

# The Revolutionary series

MEMDOS LA - Motor-driven diaphragm dosing pumps 4 – 1020 l/h up to 16 bar



## For the reliable dosing of chemicals

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

The MEMDOS LA series is available in two sizes and covers a capacity range of 4 – 1020 l/h.

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.

## 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.

## Functions

- Output range from 4 – 1020 l/h, up to 16 bar
- 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

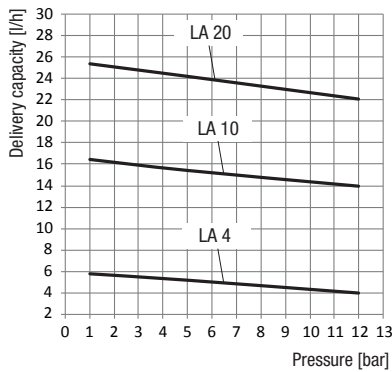
MEMDOS LA		4	4-HP	10	10-HP	20	20-HP	35	60	80	150
Delivery capacity at max. backpressure	l/h	4	8.4	14	24	22	36	63	90	156	
max. delivery pressure	bar	12	16	12	16	12	16	10	5		
Nominal stroke frequency	rpm	26		72		120		72	120	72	120
Suction lift for non-gassing media	mWS	9						8	7		
Max. supply pressure	mbar	500									
Diameter of diaphragm	mm	52						64	90		
Valve size		DN4						DN6	DN10		
Voltage supply		115 / 230 V, ± 5 %, 50 / 60 Hz									
Protection class		IP55, control IP65									
Insulation class		F									
Materials		PVC, PP, PVDF, 1.4571									
Weight	PVC	kg	14.3						16.5		
	PP		14.3						16.5		
	PVDF		14.3						17.2		
	Stainless steel (1.4571)		15.9						16.4	21.5	
Approved ambient temperature	°C	5 – 45 (with PVC components 5 – 40)									
Approved media temperature	°C	80 (with PVC parts, 35; with PP parts 60)									

MEMDOS LA		110	160	210	260	310	400	510	760	1010	
Delivery capacity at max. backpressure	l/h	114	144	210	264	294	390	504	744	1020	
max. delivery pressure	bar	10		8	7	6	4.5	4	3		
Nominal stroke frequency	rpm	96	120	96	120	96	120	53	76	107	
Suction lift for non-gassing media	mWS	7		6		4.5		1			
Max. supply pressure	mbar	500									
Diameter of diaphragm	mm	90		120		150		185			
Valve size		DN10		DN15				DN25			
Voltage supply		120 / 230 V, 50 / 60 Hz						208 / 230 V, 50 / 60 Hz			
Protection class		IP55, control IP65									
Insulation class		F									
Materials		PVC, PP, PVDF, 1.4571									
Weight	PVC	kg	25.5		26		28		40.5		
	PP		25.5		26		28		40.5		
	PVDF		26.3		26.5		28.7		41.8		
	Stainless steel (1.4571)		30.7		33.1		39		61.5		
Approved ambient temperature	°C	5 – 45 (with PVC components 5 – 40)									
Approved media temperature	°C	80 (with PVC parts, 35; with PP parts 60)									

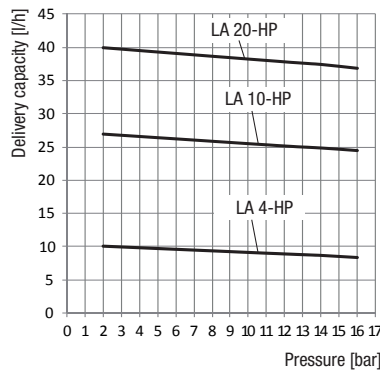
## Delivery characteristic curves

These delivery capacities were determined on the manufacturer's test stands. They apply at 20 °C (68 °F) for water, at 100 % stroke frequency. The delivery capacity depends on the medium (density and viscosity) and temperature. Since these conditions vary at every installation location, you should calibrate the dosing pump.

