

# DOSING PUMPS SERIES G™ M



- Flow rate up to 500 l/h - Pressure up to 12 bar
- Mechanically actuated diaphragm
- Variable eccentric drive mechanism
- Homogeneous or heterogeneous multiplexing capabilities

## Main technical characteristics

- Flow rate up to 500 l/h
- Pressure up to 12 bars
- Mechanically actuated PTFE diaphragm
- Stroke adjustment by variable eccentric ensuring a flow with low pulsing (no hydraulic shocks)
- Maximum temperature of pumped fluid: 40 °C
- Adjustment of flow rate while running or stopped: from 0 to 100%
- Stroke adjustment lock
- Accuracy of rated flow: ± 2% in the range of 10% to 100%
- Max. suction lift: up to 4 m water
- High vacuum suction lift option: 9 m water (consult us)
- Maximum suction pressure: 2 bar
- Aluminium housing
- Life lubrication
- Options: double diaphragm, VARIPULSE® controller for automatic adjustment and control of flow rate, stroke counter, electronic servomotor
- Homogeneous or heterogeneous multiplexing capabilities

## Electrical characteristics of motors

### General characteristics:

- Power supply:
  - 230/400 V - 50/60 Hz 3-phase
  - 230 V - 50 or 60 Hz - single-phase
  - 115 V - 50 or 60 Hz - single-phase
- Degree of protection: IP55, tropicalized
- Insulation: class F
- In compliance with European and international standards
- **Vertical** motor mounting, F130 flange, shaft end 14x30
  - standard on GM 400 and GM 500
  - option on GM 90 to GM 330
- **Horizontal** motor mounting, F130 flange, shaft end 14x30
  - standard on all multiplex models
  - option on GM 2 to GM 500 simplex

## Accessories

- The Série G™ M pumps are supplied with the accessories described in the opposite chart (except for 316L S.S. version)
- Available on request: pulsation dampeners, safety or back pressure valves, consult us.



## Construction of liquid ends

Liquid end components / Versions	Polypropylene (PP)	PVDF	S. Steel (316L)
<b>GM 2 to GM 50 versions</b>			
Liquid end body	PP	PVDF	316L
Valve body	PGC	PVDF	316L
Seat	Polyprel	PTFE	316L
Balls	Ceramic	Ceramic	316L
Connections	PGC/PVDF/PVC	PVDF/PVC	316L
Diaphragm	PTFE/PVDF*	PTFE/PVDF	PTFE/316L
Seals	Viton	Viton	Viton
<b>GM 90 to GM 500 versions</b>			
Liquid end body	PP	PVDF	316L
Valve body	PVDF	PVDF	316L
Seat	PE	PVDF	316L
Balls	Glass	Céramic	316L
Connections	PVC	PVDF	316L
Diaphragm	PTFE/PP	PTFE/PVDF	PTFE/316L
Seals	Viton	FEP	Viton

\* except on GM 2 to GM 10 = PTFE/PVC

### Accessories

For PP, PVDF versions:

- GM 2 to GM 50 versions: pump supplied with 1 injection nozzle, 1 foot valve + weight and 1 flexible hose 6 m,
- GM 90 to GM 500 versions: accessories available on request.

