Reliable dosing of chemicals

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

The MAGDOS LB solenoid diaphragm metering pump is a good-value alternative for simple and continuous dosing tasks, particularly suitable for the process industry.

Wide range of applications

The MAGDOS LB is available in seven sizes for metering applications ranging to 3.96 gph with back pressures up to 232 psig. Double-ball valves ensure accurate, consistent dosing. The dosing rate can be adjusted continuously from 0 to 100% by manually changing the stroke frequency.

The pump is externally controlled by switching the supply voltage of the pump ON and OFF.

Several different materials and connections are available for wetted-end components. By using appropriate and recommended materials, the MAGDOS LB 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) is reliably and accurately dosed.

The combination of the MAGDOS LB's solid design and the easy-to-use control 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.

In Short

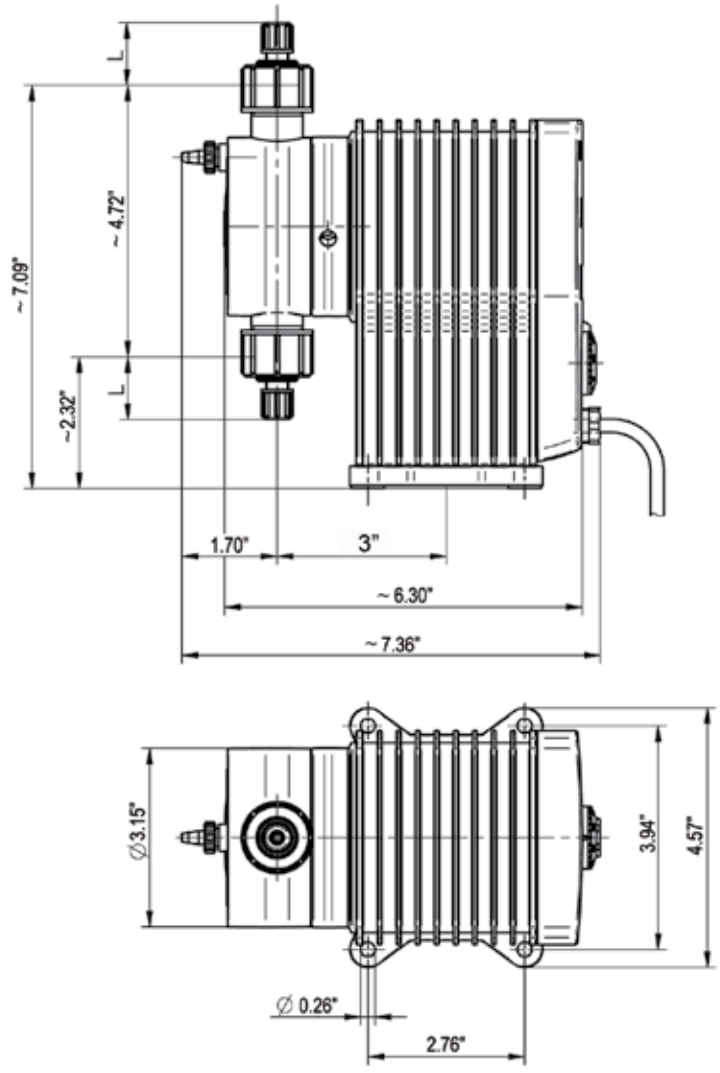
- Capacity range to 3.96 gph, up to 232 psig
- Wide range power supply unit 110-240 VAC, 50/60 Hz
- Integrated vented head (standard on plastic version)
- Wall and floor mounting possible without a bracket
- Double-ball valves ensure accurate dosing
- Materials available: PVC (standard), PP, and PVDF
- Material consistency for pumps and accessories
- Dosing heads and valves for high-viscosity media are available
- CSA and UL certified

Lutz-JESCO America Corp.

