

# DLX MF/M

The DLX range of pumps is a proven PTFE diaphragm type Solenoid Metering Pump that distinguishes itself with having a wide range of control options. Since its launch the DLX pump range has given proven reliability and quality. It is the ideal solution for many chemical dosing applications where moderate flow rate is required with counter pressures up to 20 Bar (290 PSI).

## Key Features:

Pump Body Construction of Anti-acids mica-filled reinforced polypropylene.

Excellent water resistant for tough applications. Pump protection: IP65.

Either wall (DLX) or foot mount (DLXB) installations options available.

Liquid low level option available to prevent loss of prime.

Flashing led showing pump's stroke frequency.

Manual air bleed polypropylene head for safe & easy priming with durable leak-free bleed valve assembly.

Diaphragms are of superior construction, robust PTFE machined part not bonded composite layers, for optimum flexibility and long durability.

A wide variety of chemicals can be pumped due to different liquid end materials include glass-filled polypropylene (GFPP), PVC, Polyvinylidene Fluoride (PVDF), PTFE, Plexiglas and 316SS. Valves and sealing in FPM (Viton), EPDM (Dutral), Nitril, Silicone, ceramic and alloys.

Immediate installation and start-up, included as standard accessories with all models are an injection/back pressure valve assembly and a foot valve/strainer assembly, including discharge, suction and bleeding tubing.

Safe and easy priming and valve maintenance, included as a standard accessory is a bleed valve assembly, including return tubing (available only on those models with manual air bleed head).

Control panel protection assured by an adhesive polyester film, weather-proof and resisting UV light.

Silent version available upon request.

The products are manufactured according CE regulation.

Standard power supply (fluctuations not to exceed  $\pm 10\%$ ): 230-240 V a.c. 50-60 Hz single phase.

Optional power supply (fluctuations not to exceed  $\pm 10\%$ ): 110 V a.c. 50-60 Hz single phase. 48V a.c., 24V a.c./d.c., 12V d.c.

Overvoltage cat. II. Environmental Conditions: IP65 protection, altitude up to 2000m, ambient temperature 5°C to 40°C, maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C. Pollution degree 2



## Characteristics

The DLX-DLXB MF/M metering pumps are activated by a PTFE diaphragm mounted on a piston of an electromagnet.

When the piston of the electromagnet is energised, a pressure is produced in the pump head creating an expulsion of liquid from the discharge valve. After each pump pulse is finished a spring returns the piston back to the initial position, enabling a recall of liquid through the suction valve.

The operation is simple and the pump does not need lubrication, therefore maintenance is reduced almost to zero.

Multifunction dosing pump, with flow controlled by any of the following: Manual mode; Pulse multiplier with memory (1xN-M); Pulse multiplier (1xN); Pulse divider (1:N); dosing in ppm with a water meter, fully configurable 4(0)-20mA input; built-in 7 day timer (max. 8 start/stop cycles per day/week).

Additional features: flow alarm; level switch input (without probe); relay output; buzzer (acoustic alarm); clock; language Italian/English.

Any time the pump is in alarm the service output relay will be activated.

100% corresponds to the maximum stroke frequency, i.e. 120 strokes/min. Stroking rate gives very high rate of reproducible metering accuracy.

## IMMAGINE SERIGRAFIA

### PUMP CONTROLS

Menu navigation buttons  
 "Yellow" LED flow sensor alarm/max allowed pulse difference  
 "Red" LED injection pulse flashing  
 "green/red" LED pump fed/stand by  
 LCD display  
 Activation/Deactivation metering button

