

Reliable dosing of chemicals

The bus-compatible motor-driven diaphragm dosing pump MEMDOS SMART LBs provides a variety of attractive solutions for demanding and complex metering tasks and can also be integrated into a network at low cost.

The dosing pump has an RS485 interface to operate and configure the pump using a Modbus RTU protocol.

The pump is being programmed according to your specific application needs. When using a PLC for programming, the register addresses are read out and detailed.

Precision that inspires

In addition to a large number of configuration options, the pump has a logbook function. This records the flow rate over the running time of the pump and can be exported to a table if required.

The performance ranges from 0.63 gph at 290 psig to 8.10 gph at 44 psig. Depending on the application, different materials and connections on the pressure and suction side can be used. Accessory sets consisting of hose, injection nozzle and suction line are available for optimal results and quick installation.

Wide range of applications

The drive of the MEMDOS SMART LBs is fully adjustable. The stepper motor with its wear-free belt drive ensures a particularly gentle dosing process. Stroke frequency, number of strokes, running time, batch and much more can be controlled via the network interface.

The MEMDOS SMART LBs with its compact footprint can be easily integrated into smaller dosing systems.

The wide adaptability to specific applications makes the MEMDOS SMART LBs the perfect pump for cost effective, precise OEM applications. Depending on the requirements, the pump can be mounted on the wall in three different positions, upright or oriented left or right.



In Short

- Capacity range from 0.63 to 8.19 gph, up to 290 psig
- Dosing head ventilation (plastic version)
- Slow mode for higher viscous media*
- Manual control 0 - 100%
- External control with pulse increase and reduction*
- Batch dosing with interval and timer functions*
- External start / stop
- Slow Mode Options*
- BUS input Modbus RTU (RS485)
- Power supply 110 - 240 V or 24 V (optional)
- Logbook function

* Pre-programmed factory options, Consult Factory.

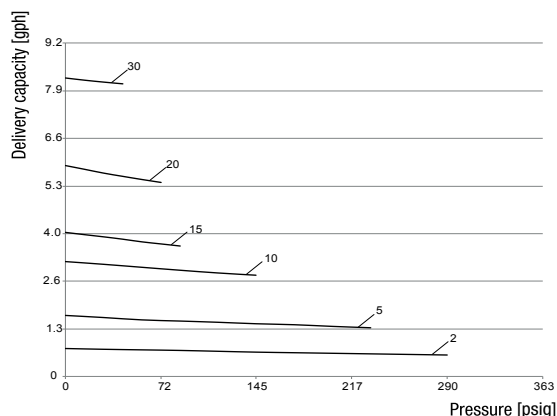
Technical Data

MEMDOS SMART LBs		2	5	10	15	20	30
Delivery rate at max. back pressure	gph	0.63	1.35	2.83	3.62	5.39	8.11
	ml/stroke	0,27	0,57	1,19	1,52	2,27	3,41
Maximum delivery pressure	psig	290 (232)*	232	145	88	74	44
Delivery rate at medium back pressure	gph	0.7	1.51	2.99	3.80	5.6	8.19
	ml/stroke	0,28	0,63	1,26	1,60	2,36	3,44
Medium delivery pressure	psig	145	116	72	44	36	22
Nominal stroke frequency	SPM	150					
Suction lift for non-degassing media	ft. H ₂ O	9.8					
Maximum inlet pressure	psig	11.6 PSI					
Diameter of the diaphragm	in	1.29"	1.54"		2.13"		
Valve size		DN3**/DN4	DN4				
Voltage supply		24 VDC, 110 to 240 V, - 10%/+5%, 50/60 Hz					
Power consumption	W	25					
Protection class		IP 65 (with covering caps on the connections)					
Insulation class		F					
Material versions		PVC, PP, PVDF, 1.4571					
Weight	PVC, PP, PVDF	~ 4.85					
	1.4571	~7.27					
Max. ambient temperature	°F	41° - 113° (with PVC parts 41° - 104°)					
Max. temperature of the medium	°F	176 (with PVC parts 95°, with PP parts 140°)					

*PVC version ** DN3 only for double ball valves

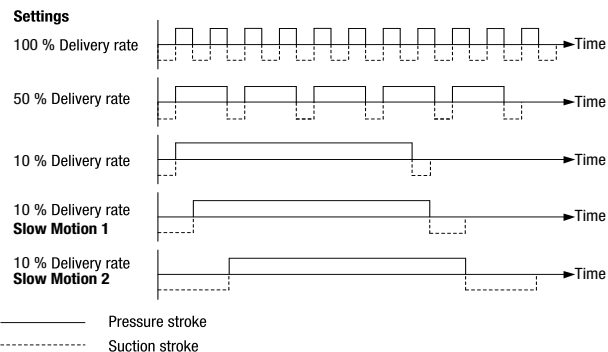
Delivery characteristic curves

These delivery rates were determined based on the manufacturer's testing standards. They apply at 20 °C (68 °F) for water, at 100% stroke frequency. Medium (density and viscosity) and temperature change the delivery rate. Since these conditions are different at each location, the dosing pump should be calibrated.