Solenoid Diaphragm Dosing Pump - MAGDOS LB

MAGDOS LB	05	1	2	4	6	10	15
Max. back pressure (psig)	232	232	232	232	116	87	43
Flow rate at max. pressure (gph)	0.09	0.20	0.50	0.89	1.6	2.40	3.43
Average back pressure (psig)	116	116	116	116	58	43	14
Flow rate at medium pressure (gph)	0.14	0.29	0.61	1.00	1.80	2.64	3.96
Max. stroke frequency (SPM)	120	250	160	180	180	180	250
Suction lift for non-effervescent media (ft H_2O)	16	16	9	9	6	6	6
Max. inlet pressure (psig)	11 PSI						
Power supply	110...240 V, 50/60 Hz						
Power supply cable	6 feet with mains plug						
Power consumption	18 W						
Max. power consumption during dosing stroke	approximately 4 A						
Protection class	IP 65						
Weight	approximately 6.6 pounds						
Max. ambient temperature	41°F-113°F (with PVC parts 41°F-104°F)						
Max. temperature of the medium	PVDF 176°F (with PVC parts 95°F, with PP parts 140°F)						

MAGDOS LB Dimensions



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"
PVDF	1/4" FNPT	1.96"
	1/4" FNPT	2.12"

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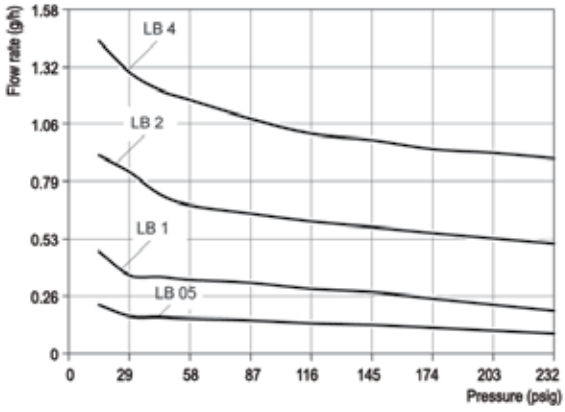
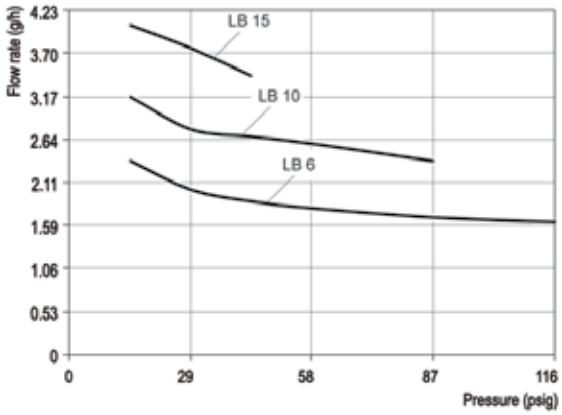
Flow Curves

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.





Installation positions

MAGDOS LB can be mounted in three different positions without further auxiliary equipment:

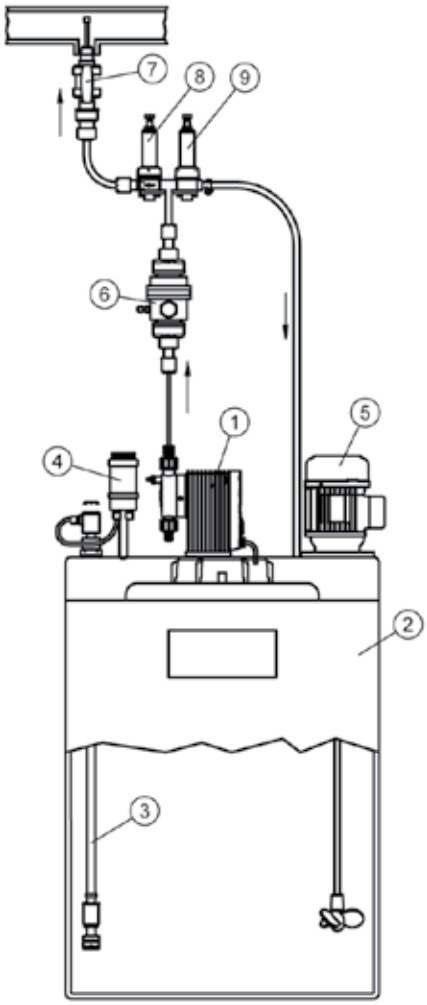
Floor mounting

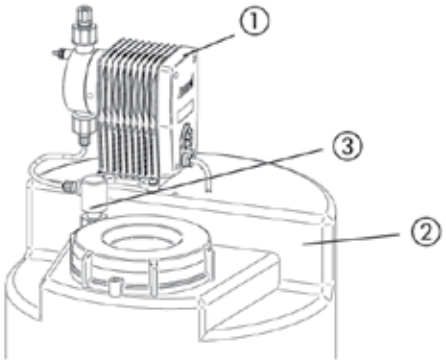
Wall mounting with dosing head on the right-hand side

Wall mounting with dosing head on the left-hand side

Solenoid Diaphragm Dosing Pump - MAGDOS LB

Installation examples





Legend

① MAGDOS LB
② Chemical tank
③ Suction line
④ Priming aid
⑤ Electric agitator
⑥ Pulsation dampener
⑦ Injection nozzle with non-return and shut off valve
⑧ Back pressure regulating valve
⑨ Pressure relief valve (safety valve)

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.

