



**LAGOA**

› DOSING PUMPS

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# LAGOA SERIES: SIMPLE, RELIABLE, AVAILABLE

PCM range of dosing pumps consists of mechanical diaphragm dosing pumps with actuated valves.



Lagoa LG1



Lagoa LG2 Duplex

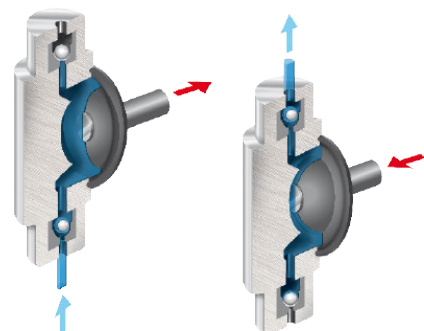
## OPERATION

The Lagoa pump is composed of a membrane connected to a piston which alternating movement successively fills and empties the pumphead.

- 1 The backward movement of the membrane opens the bottom check valve and allows the entry of fluid, which fills the pumphead.
- 2 The forward movement of the membrane closes the bottom check valve, opens the top check valve and expels the dose.

## TECHNICAL DATA

- Maximum flow: 315 l/hr per pumphead
- Adjustable from 10 to 100%
- Maximum pressure: 12 bar
- Maximum temperature: 90°C
- Speed: 46 and 111 strokes/min
- Precision:  $\pm 1\%$
- Linearity:  $\pm 3\%$
- Deliverable within 2 to 6 days.



SUCTION

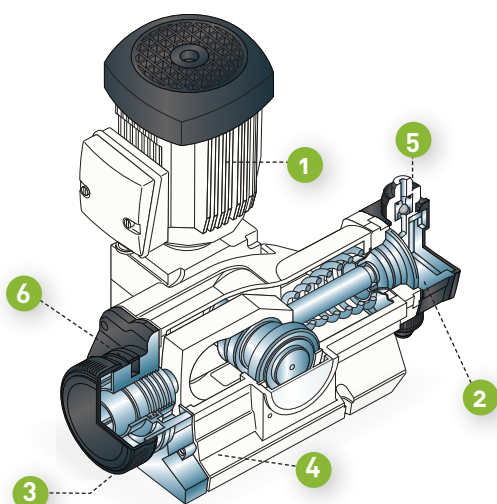
DISCHARGE

# LAGOA

## DIAPHRAGM DOSING PUMPS

### Applications

The Lagoa series is designed for metering a wide variety of chemicals in various industries from waste water treatment to mechanical or mining industries.



#### 1 Drive.

The pump is driven by a direct mounted light alloy motor with IP55 protection. The bearings are greased for life, making the motors maintenance-free.

#### 2 Diaphragm.

Preformed type, made of PTFE reinforced with elastomer. The liquid contact part is in chemically inert PTFE.

#### 3 Stroke adjustment.

The capacity is set by turning the micrometer dial which is fitted with vernier scale graduated in percentage stroke length.

#### 4 Casing.

Robust cast aluminium alloy construction.

#### 5 Pumphead.

The pumphead is easy to remove and change. It consists of:

- 1 suction check valve
- 1 discharge check valve
- 1 liquid end body

Pumpheads are available in many material combinations.

Note: other versions are available on request.

#### Pumphead type:

- Polypropylene
- PVC
- Stainless steel
- PVDF

#### 6 Locking device.

The stroke adjustment mechanism can be locked in position to ensure that stroke length remains at its set point.

### ACCESSORIES AND OPTIONS

- Foot valves
- Injection rod
- Safety and retention valves
- Pulsation dampers
- « Ready-to-meter » assemblies
- Multiplexing

## ADVANTAGES

#### Design:

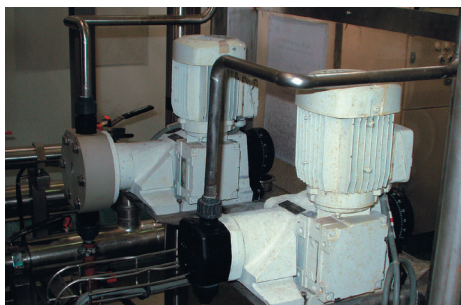
- Simple and robust construction
- Reliability of metering
- Adaptable: meters a wide range of fluids
- Simplified maintenance
- Dry running

#### Electro-mechanical drive:

- Does not cause and is not affected by interference
- Reduced mechanical and hydraulic shocks
- Silent



Sulfuric acid metering in mining



Metering of soda and acid.



Ferric chloride pumping in purification station.

## INDUSTRIES AND APPLICATIONS



### › ENVIRONMENT

Chemicals agents, lime milk, polymer, Ferric chloride, Aluminum chloride, PAC, WAC, Nutrient, Scum, Foam, Acids, Alkalines.



### › MECHANICAL ENGINEERING

Oil water mixtures, laminoire wastes, cutting oil, engine lubricants, engine lubricant wastes, waste oil, spent baths, lead paste, washcoat, slop, colloidal silica, water-glycol deicing, glycol, resin, hardener.



### › CHEMICALS

Glues, paints, varnishes, polymer, flue gas desulphurization, fiber production, colloidal silica, latex, pigment slurry, plasticizers, emulsion, zeolite, binder, sizing.



### › NEW ENERGIES

Oil, biodiesel, musts, vinasses, coal water mixtures, glycerin & methanol, soapstock, liquid manure, waste ion-exchange resin, dispersant, stabilizer, slurry from flue gas desulfurization (FGD).



### › MINERALS

Mineral slurries, explosive preparation, polymer, pulp, grouts, mortars, refuse derived fuels, chrome VI reduction, coloring agent, sludge.



### › FOOD

Sugars & Starches (Transfer of sugar, glucose, honey, pulp, syrup, molasses, thick juices, liquor, flocculent, starch, starch milk, gluten).



### › PAPER

Mineral slurries (kaolin, talc, bentonite, calcium carbonate, titanium dioxide), binders (starch, casein, AKD, PVA, CMC, latex), additives (retention agents, dispersants, optical brighteners), coating color, polymer.