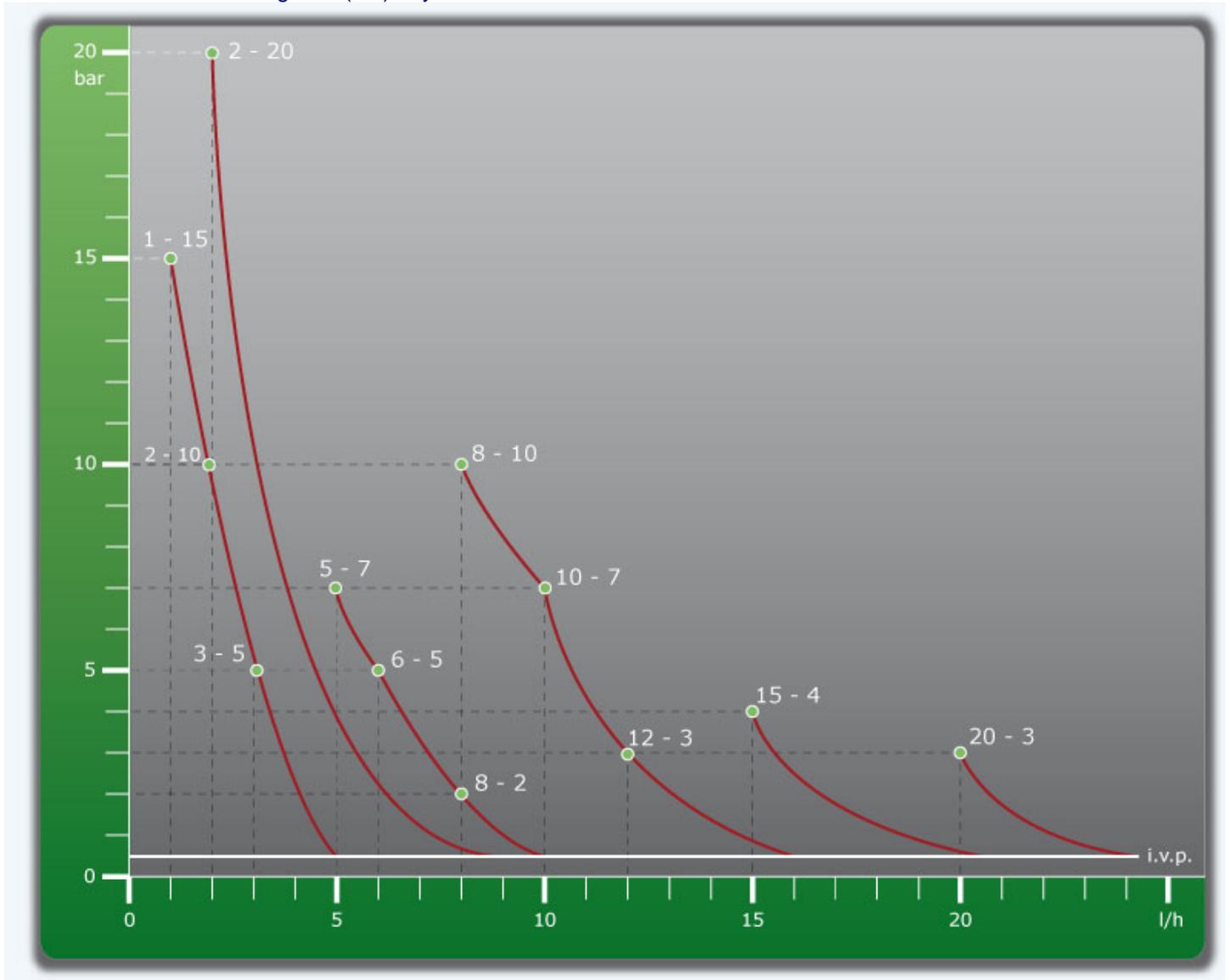
The flow rate of the pump will depend on the counter pressure in the discharge line (please check flow vs. pressure diaphragm) and on the physical properties of the chemical being dosed. As a general rule the pump flow rate will be higher if there is a lower is the counter pressure.

## Pressure and Flow Rate Capacity

Model		1 - 15	2 - 10	2 - 20	5 - 7	5 - 12	8 - 10	15 - 4	20 - 3
Nominal Capacity	L/H	1	2	2	5	5	8	15	20
	G/H	0.26	0.53	1.53	1.32	1.32	2.12	3.96	5.26
	G/D	6.24	12.72	36.72	31.68	31.68	50.88	95.04	126.24
Max Capacity	L/H	8	10	8.5	13	17	20	20	24.5
	G/H	2.08	2.6	2.21	3.38	4.42	5.2	5.2	6.37
	G/D	49.92	62.4	53.04	81.12	106.08	124.8	124.8	152.88
Max Pressure	Bar	15	10	20	7	12	10	4	3
	PSI	217	145	290	101	174	145	58	43

How many gallon in 1 liter? The answer is approx. 0,264. Converting between gallon [US, liquid] and liter.

1 liter/hour = 0.264172052 gallon (US)/hour  
1 liter/hour = 5.279261959 gallon (UK)/day



How many psi in 1 bar? The answer is approx. 14,5.

We assume you are converting between pound/square inch [absolute] and bar.

The performance of the pump depends on the viscosity of the medium and hydraulic installation conditions.  
The curves refer to water at 20°C.