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 LD is available in seven sizes for metering applications ranging to 3.96 gph with back pressures up to 232 psig. Double-ball valves ensure accurate, consistent dosing. To adapt the dosing performance, the stroke frequency can be adjusted manually or via an external control contact. You can thus dose with a flick of the wrist.

Several different materials and connections are available for suction and discharge side, depending on the specific applications. By using appropriate and recommended materials, the MAGDOS can be used in a wide variety of process applications.

Matching accessory sets with hoses, 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) is reliably and accurately dosed.

The combination of the MAGDOS LD'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.

In Short

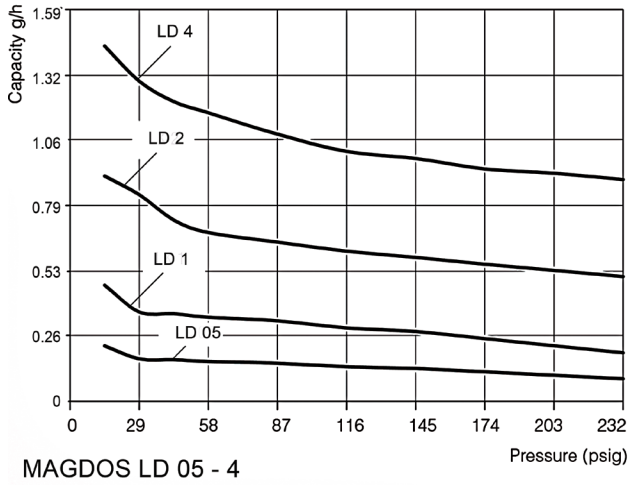
- Capacity range to 3.96 gph, up to 232 psig
- Power supply 230 VAC +/- 10%, 50/60 Hz, IP 65, max. 25 W or 115 VAC +/-10%, 50/60 Hz, IP 65, max. 25 W
- Graphical display
- Materials available: PVC, PP and PVDF
- Material consistency for the pumps and accessories
- Dosing head manual venting
- Wall and floor mounting
- Double-ball valves ensure accurate dosing
- Precise pump settings using the keyboard
- External control via floating contacts with impulse increase and reduction
- Level input with early warning and main alarm
- Release input

Technical Data

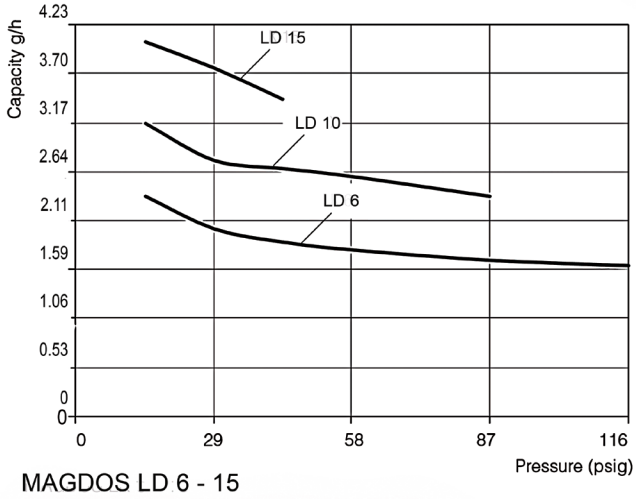
MAGDOS LD			05	1	2	4	6	10	15
Delivery capacity at max. pressure		gph	0.09	0.20	0.50	0.89	1.64	2.40	3.43
		ml/stroke	0.05	0.05	0.2	0.31	0.57	0.83	0.86
Max. supply pressure		psig	232				116	87	43
Delivery capacity at medium pressure		gph	0.14	0.29	0.61	1.00	1.80	2.64	3.96
		ml/stroke	0.08	0.07	0.24	0.35	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. supply pressure		psig	11 PSI						
Nominal valve width			DN3		DN4				
Voltage supply			230 V AC +/- 10%, 50/60 Hz or 115 V AC +/- 10%, 50/60 Hz						
Power consumption		W	8	13	19	25			22
Protection class			IP 65 (with covering caps on the connections)						
Insulation class			F						
Weight	PVC, PP, PVDF	lb	~ 7.0						
	Stainless Steel		~ 9.5						
Max. ambient temperature		°F	PVDF 113° (104° with PVC parts)						
Max. temperature of the medium		°F	PVDF 176° (with PVC parts 95°; with PP parts 140°)						

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.