## Performances

### Temporary datas

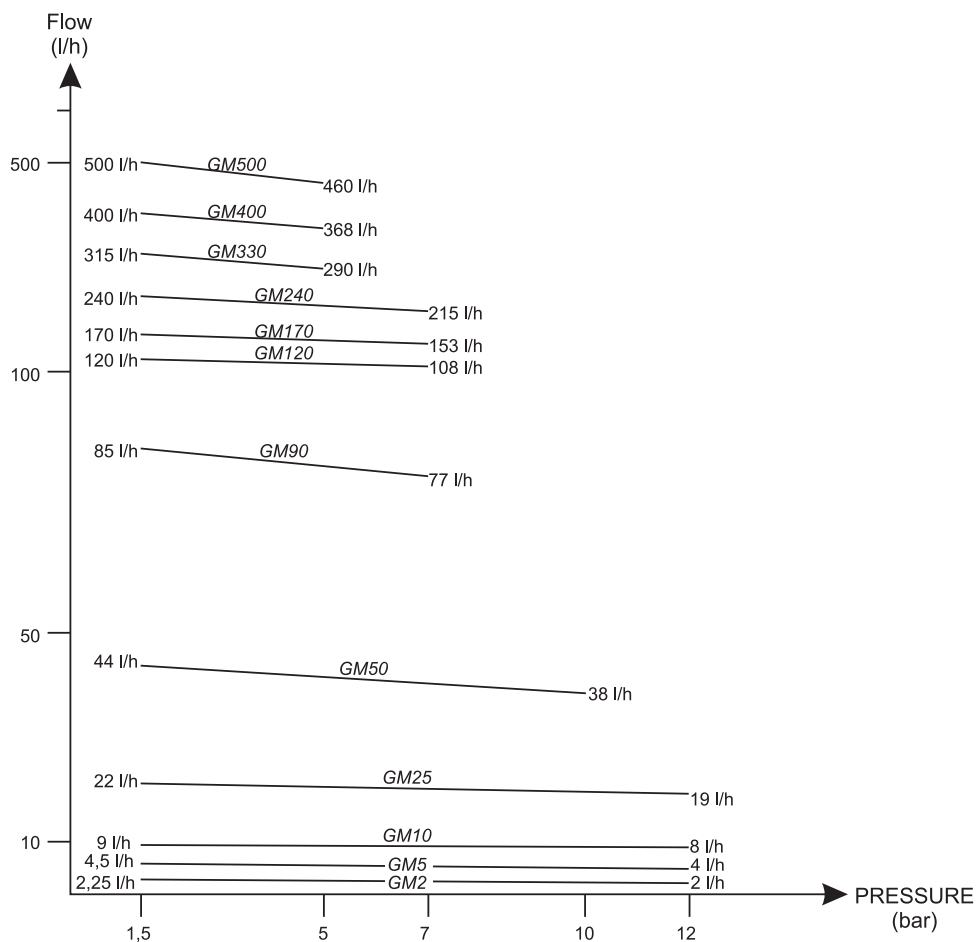
Type	Flow max (l/h) <sup>(1)(2)</sup>	Pressure max (bar)	Stroke lenght (mm)	Stroke speed (spm) <sup>(2)</sup>	Motor speed (rpm) <sup>(2)</sup>	Motor power (W)	
						3 ph.	1 ph.
<b>GM 2</b>	2.25	12	4	36	1500	90	180
<b>GM 5</b>	4.5	12	4	72	1500	90	180
<b>GM 10</b>	9	12	4	144	1500	90	180
<b>GM 25</b>	22	12	6	72	1500	90	180
<b>GM 50</b>	44	10	6	144	1500	90	180
<b>GM 90</b>	85	7	6	72	1500	90	180
<b>GM 120</b>	120	7	8	72	1500	90	180
<b>GM 170</b>	170	7	6	144	1500	90	180
<b>GM 240</b>	240	7	8	144	1500	120	180
<b>GM 330</b>	315	5	8	144	1500	120	180
<b>GM 400</b>	400	5	10	144	1500	250	180
<b>GM 500</b>	500	5	10	180 <sup>(3)</sup>	1500	250	180

<sup>(1)</sup> Max flow at 1.5 bar

<sup>(2)</sup> Values with motor at 50 Hz (multiply by 1.2 for 60 Hz)

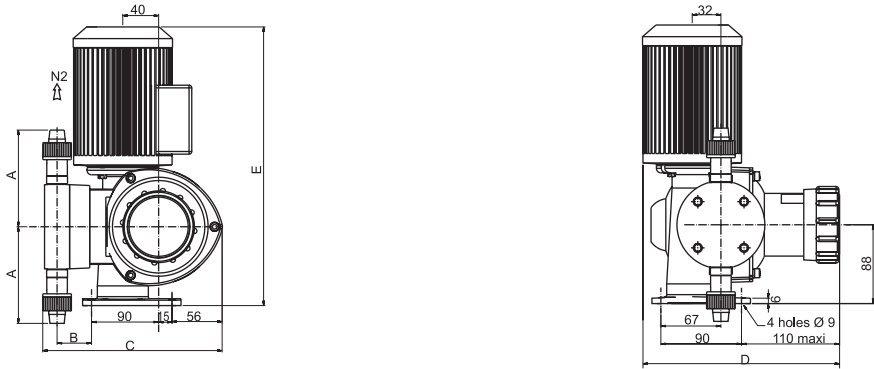
<sup>(3)</sup> Consult us for use at 60 Hz

