

Dosing pump 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 minimising pulsation and shock
- Maximum temperature of pumped liquid: 40 °C
- Adjustment of flow rate while running or stopped: from 0 to 100%
- Stroke adjustment lock
- Accuracy: ± 2% of rated flow from 10 to 100% stroke
- Suction lift: up to 4 m water
- High vacuum suction lift option: 9 m water (consult us)
- Maximum suction pressure: 2 bar
- Aluminium alloy 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
- Integrable into an EH&S protection enclosure



Dosing pump series G™ M

Electrical characteristics of motors

General characteristics:

- Power supply:
 - 230/400 V - 50/60 Hz - three-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 three-phase 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

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	PVDF	PVDF	316L
Seats	Aflas	PTFE	316L
Balls	Ceramic	Ceramic	316L
Connections	PVDF	PVDF	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
Seats	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

- 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.

ACCESSORIES

For PP, PVDF versions:

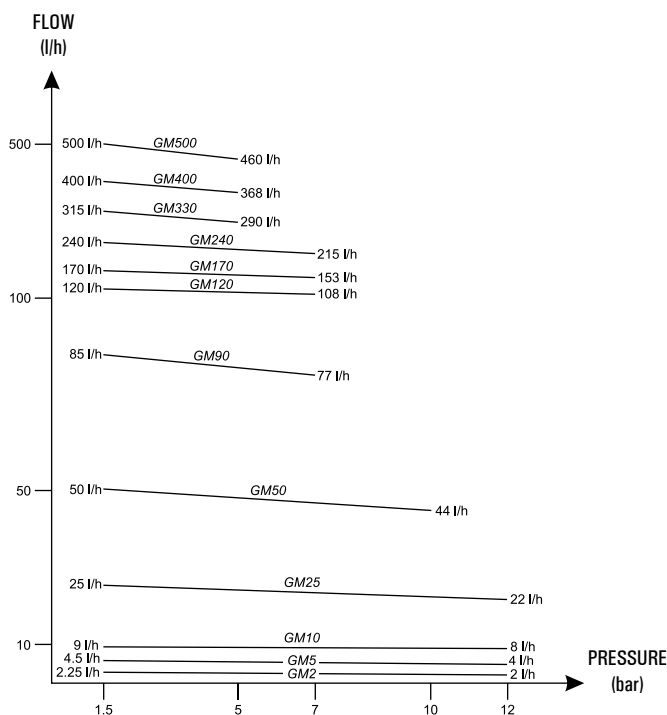
- GM 2 to GM 50 versions: pump supplied with 1 injection nozzle, 1 foot valve + 1 weight, 1 flexible polyethylene hose (6 m) and 1 reinforced PVC hose (6 m),
- GM 90 to GM 500 versions: accessories available on request.

Performances

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

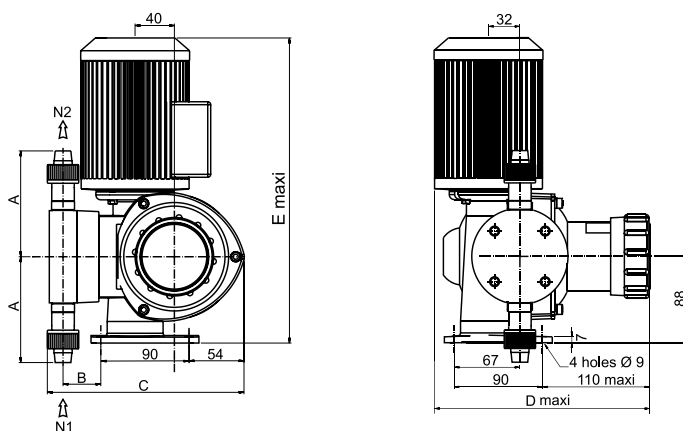
⁽¹⁾ Values with motor at 50 Hz (multiply by 1.2 for 60 Hz)