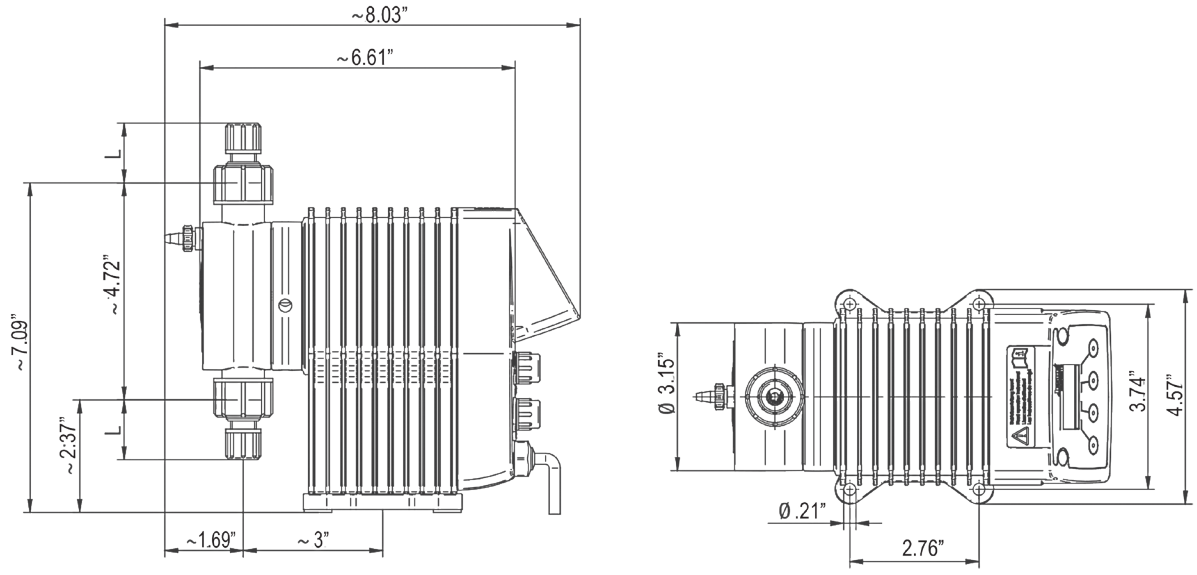


MAGDOS LD 05 - 4



MAGDOS LD 6 - 15

Dimensions



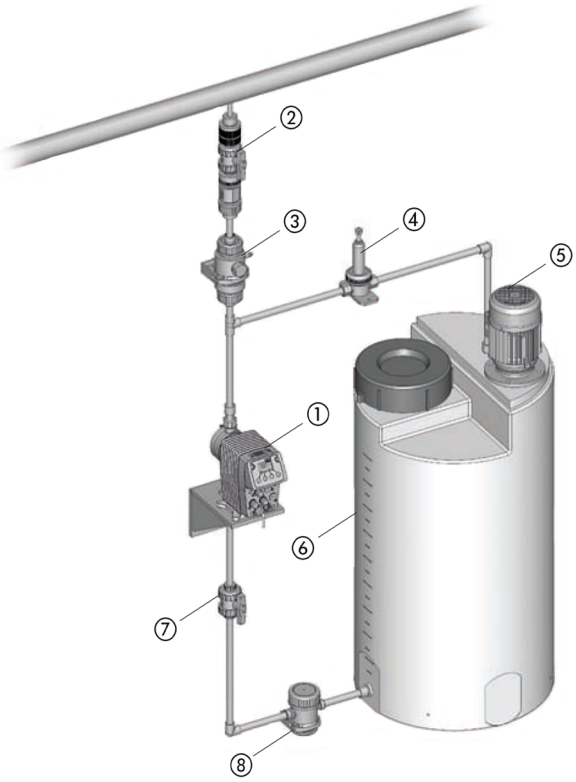
Material	Size	L
PVC, PP, PVDF	1/4" x 3/8"	1.34"
	1/4" x 7/16"	1.34"
	1/4" FNPT	1.34"

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:



Legend

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

- 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.

