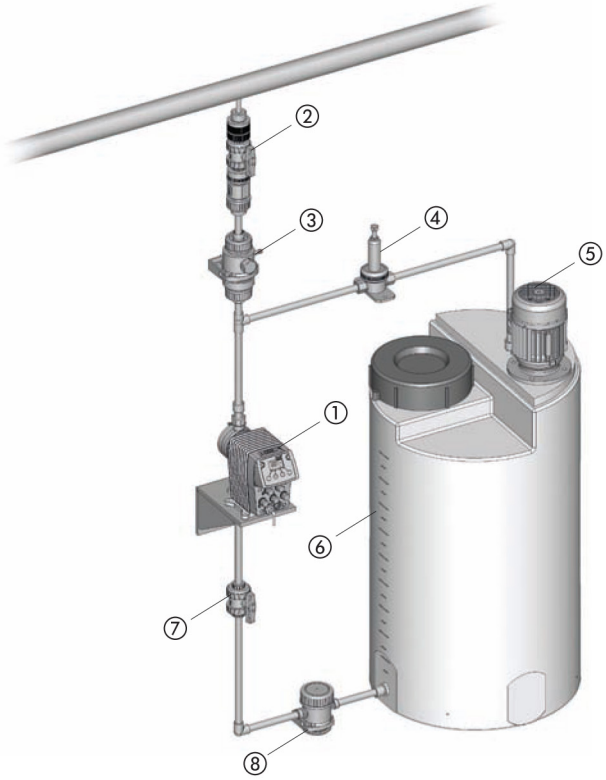
Even the best pump can be improved – simply by the addition of appropriate accessories.

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