

Reliable dosing of chemicals

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

The MEMDOS LA motor-driven diaphragm dosing pump has raised the bar with its robust and ingenious drive concept and easy operability.

Riding on the crest of the waves

The MEMDOS LA series is available in two sizes and covers a capacity range of up to 270 gph. The maximum permitted pressure, depending on the size is 232 psig.

Thanks to the sturdy tappet drive with manual or automatic capacity adjustment via external current signals, the conveyed media such as acids, lyes, coagulants and flocculants are dosed reliably and precisely.

Upon request, the MEMDOS LA pumps can also be supplied with a double diaphragm system, thus avoiding uncontrolled leakage of media if the dosing diaphragm wears out.

Versatile and flexible

The MEMDOS LA is equipped with a diverse range of inputs and outputs and can thus be deployed for complex dosing tasks. It can be controlled via a 0/4 – 20 mA current input and an external release input. At the same time, it indicates its current operating state via a fault output (alarm relay) and an optocoupler output (stroke feedback). The pump is fitted with a 0 – 20 mA analogue output.

The MEMDOS LA is compatible with all conventional control systems.

The pump is also fitted with a level input, can evaluate suction lines directly using a low level alarm and its large functional scope means that it can be deployed in a number of areas.



In Short

- Capacity range up to 270 gph, up to 232 psig
- Power supply 115 / 230 V, $\pm 5\%$, 50/60 Hz
- Material finishes PVC, PP, PVDF and stainless steel
- Stroke frequency manually settable via a potentiometer
- Release input for external start/stop
- Analogue input 0/4 – 20 mA
- Level input with a switching point
- Analogue output 0 – 20 mA
- Alarm relay output
- Stroke feedback output
- Double-diaphragm system (optional)
- CSA and UL certified

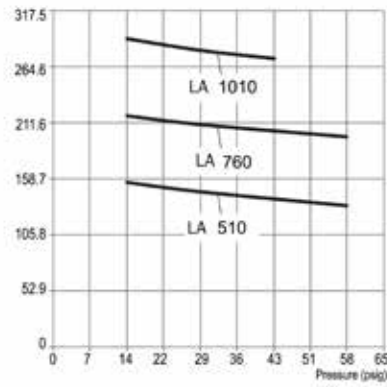
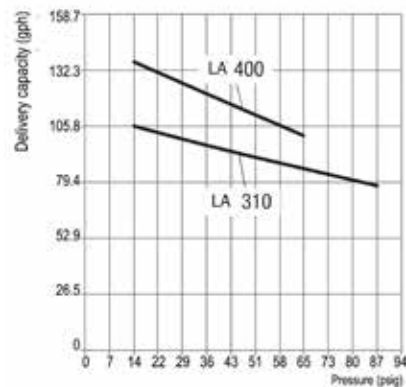
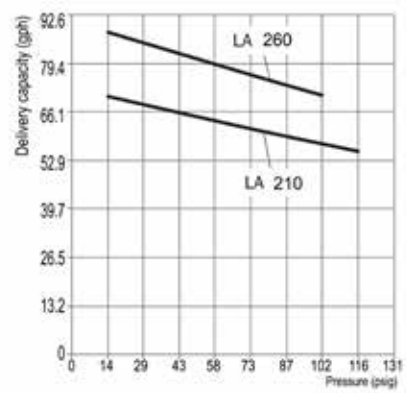
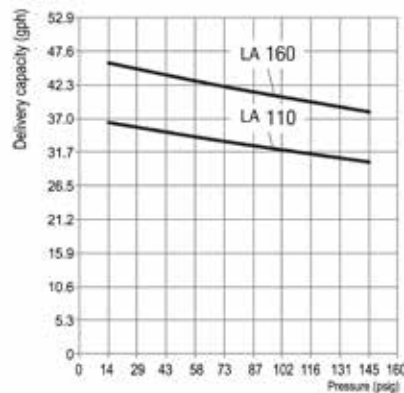
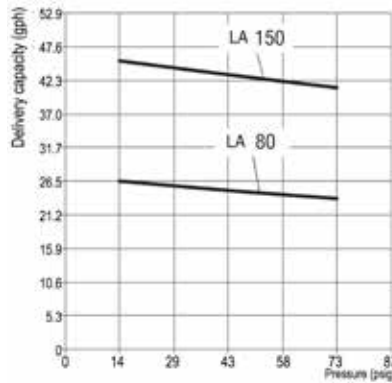
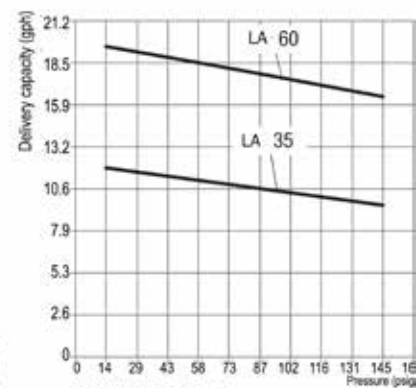
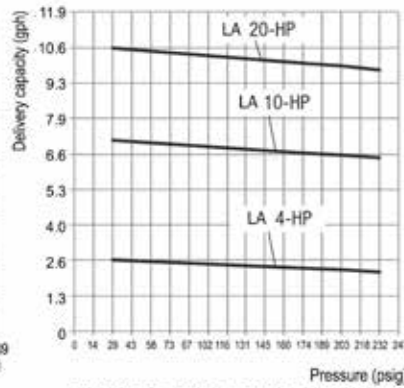
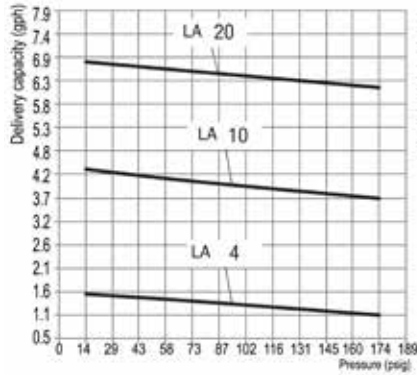
Technical Data