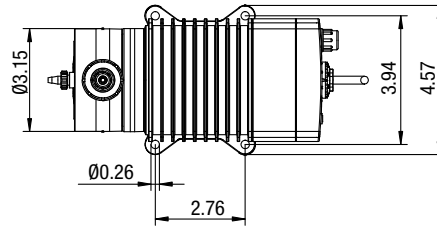
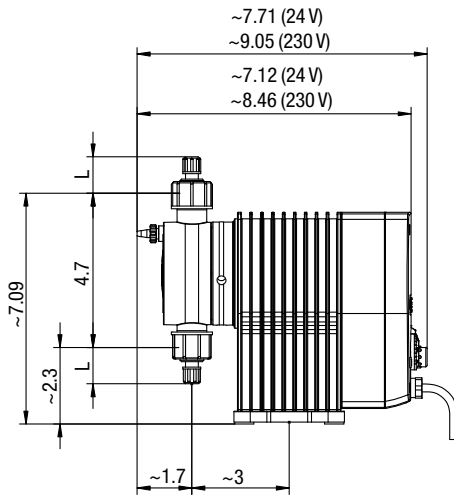
Conveying characteristics

At low flow rates, for example, the metering pump runs through the suction stroke at maximum speed and adjusts the speed of the pressure stroke to the desired flow rate. In this way, an almost constant flow rate can be achieved, which enables gentle, low-pulsation metering.

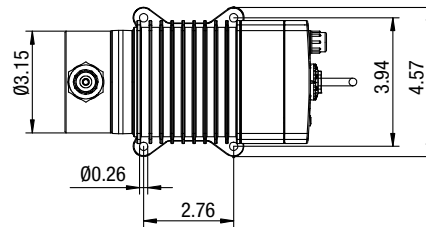
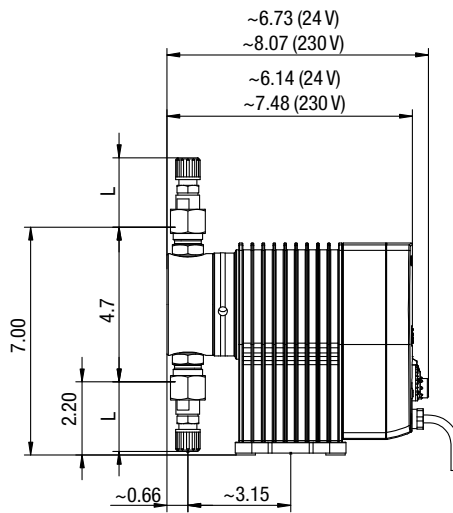


Dimensions

MEMDOS SMART LBs 2, 5, 10 with dosing head made of PVC, PP or PVDF
All dimensions in inches



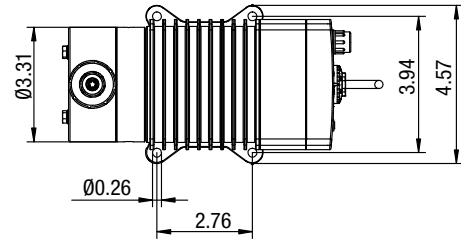
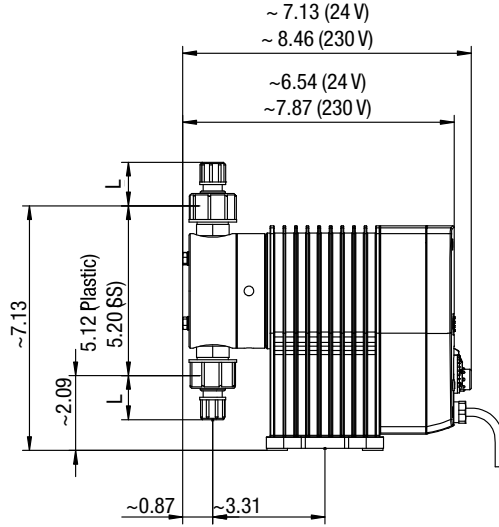
MEMDOS SMART LBs 2, 5, 10 with dosing head made of Stainless Steel (1.4571)
All dimensions in inches



Connections		Material	Size	Nominal diameter	L
MEMDOS SMART LBs / Sizes					
2	PVC, PP, PVDF	4/6 mm	DN4	1.22"	
	SS/PVDF	4/6 mm	DN4	1.96"	
5, 10	PVC, PP, PVDF	4/6 mm	DN4	1.22"	
		1/4x3/8"	1/4"	0.51"	
		6/9 mm	DN6	1.34"	
		6/12 mm	DN6	0.51"	
	SS/PVDF	4/6 mm	DN4	1.96"	
		6/9 mm	DN6	2.12"	

Dimensions

MEMDOS SMART LBs 15, 20, 30
All dimensions in inches



Connections		Material	Size	Nominal diameter	L
MEMDOS SMART LBs / Sizes	15, 20, 30	PVC, PP, PVDF	4/6 mm	DN4	1.22"
			1/4x3/8"	1/4"	0.51"
			6/9 mm	DN6	1.34"
			6/12 mm	DN6	0.51"
		SS/PVDF	4/6 mm	DN4	1.96"
			6/9 mm	DN6	2.12"