⁽²⁾ Do not use with 60 Hz motor



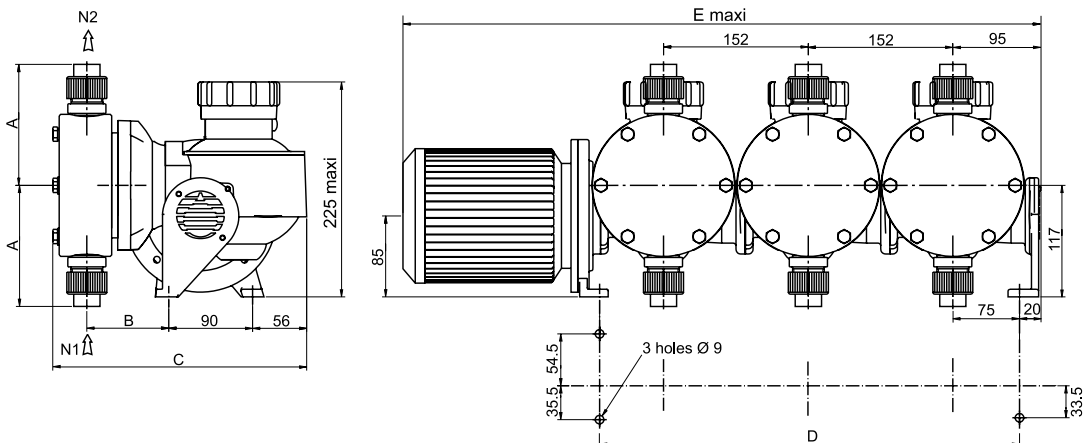
Dimensions and connections

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)



Dimensions and connections

GM 2 to GM 50 (size in mm)

Versions		Connection	A	B	C	D	E
Simplex SX vertical motor	PP	T	91	40	200	220	312
	PVDF	T					
	316L	N					
Simplex HX horizontal motor	PP	T	91	39	205	142 ⁽¹⁾	395 ⁽¹⁾
	PVDF	T					
	316L	N					
Duplex DX horizontal motor	PP	T	91	39	205	294	547
	PVDF	T					
	316L	N					
Triplex TX horizontal motor	PP	T	91	39	205	445	698
	PVDF	T					
	316L	N					

⁽¹⁾ For GM 25 and GM 50 models, D=143 and E=450

Connections:

T = Hose 6x8, 6x12 and G 1/2" male
N = Threaded socket 1/2" BSP female
Q = Female socket for DN15 rigid tubing (PVC)

GM 90 to GM 240⁽²⁾ (size in mm)

Versions		Connection	A	B	C	D	E
Simplex SX vertical motor	PP	Q	127	82	272	220	312
	PVDF	N	131				
	316L	N					
Simplex HX horizontal motor	PP	Q	127	80	277	142	395
	PVDF	N	131				
	316L	N					
Duplex DX horizontal motor	PP	Q	127	80	277	294	547
	PVDF	N	131				
	316L	N					
Triplex TX horizontal motor	PP	Q	127	80	277	445	753
	PVDF	N	131				
	316L	N					

⁽²⁾ Triplex (TX) version is not available for GM 240 model

GM 330 to GM 500 (size in mm)

Versions		Connection	A	B	C	D	E
Simplex SX vertical motor	PP	Q	127	82	272	220	312
	PVDF	N	131				
	316L	N					
Simplex HX horizontal motor	PP	Q	127	80	277	142	395
	PVDF	N	131				
	316L	N					

Weight and packing

Versions		Simplex	Duplex	Triplex
Net Weight (kg) ⁽¹⁾	with plastic liquid end	7	12	19
	with S. Steel liquid end	13	24	33
Gross Weight (kg) ⁽¹⁾	with plastic liquid end	9	17	24
	with S. Steel liquid end	15	29	38
Packing (L x W x H - mm)		400 x 300 x 490	800 x 600 x 620	800 x 600 x 620

⁽¹⁾ Approximately

G™ M pump servomotors

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
- Enclosure: 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 G™ M Triplex dosing pump with an electronic servomotor

VARIPULSE® control module

A simple unit, very economical and reliable, to provide speed variation in proportion to an analogue signal.

Two versions available:

- Frequency variation
- Three operating modes

- Supply voltage: 220 V (-7% to 10%) single-phase mains for 230 V three-phase motor (option: 400 V three-phase mains)
- Frequency: 50/60 Hz
- Power: 0.09 to 0.25 kW
- Enclosure: IP55

(see data-sheet ref. 160 7003 201N)



VARIPULSE® control module

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



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

To find your local representative, visit our website:

www.miltonroy-europe.com