MEMDOS LA		4	4-HP	10	10HP	20	20HP	35	60	80	150
Delivery capacity at maximum backpressure (50/60 Hz)	gph	1.1	2.2	3.7	6.0	5.8	9.6	9.5	16.7	24	41
Max. supply pressure	psig	174	232	174	232	174	232	145		72	
Max. stroke frequency (50/60 Hz)	SPM	26	26	72	72	120	120	72	120	72	120
Suction head for non-gassing media	feet H ₂ O	29				26				23	
Max. supply pressure	psi	7.3 PSI									
Stroke length	inch	0.3"						0.4"			
Stroke volume	ml/stroke	2.7	5.4	2.7	5.4	2.7	5.4	8.6	8.6	19.3	21.4
Nominal valve width		DN4						DN6		DN10	
Voltage supply		115/230V									
Motor efficiency		Greater than 90% (energy efficiency class IE4)									
Protection class		IP 55									
Insulation class		F									
Weight (without a motor)	PVC	24						27			
	PP	24						27			
	PVDF	24						30			
	14571	27						38			
Max. ambient temperature	°F	41-113°F (104°F with PVC parts)									
Max. temperature of the medium	°F	176°F (with PVC parts 95°F; with PP parts 140°F)									

MEMDOS LA		110	160	210	260	310	400	510	760	1010	
Delivery capacity at maximum backpressure (50/60 Hz)	gph	30	38	56	70	78	103	133	197	270	
Max. supply pressure	psig	145			118			103		58	
Max. stroke frequency (50/60 Hz)	SPM	96	120	96	120	96	120	53	76	107	
Suction head for non-gassing media	feet H ₂ O	23		19		14		3			
Max. supply pressure	psi	7.3 PSI									
Stroke length	inch	0.4"							0.5"		
Stroke volume	ml/stroke	2.7	5.4	2.7	5.4	2.7	5.4	8.6	8.6	19.3	
Nominal valve width		DN10			DN15			DN25			
Voltage supply		115/230V									
Motor efficiency		Greater than 90% (energy efficiency class IE4)									
Protection class		IP 55									
Insulation class		F									
Weight (without a motor)	PVC	43.4		45.6		50		67.2			
	PP	43.4		45.6		50		67.2			
	PVDF	44.1		46.7		51.5		71			
	14571	55		64.5		75.8		115			
Max. ambient temperature	°F	41-113°F (104°F with PVC parts)									
Max. temperature of the medium	°F	176°F (with PVC parts 95°F; with PP parts 140°F)									

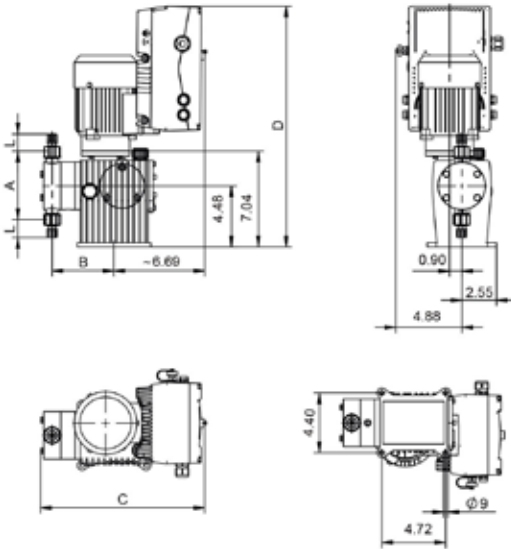
Delivery Characteristic Curves

The supply performance graph is valid for 68°F (20°C) for water at 100% stroke frequency. The delivered capacity depends on the medium (density and viscosity) and temperature. Dosing must therefore be calibrated during practical use.

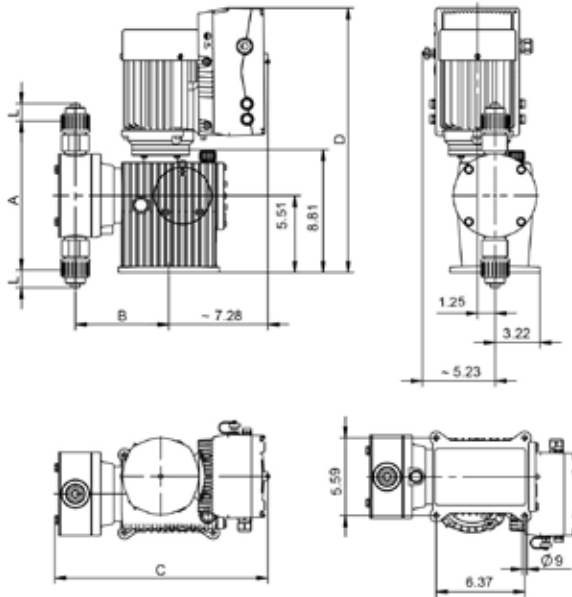


Dimensions

MEMDOS LA 4 – 80 and 150
All dimensions in inches



MEMDOS LA 110, 160 – 1010
All dimensions in inches



Size	4-20	35-60	80, 150	110, 160	210-260	310-400	510-1010
A	4.96	5.86	9.80	9.80	10.55	12.30	13.85
B	4.56	4.78	5.23	6.29	6.69	6.88	8.18
C	12.06	12.28	12.73	14.76	15.15	15.35	17.91
D (standard motor)	17.32	17.32	17.32	18.89	18.89	18.89	21.18
L	Depends on the connection type and size						

All dimensions in inches

Accessories

Suitable sets of accessories, which consist 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 accessories. 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 excessive pressure
- Pulsation dampener – to dampen 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 more accessories for your dosing pump, please refer to our dosing pump brochure.