

General Description

The MAGDOS LT line of solenoid driven metering pumps combines state-of-the-art microprocessor technology with the durability of high quality mechanics. Chemical resistant materials make the pump suitable for many municipal and industrial applications. A microprocessor-based control unit allows for flexible adaptation to changing system pressure requirements, allowing the pump to continually operate in an optimum power range. By optimizing the power consumption, excess heat generated by the solenoid is reduced, letting the pump operate economically and reliably.

The MAGDOS LT is available with the following features:

- Capacity range from 0.03 to 4.49 gph with pressures up to 232 psig.
- Manual stroke length adjustment with a 5:1 turndown ratio.
- Manual speed control to set the pump at 25%, 50%, and 100% of its maximum stroke frequency.
- External speed control for proportional feeding that provides one stroke per switch closure by contact (i.e. water meter or PLC).
- Simple one push button operation mode selection.
- LED operation mode indication.
- Selectable energy supply to stroke solenoid resulting in lower energy consumption and reduction in operation noise.
- Adjustable overload protection for various pressure levels.
- Double-ball check valves guarantee the highest accuracy and reliable feeding for viscosities up to 400 cps. Spring-loaded check valves are available for process fluids with viscosities up to 1,000 cps.
- Level control indicates low chemical, allowing the pump to stop operation before losing prime.
- Electrical Data: 115 VAC, 50/60 Hz, NEMA 4X/IP65 (optional: 230 VAC, 24 VDC)

Materials of Construction

Standard liquid end in PVC with options in PP, PVDF and 316 Stainless Steel. Diaphragms are PTFE-coated EPDM. Seals of Viton™, EPDM or PTFE are available.

Rev. 6



Options

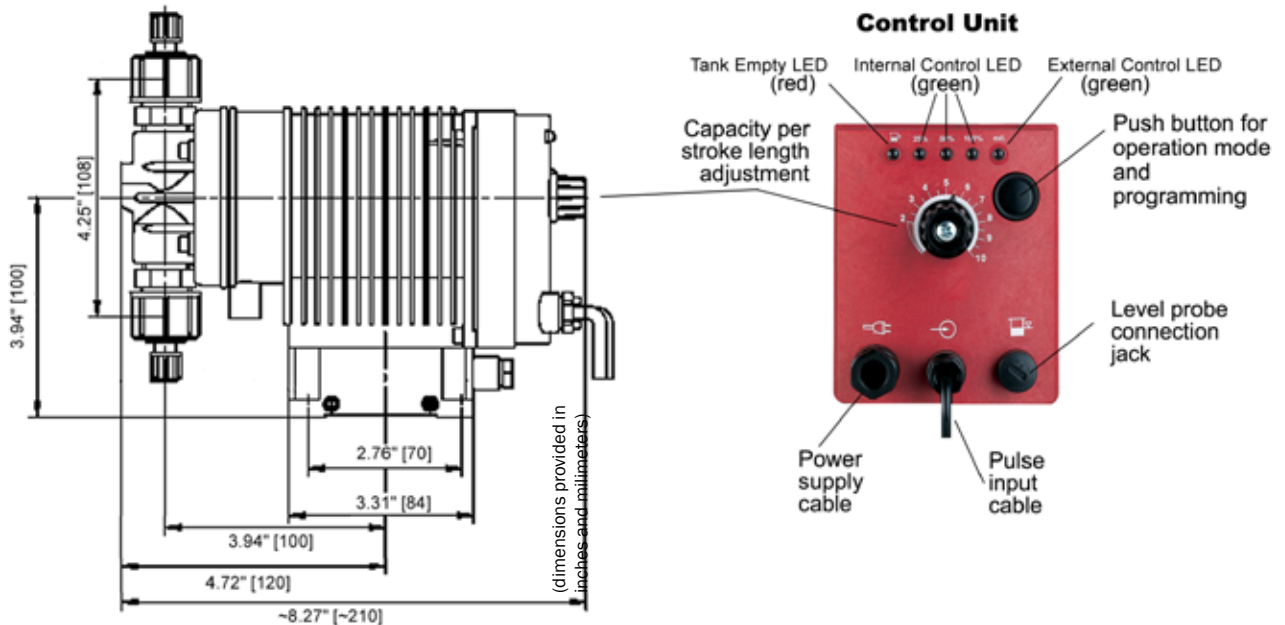
- Vented head
- Diaphragm leak detection
- Tubing accessory kit (includes a foot valve, tubing, and injection nozzle)
- Five function valve - PENTABLOC
- Mounting brackets

Control Unit

The control unit contains a microprocessor, which controls the stroke frequency and pressure generation. The MAGDOS LT can be adapted to practically all requirements of home water supply, water and wastewater treatment, as well as industrial processes. The electronic control unit features the functions described below.

Functions	LT
Internal operation control (% of maximum stroke frequency)	25/50/100
External operation control by pulse (i.e. water meter/relay contact)	X
Energy adjustment	X
Low level indication of supply tank*	single

*in conjunction with optional suction line with integrated level switch.



Technical Data

Model		02	06	1	3	4	6	8	10	
Capacity at maximum pressure	gph	0.03	0.12	0.23	0.42	0.87	1.37	2.08	3.56	
Maximum pressure	psig	174	232	232	232	174	145	116	43.5	
Capacity @ medium pressure	gph	0.07	0.18	0.37	0.74	0.98	1.45	2.67	4.49	
Medium pressure	psig	87	116			87			29	
Capacity stroke @ maximum pressure	ml	.023	.095	.18	.33	.686	.72	1.04	1.87	
Maximum stroke frequency	SPM	80						120		
Diaphragm diameter	in.	1.26						1.5		2.0
Suction lift (for non-effervescent media)	ft H ₂ O	10.0						6.6		4.0
Maimum positive static suction head	ft H ₂ O	26.2						22.9		13.0
Voltage		115 VAC +/-10% (optional: 230 VAC +/-10%; 24 VDC +/-10%)								
Length power cord	ft.	6 (115 VAC w/UL/CSA Plug) (230 VAC w/Schuko Plug)								
Power consumption	watts	30 (115 VAC, 230 VAC)								
Maximum current consumption during stroke	amps	115 VAC : 4.3, 230 VAC : 2.9								
Soldered fuse	amps	3.15 (slowly reacting)								
Protection class		NEMA 4X/IP65								
Insulation class		F								
Voltage to low level probe	VDC	5, for potential-free switches								
Voltage to pulse input	VDC	5, for potential-free switches								
Maximum ambient temperature	°F	PVC: 104° (optional: SS, PP, PVDF: 113°)								
Maximum temperature of process fluid	°F	PVC: 95° (optional: SS, PP, PVDF: 122°)								
Pump weight	lbs.	Plastic head approximately 6.0 (optional: SS head approximately 7.3)								
Connection type (standard)		4 mm x 6 mm PE tubing			1/4" x 3/8" PE tubing*					

*optional - 1/4" FNPT Pipe, 1/4" x 7/16" PVC tubing, 3/8" x 1/2" PE tubing