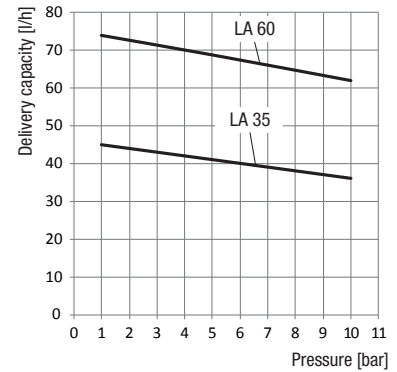
MEMDOS LA 4 – LA 20



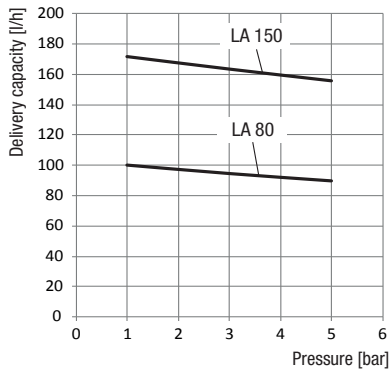
MEMDOS LA 4-HP – LA 20-HP



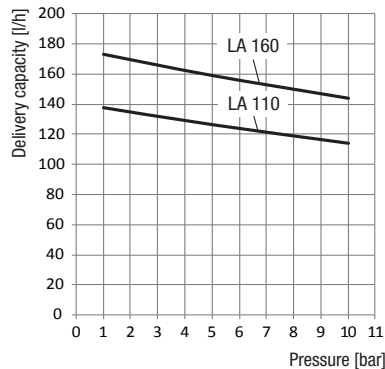
MEMDOS LA 35 – LA 60



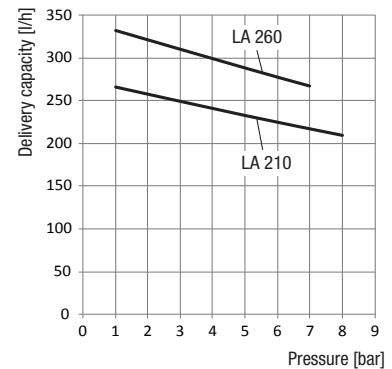
MEMDOS LA 80 – LA 150



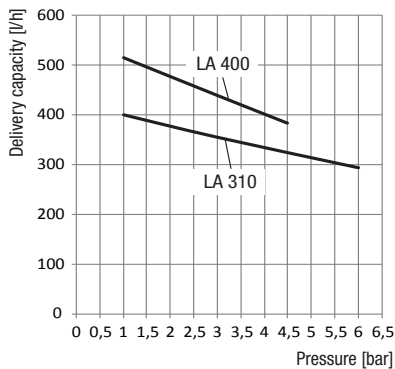
MEMDOS LA 110 – LA 160



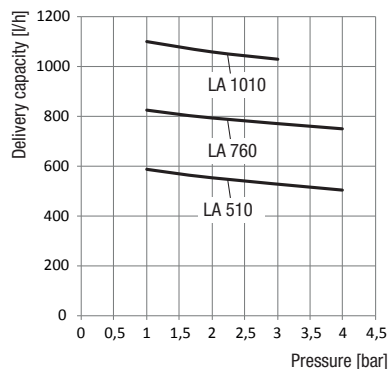
MEMDOS LA 210 – LA 260



MEMDOS LA 310 – LA 400



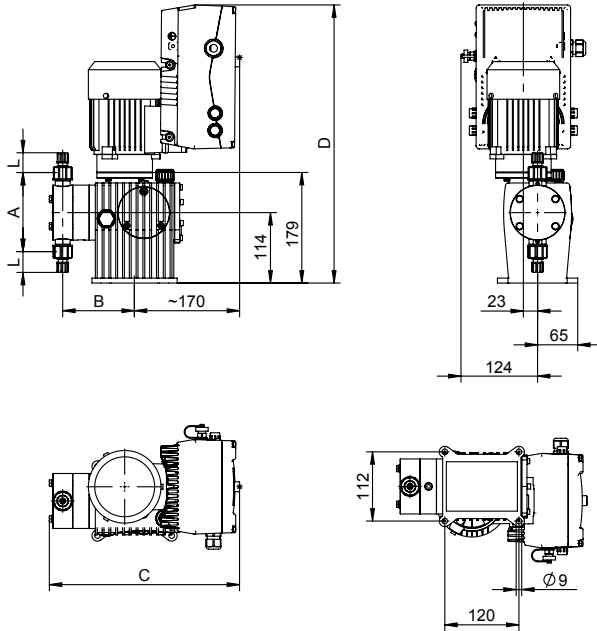
MEMDOS LA 510 – LA 1010



## Dimensions

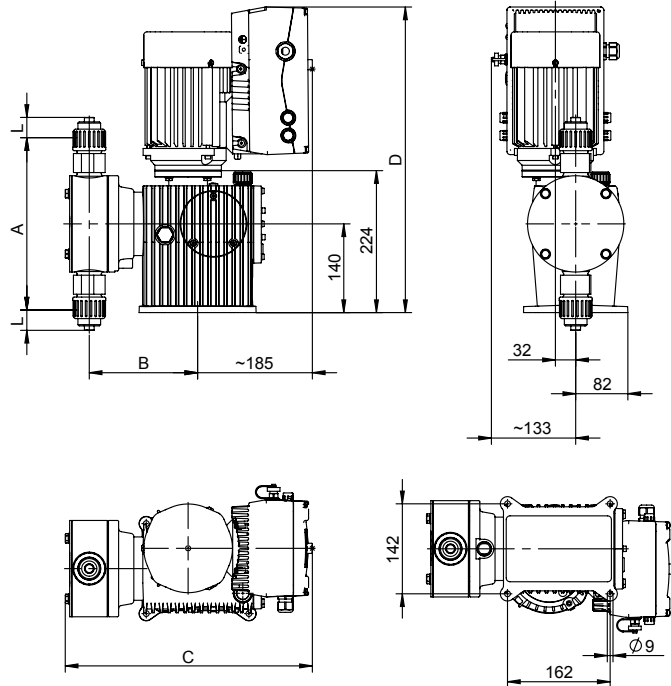
### MEMDOS LA 4 – 80 and 150

All dimensions in mm



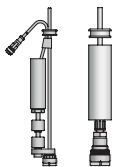
### MEMDOS LA 110, 160 – 1010

All dimensions in mm



Scale	4 – 20	35 – 60	80, 150	110, 160	210 – 260	310 – 400	510 – 1010
A	126	149	249	249	268	312.5	352
B	116	121.5	133	160	170	175	208
C	306.5	312	323.5	375	385	390	455
D	440	440	440	480	480	480	538
L	Depends on the connection type and size						

## MEMDOS LA Standard - accessories



### Suction lines

Type SL-2 with ceramic reinforcement piece, cable length 3,000 mm, tube length 2,500 mm. Level monitoring and pre-alarm with 2 switching points, switching distance approx. 50 mm. Switching function: Closer on rising level, electrical connection to dosing pump via plug connector M12x1.

Flexible suction line, SA model with foot valve and load part made from ceramic and 2500 mm tube length.



### Injection nozzles

To connect the dosing line to the dosing point.

Injection nozzle type R, spring loaded, opening pressure 0.1 bar.



### Suction and pressure tube

Permissible operating pressure at 20 °C in accordance with DIN EN ISO 7751, chemical resistance and correct connection are assumed.