## Liquid End

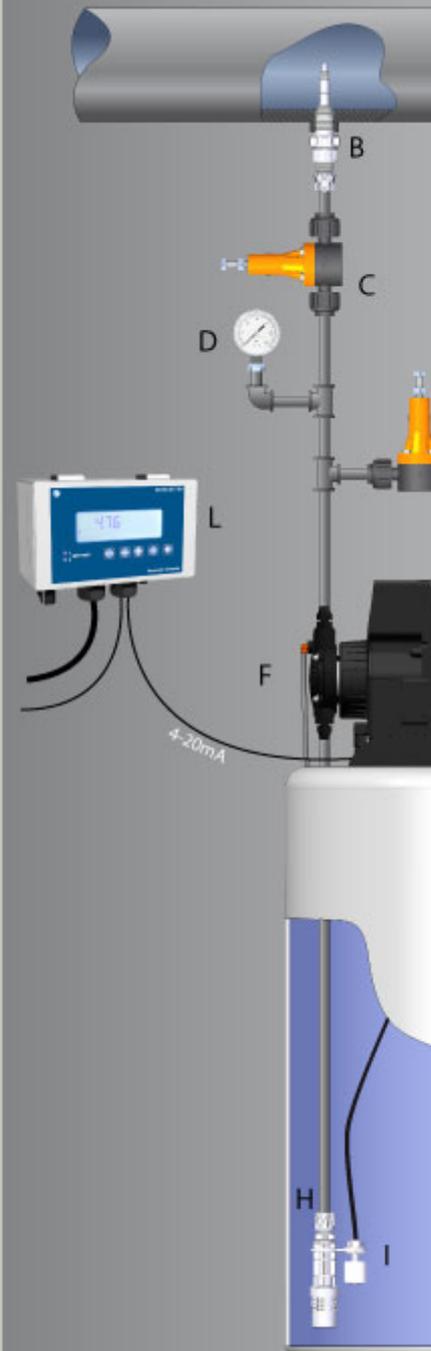
Wetted Parts	Standard Materials
Pump Head	PP
Diaphragm	PTFE
Lip valves	FPM (Viton®)
Sealings	FPM (Viton®)
Injection Valve	PP/Ceramic
Foot Filter	PP/Ceramic
Suction/Bleeding Tubings	PVC
Delivery Tubing	PE

Wetted Parts	Standard Materials
Pump Head with Gravity Balls	Ceramic

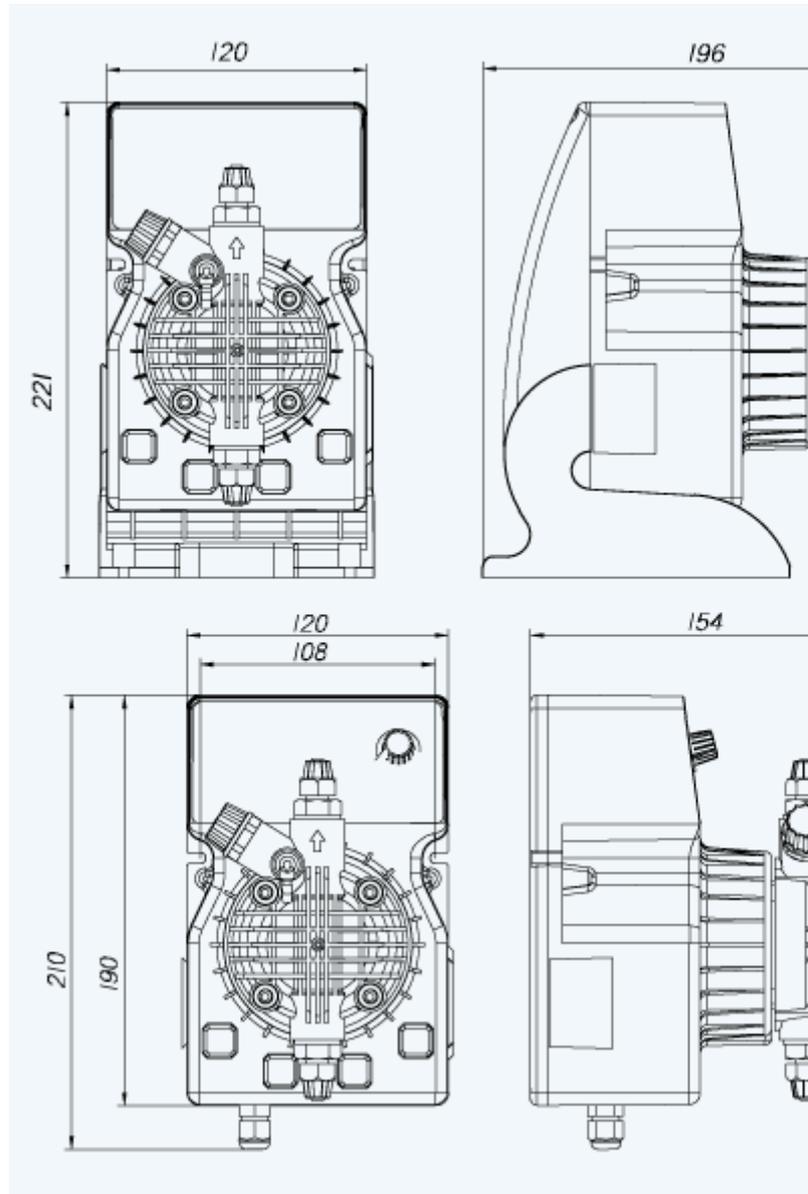
## Assembly and Dimensions

### Sample Installation

- A - Main Pipeline
- B - Injection Valve
- C - Backpressure Valve
- D - Pressure Gauge
- E - Relief Valve
- F - Dosing Pump
- G - Tank
- H - Foot Filter
- I - Level Switch
- L - Controller



## Overall Dimensions



How many mm in 1 inches? The answer is 25.4

## Options

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