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 LK is available in seven sizes for metering applications ranging 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 or via external control contact.

Several different materials and connections are available for wetted-end components. By using appropriate and recommended materials, the MAGDOS LK 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) is reliably and accurately dosed.

The combination of the MAGDOS LK'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.

In Short

- Capacity range to 3.96 gph, up to 232 psig
- Power supply 110 VAC or 230 VAC, 50/60 Hz
- Multi-language menu support
- Easy-logic menu controls with graphical display guidance
- Calibration functionality
- Multi-unit capacity indication
- Eco-operation settings
- 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

Lutz-JESCO America Corp.

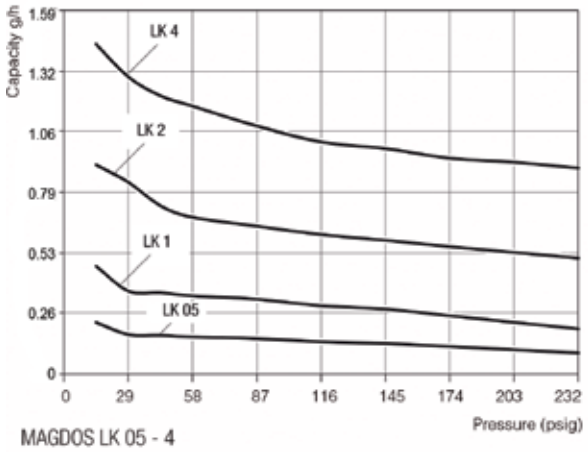
Solenoid Diaphragm Dosing Pump MAGDOS LK

Technical Data

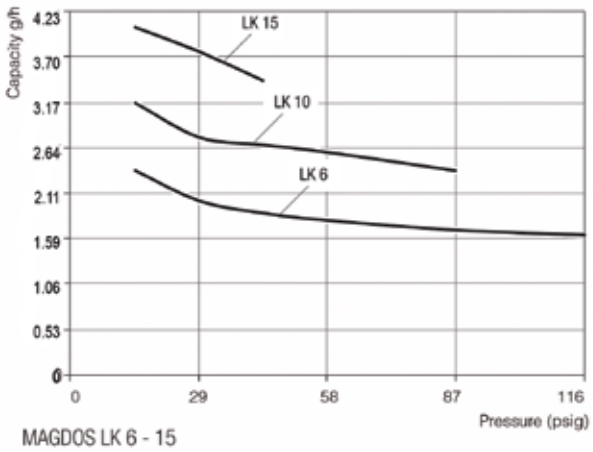
MAGDOS LK			05	1	2	4	6	10	15
Delivery capacity at max. pressure		gph	0.09	0.20	0.50	0.89	1.64	2.40	3.43
		ml/stroke	0.05	0.05	0.2	0.31	0.57	0.83	0.86
Max. supply pressure		psig	232				116	87	43
Delivery capacity at medium pressure		gph	0.14	0.29	0.61	1.00	1.80	2.64	3.96
		ml/stroke	0.08	0.07	0.24	0.35	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. supply pressure		psig	11 PSI						
Nominal valve width			DN3		DN4				
Voltage supply			230 V AC +/- 10%, 50/60 Hz or 115 V AC +/- 10%, 50/60 Hz						
Power consumption		W	8	13	19	25			22
Protection class			IP 65 (with covering caps on the connections)						
Insulation class			F						
Weight	PVC, PP, PVDF	lb	~ 7.0						
	Stainless Steel		~ 9.5						
Max. ambient temperature		°F	Stainless Steel/PVDF 113° (104° with PVC parts)						
Max. temperature of the medium		°F	Stainless Steel/PVDF 176° (with PVC parts 95°; with PP parts 140°)						

