

# Series G

When strength means performance...



Dosing pumps  
with mechanically-actuated  
diaphragms  
simple and robust

# Dosing pumps

## Series G

The G Series consists of three models of compact and lightweight dosing pumps, weighing between 7 and 40 kg. G Series pumps can handle a very wide range of flow rates.

These pumps are recommended for low discharge pressures - mainly in water treatment and surface treatment, but also in the food industry in clean-in-place applications, etc.

G Series models are multi-purpose dosing pumps and can handle all known reagents. They are designed for continuous service day in and day out and can run dry without any damage to the pump.

G Series pumps also incorporate a variable eccentric system, previously only found in industrial pumps operating under intensive service conditions. This unusual patented design principle has proved its worth in service.

The PTFE diaphragm is directly linked onto the moving parts of the mechanism (the slide and the variable eccentric). This technology allows G Series dosing pumps to cope with high suction head conditions.



GA Series



GM Series



GB Series



# Advantages

## Exclusive features for guaranteed performance

### Proven flexibility in the harshest environments

#### Wide variety of liquid ends

G Series dosing pumps offer a wide choice of liquid end materials which are compatible with most chemical substances:

- Polypropylene (PP).
- PVDF.
- Stainless steel.
- High viscosity.
- Fluorinated liquids.
- Slurries...

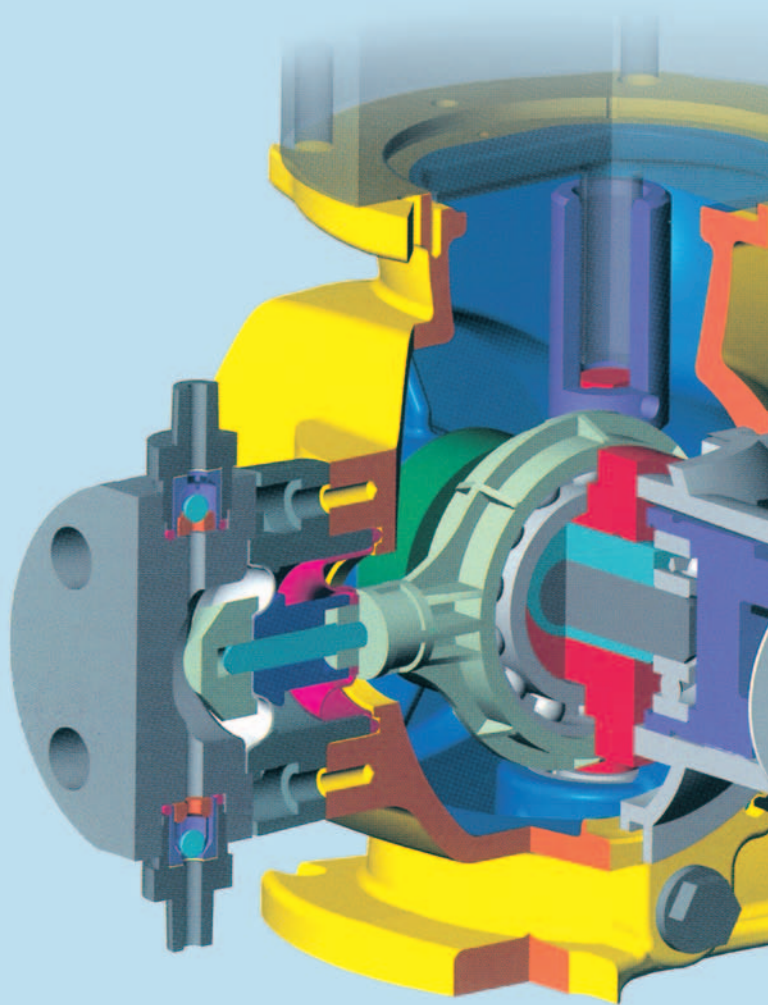
#### Automatic flow control

Different control systems can be used to automate flow settings on G Series pumps:

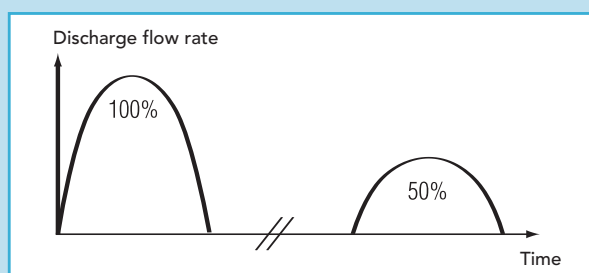
- **Electronic servo-motor:** automatic stroke setting adjustment
- **Variable speed drive:** motor speed adjustment.
- **Varipulse®:** automatic flow control providing a number of different control modes.



GM Series pump fitted with a Varipulse® unit



#### Variable eccentric



G Series dosing pumps

G Series pumps produce a smooth output which minimizes pulsing and eliminates shock (e.g.: 100% and 50% of stroke).

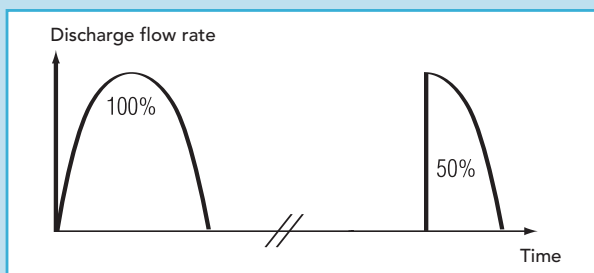
# A wide choice of options and accessories

## Proven reliability of design

- All parts of the mechanism have permanent lubrication.
- Ball bearings used for main moving parts: connecting rod, wheel and worm screw.

