

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 bar
- 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: $\pm 2\%$ 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 Serie 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)
GM 2 to GM 50 versions			
Liquid end body	PP	PVDF	316L
Valve body	PVC	PVDF	316L
Seat	Polyprel	PTFE	316L
Balls	Ceramic	Ceramic	316L
Connections	PVC/PVDF	PVDF/PVC	316L
Diaphragm	PTFE/PVDF*	PTFE/PVDF	PTFE/316L
Seals	Viton	Viton	Viton
GM 90 to GM 500 versions			
Liquid end body	PP	PVDF	316L
Valve body	PVDF	PVDF	316L
Seat	PE	PVDF	316L
Balls	Glass	Ceramic	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 one 6 m flexible polyethylene hose,
- GM 90 to GM 500 versions: accessories available on request.

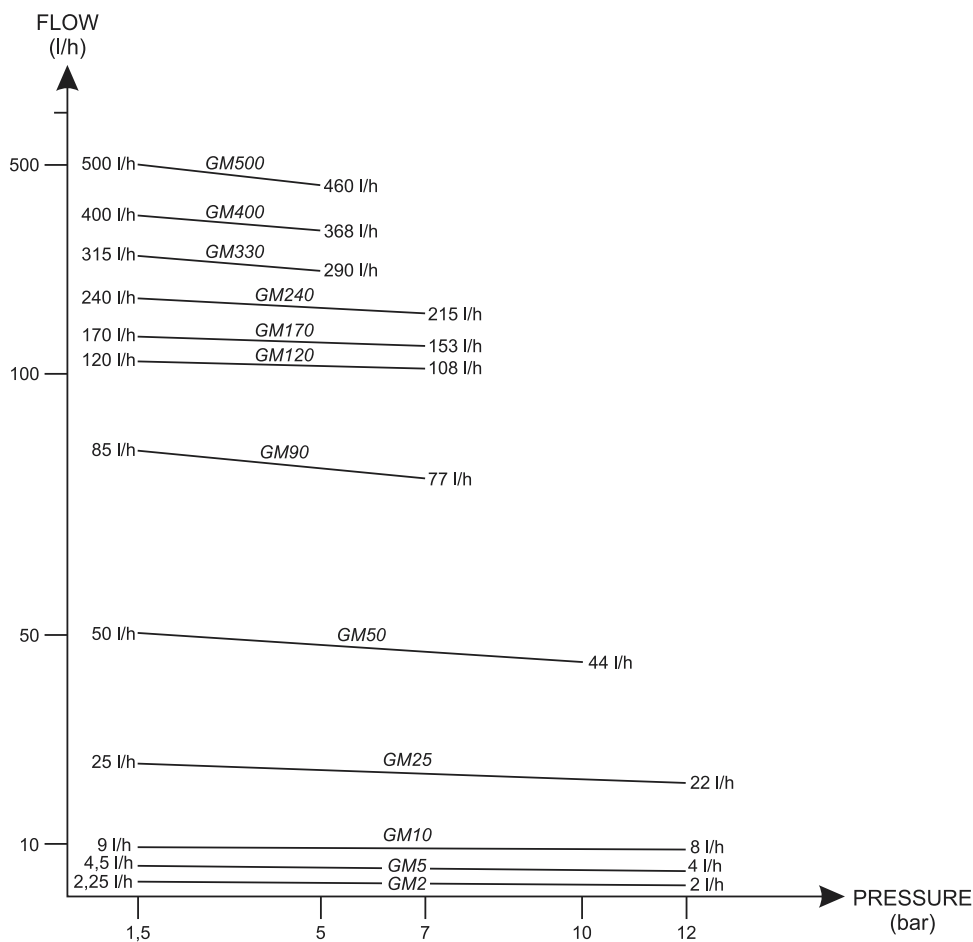
Performances

Type	Flow max (l/h) ⁽¹⁾ at 1.5 bar	Pressure max (bar)	Stroke lenght (mm)	Stroke speed (spm) ⁽¹⁾	Motor speed (rpm) ⁽¹⁾	Motor power (W)	
						3 ph.	1 ph.
GM 2	2.25	12	4	36	1500	90	180
GM 5	4.5	12	4	72	1500	90	180
GM 10	9	12	4	144	1500	90	180
GM 25	25	12	6	72	1500	90	180
GM 50	50	10	6	144	1500	90	180
GM 90	85	7	6	72	1500	90	180
GM 120	120	7	8	72	1500	90	180
GM 170	170	7	6	144	1500	90	180
GM 240	240	7	8	144	1500	120	180
GM 330	315	5	8	144	1500	120	180
GM 400	400	5	10	144	1500	250	180
GM 500	500	5	10	180 ⁽²⁾	1500	250	250