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 LK 05 - 4



MAGDOS LK 6 - 15

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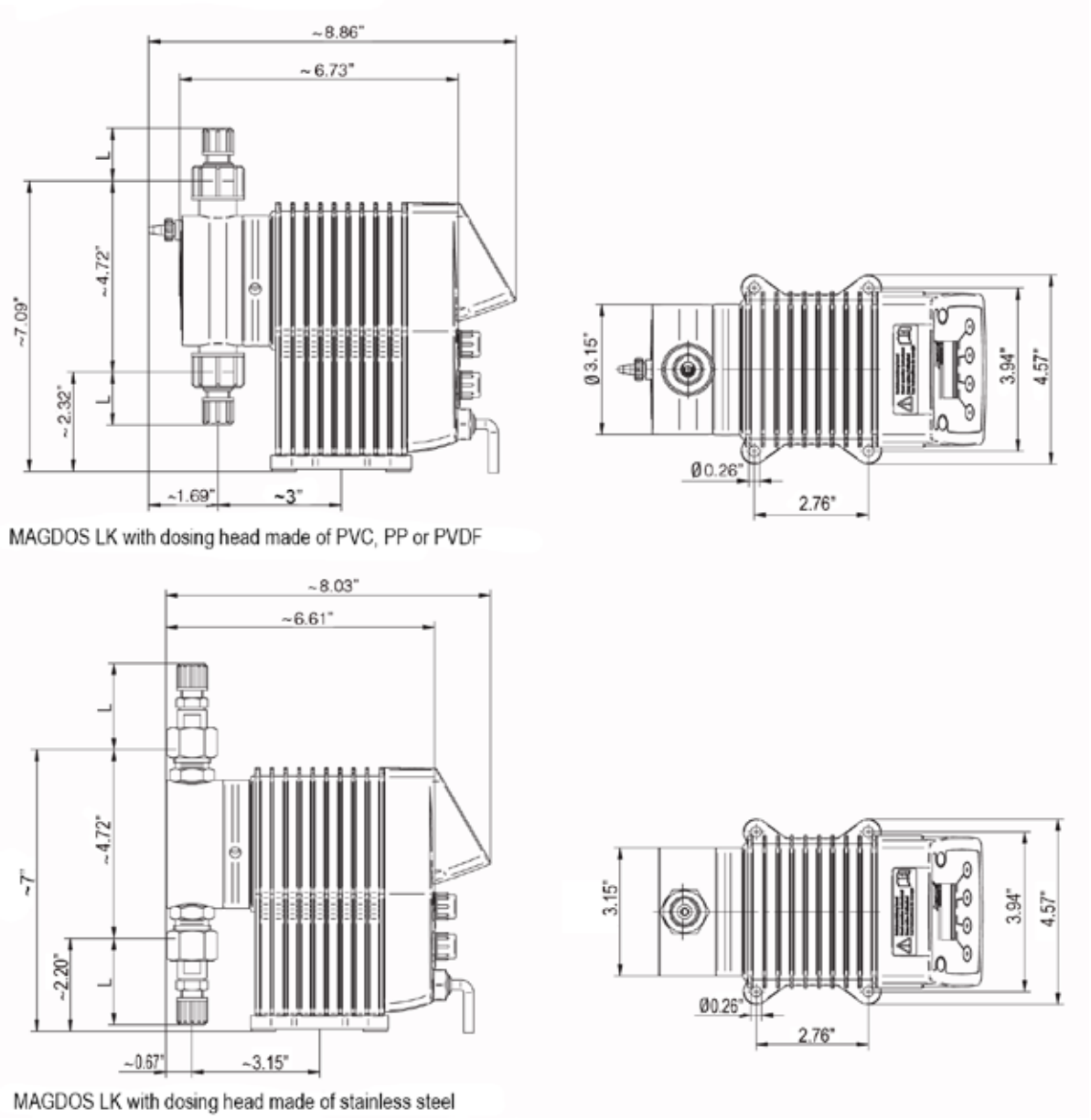
Dimensions



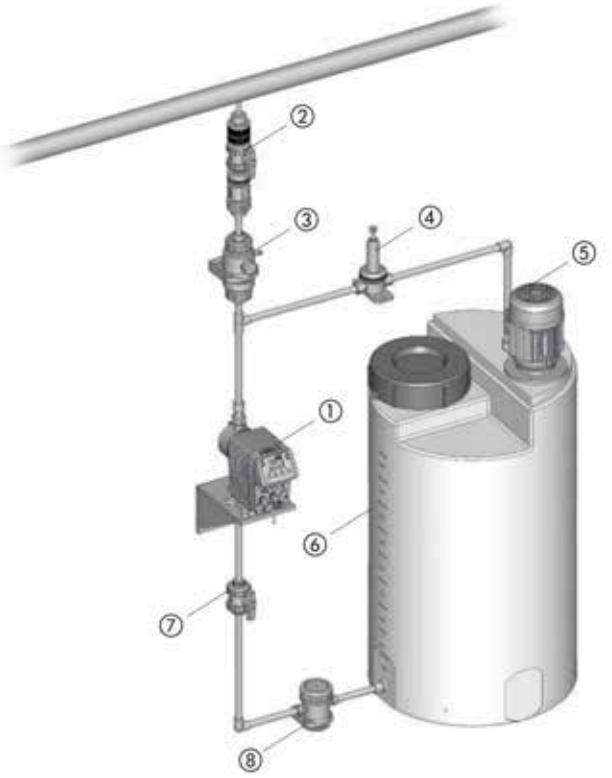
Material	Size	L
PVC, PP, PVDF	1/4" x 3/8"	1.34"
	1/4" x 7/16"	1.34"
	1/4" FNPT	1.34"
1.4571 / PVDF	1/4" FNPT	1.96"
	1/4" FNPT	2.12"