## Performances curves

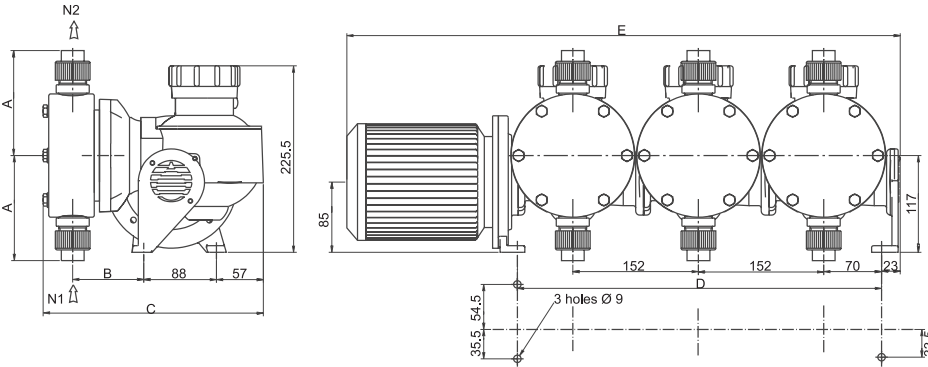


## Dimensions and connections

- Simplex version as a standard: vertical motor (**SX**)



- Multiplex version as a standard: horizontal motor (**DX - TX**)  
Simplex version as an option: horizontal motor (**HX**)



	Versions	Connect.	GM 2 to GM 50 size (mm)					Connect.	GM 90 to GM 330 size (mm)					Connect.	GM 400 and GM 500 size (mm)				
			A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
Simplex SX vertical motor	PP	R						Q	127					Q	127				
	PVDF	R	108	39	200	220	311	N	131	82	272	220	311	N	131	82	272	245	425
	Inox	N	102					N						N					
Simplex HX horizontal motor	PP	R						Q	127					Q	127				
	PVDF	R	108	35	205	136,5	366	N	131	78	277	136,5	366	N	131	78	277	136,5	366
	Inox	N	102					N						N					
Duplex DX horizontal motor	PP	R						Q	127					Q	127				
	PVDF	R	108	35	205	288,5	518	N	131	78	277	288,5	518	N	131	78	277	288,5	518
	Inox	N	102					N						N					
Triplex TX horizontal motor	PP	R						Q	127					Q	127				
	PVDF	R	108	35	205	440,5	670	N	131	78	277	440,5	670	N	131	78	277	440,5	670
	Inox	N	102					N						N					

### Connections :

R = Reinforced hose 6x12 mm + female socket for DN8 rigid tubing (PVC)    N = Threaded socked 1/2" BSP female    Q = Female socket for DN15 rigid tubing (PVC)

## Weight

Version	Simplex	Duplex	Triplex
Net weight (kg) with S. Steel liquid end <sup>(1)</sup>	13	24	33

<sup>(1)</sup> Approximately

## G<sup>TM</sup> M pumps servomotor

These electronic servomotors are intended to replace the manual stroke control by an automatic system.

- Supply: 230 V single-phase or 110 V single-phase
- Frequency: 50 Hz or 60 Hz
- Protection: IP65
- Visual position indicator
- Emergency manual control
- Control signal: 0-20 mA or 4-20 mA or 0-10 V or 2-10 V
- Recopy potentiometer: 0-20 mA or 4-20 mA or 0-10 V or 2-10 V

(See data-sheet ref. 160 7001 201N)



Heterogeneous G<sup>TM</sup>M Triplex dosing pump with an electronic servo-motor

## VARIPULSE<sup>®</sup> controller

A simple unit, very economical and reliable, with multiple functions:

- Control by external pulse
- Proportional control by analogue input (pulse control)
- Proportional control by analogue input (speed control)
- Manual control of stroke speed
- Supply: 1 phase: 200 V (-10%) to 240 V (+10%)
- Frequency: 50 / 60 Hz
- Power from -0.09 to 0.25 kW
- Protection: IP55

(see data-sheet ref. 160 7002 201N)



VARIPULSE<sup>®</sup> controller

## Stroke counter by magnetic probe detector

- Supply: from 10 to 30 VCC
- Residual undulation: < 10%
- Permanent output current: 300 mA maximum
- CEM according to EN 60 947-5-2
- Protection: IP67
- Output: PNP or NPN
- Cable length: 2 m
- Wires section: 0.25 mm<sup>2</sup>



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