*This design helps to prevent overheating and extend pump life and plays a key part in keeping G Series pumps running quietly.*

*Please do not hesitate to contact us if you require any specific information*



**Conventional dosing pumps**

*Output characteristics with hydraulic shock created by conventional dosing pumps (e.g.: 100% and 50% of stroke).*

G Series dosing pumps can be supplied with an automatic flow control system. Further options include a double diaphragm liquid end and a stroke counter.

A wide variety of accessories are available to meet specific conditions at your installation site such as long lengths of discharge piping, low pressures below 1.5 bar and so on. Accessories include 3-function valves, 4-function valves, check valves, relief valves, damper vessels, calibration pots, etc.

## Multiplex pumps

APPLICATIONS



Fertilization in soilless culture applications, containers and arboriculture:

- duplex version: two fertilizers injected into irrigation piping separately to avoid formation of precipitate,
- triplex version: injection of two fertilizers plus nitric acid to correct pH.

Another application is the treatment of water for swimming pools, with injection of coagulant, disinfectant etc.

# 3 models

## cover full range of requirements

Low-cost compact pumps with high-performance flow-rate and pressure characteristics

### GA, GM, GB

#### GA Series

This is the most compact and economical model with flow rates up to 170 l/h and pressures up to 12 bar. The housing is extremely strong and is made from fibreglass-reinforced material giving excellent resistance to corrosion.

#### GM Series

The GM Series dosing pump is of metal construction. It is particularly useful in multiplexing applications and can be used with up to three identical or different liquid ends. The pump can handle flow rates of up to 500 l/h and pressures up to 12 bar and is suitable for a large number of industrial uses other than water treatment, such as the injection of reagents at medium pressure.

#### GB Series

The GB Series dosing pump is also of metal construction with a cast aluminium housing. This model can handle the largest output with flow rates of up to 1,200 l/h at pressures up to 10 bar.

### Surface treatment

APPLICATIONS



Injection of inorganic additives, wetting agents and brightener for a continuous nickel-plating line

G Series pumps are used for adding reagents in surface treatment processes.

- chemical (phosphate) treatment: addition of degreasing agents, phosphate treatment additives and passivation products;
- electrolytic (electro-plating) treatments: addition of degreasing agents, cleaning agents, bases and brighteners to treatment baths for zinc and zinc alloy plating, nickel electroplating and chemical nickel plating, copper plating, tinning and so on, plus dosing passivation products.

Control systems for these applications can be based on the treated surface (in chemical treatment) or on power consumption (in electrolytic treatment). Measuring devices for chemical and physical properties such as pH or conductivity may also be used.

### Water treatment

APPLICATIONS



Injection of coagulants, flocculating agents and caustic soda in a water treatment process following application of liquid wax.

Series G range pumps are used for feeding reagents and treatment products and are particularly suitable for:

- potable water treatment: injection of coagulants, flocculating agents, sodium hypochlorite, lime slurry, acid, bases, caustic soda, activated carbon, etc,
- domestic or industrial waste water treatment,
- air pollution control,
- plus other applications including the treatment of water for swimming pools, domestic hot water, boiler feed water, cooling water, etc.



# Performance - comparisons between G Series pumps

Model	Flow Rate	Pressure	Stroke	Power	
	(max)	(max)		motor (W)	
	l/h	bar	spm	single phase	3-phase
GA	2.5	12	36	180	90
	5	12	72	180	60
	10	12	144	180	60
	25	12	72	180	60
	50	10	144	180	60
	83	5	72	180	60
	110	3.5	144	180	60
	170	3.5	144	180	60
GM	2.25	12	36	180	90
	4.5	12	72	180	90
	9	12	144	180	90
	25	12	72	180	90
	50	10	144	180	90
	85	7	72	180	90
	120	7	72	180	90
	170	7	144	180	90
	240	7	144	180	120
	315	5	144	180	120
	400	5	144	180	250
	500	5	180	180	250
GB	90	10	36	-	370
	175	10	72	-	370
	236	8	72	-	370
	345	10	144	-	550
	430	8	180	-	550
	472	7	144	-	550
	590	7	180	-	550
	950	3.5	144	-	550
	1200	3.5	180	-	550

Performance for max. standard stroke rates at 50 Hz. Please contact us if the performance characteristics you require are not covered on this table.

Ihr Partner vor Ort:



**MEDOTEC**

Mess- und Dosiertechnik GmbH

Dörmgesstr. 6, 41238 Mönchengladbach

Telefon: +49 (0) 2166 - 18 99 90

Telefax: +49 (0) 2166 - 18 99 91

Email: mail@medotec.de

[www.medotec.de](http://www.medotec.de)



**Milton Roy Europe**

A network of over 100 distributors and sales and service offices.

To find your local representative, visit our website: [www.miltonroy-europe.com](http://www.miltonroy-europe.com)

**MILTON ROY EUROPE**

10 Grande Rue

27360 PONT-SAINT-PIERRE

FRANCE

Tel: +33 (0)2 32 68 30 00

Fax: +33 (0)2 32 68 30 93

[contact@miltonroy-europe.com](mailto:contact@miltonroy-europe.com)

[www.miltonroy-europe.com](http://www.miltonroy-europe.com)