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:



Legend

① MAGDOS LK
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

- 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.

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

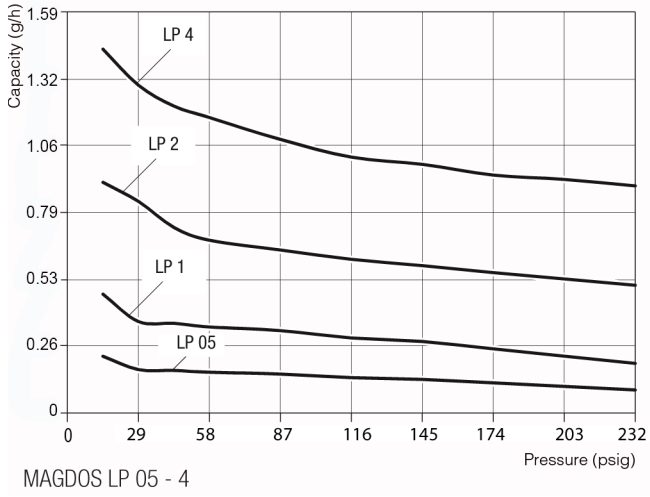
- Capacity range to 3.96 gph, up to 232 psig
- Wide range power supply unit 110-240 VAC, 50/60 Hz
- Multi-language menu support
- Easy-logic menu controls with graphical display guidance
- Calibration functionality
- Multi-unit capacity indication
- Two Eco-operation settings
- External control via standard 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

Technical Data

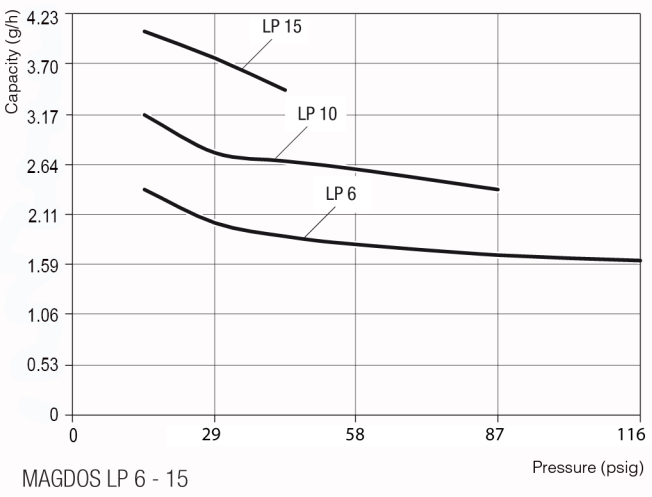
MAGDOS LP			05	1	2	4	6	10	15
Delivery capacity at max. pressure		gph	0.09	0.20	0.50	0.89	1.60	2.40	3.43
		ml/stroke	0.05	0.05	0.2	0.31	0.57	0.83	0.86
Max. supply pressure		psig	232				116	87	43
Delivery capacity at average pressure		gph	0.14	0.29	0.61	1.00	1.80	2.64	3.96
		ml/stroke	0.08	0.07	0.24	0.35	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)						

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.