⁽¹⁾ Values with motor at 50 Hz (multiply by 1.2 for 60 Hz)

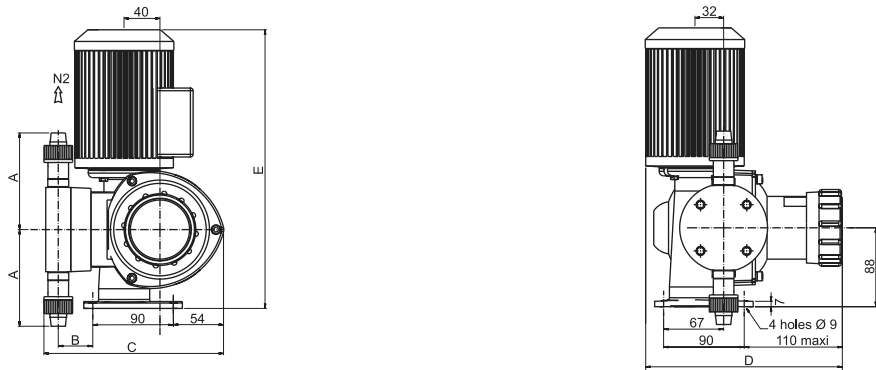
⁽²⁾ Not use at 60 Hz for 180 spm/mm.

Performances curves

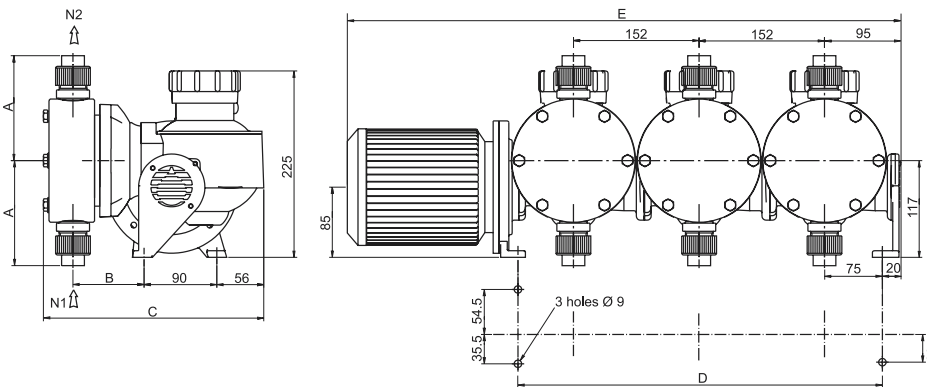


Dimensions and connections

- 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	T						Q	127					Q	127				
	PVDF	T	108	40	200	220	311	N	131	82	272	220	312	N	131	82	272	245	425
	Inox	N	102					N						N					
Simplex HX horizontal motor	PP	T						Q	127					Q	127				
	PVDF	T	108	39	205	142	395	N	131	80	277	142	395	N	131	80	277	142	395
	Inox	N	102					N						N					
Duplex DX horizontal motor	PP	T						Q	127					Q	127				
	PVDF	T	108	39	205	294	547	N	131	80	277	294	547	N	131	80	277	294	547
	Inox	N	102					N						N					
Triplex TX horizontal motor	PP	T						Q	127					Q	127				
	PVDF	T	108	39	205	445	698	N	131	80	277	445	698	N	131	80	277	445	698
	Inox	N	102					N						N					

Connections :

T = Hose 6x8, 6x12 and G 1/2" male

N = Threaded socked 1/2" BSP female

Q = Female socket for DN15 rigid tubing (PVC)

Weight

Versions	Simplex	Duplex	Triplex
Net Weight (kg) ⁽¹⁾ with plastic liquid end with S.Steel liquid end	7 13	12 24	19 33
Gross Weight (kg) ⁽¹⁾ with plastic liquid end with S.Steel liquid end	9 15	17 29	24 38
Packing (LxH)	400x300x490	800x600x620	800x600x620

⁽¹⁾Approximately

GTMM pumps servomotor

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

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

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



Heterogeneous GTMM Triplex dosing pump with an electronic servomotor

VARIPULSE[®] controller ⁽¹⁾

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

- Control by external pulse
- Proportional control by analogue input (pulse control) F (T)
- 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

⁽¹⁾ Only suitable for use on GTMM models with base stroke speed of 144 spm

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



VARIPULSE[®] 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 mm²