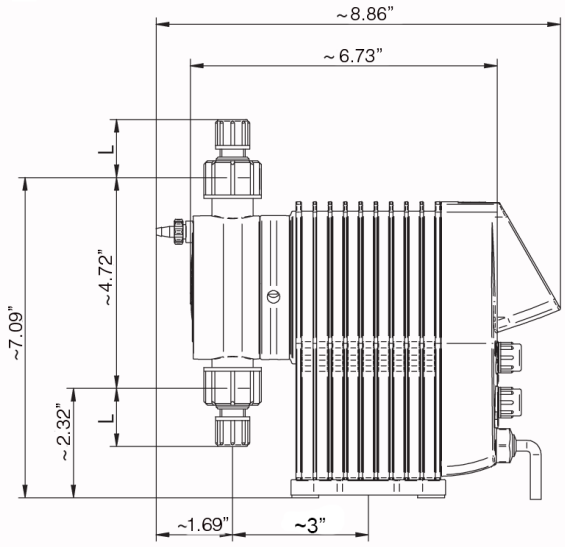


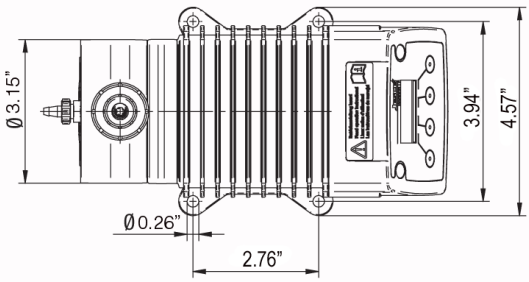
MAGDOS LP 05 - 4



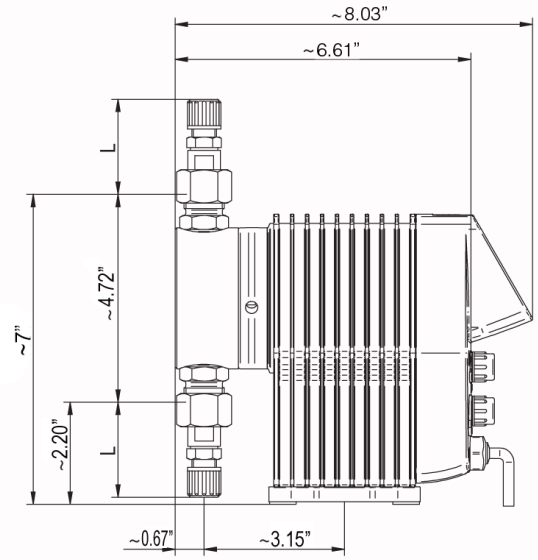
MAGDOS LP 6 - 15

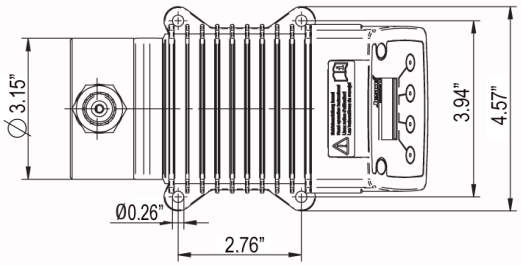
MAGDOS LP Dimensions





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

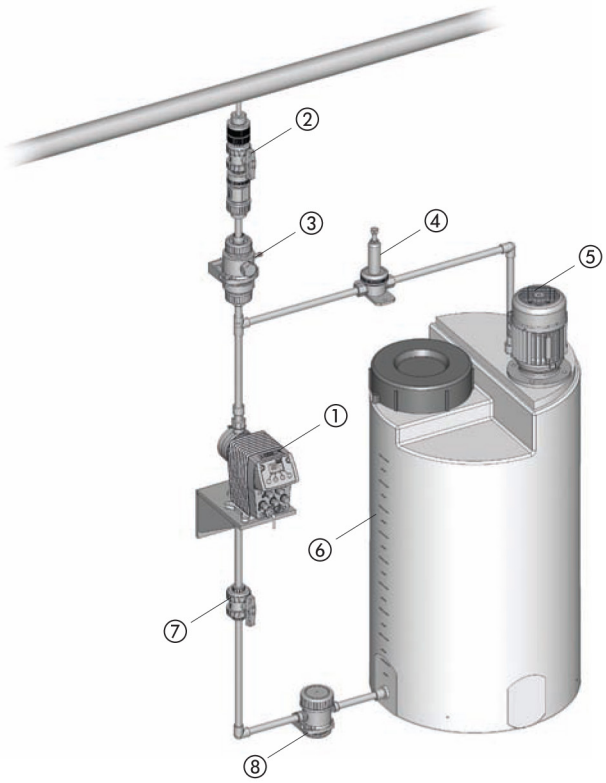
Even the best pump can be improved – simply by the addition of appropriate accessories.

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