



MILTON ROY

The Inventor of Metering Pump



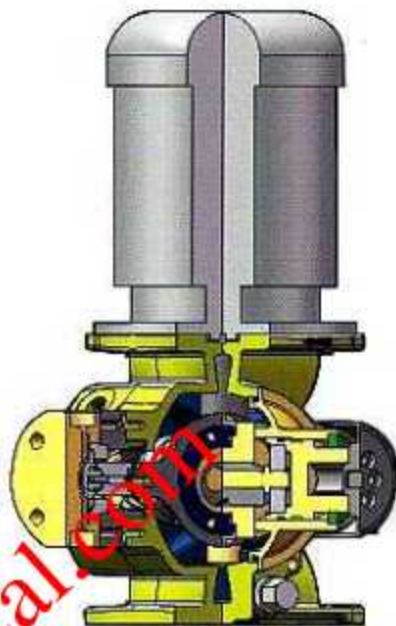
G SERIES

G SERIES

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The G Series of metering pumps offer traditional Milton Roy reliability with outstanding value for applications up to 175 psi (12 Bar).

Milton Roy has combined its heavy-duty industrial drive technology with state of the art design and manufacturing processes in creating the G Series metering pump. This family of Mechanically Actuated Diaphragm metering pumps is designed for durability and cost effectiveness.



MATERIAL OF CONSTRUCTION

• GM0002-GM0050

Liquid End	Liquid End Body	Valve Body	Seal	Ball	Diaphragm	Seal	Connection
PVC	PVC	PVDF	PVDF	Ceramic	PTFE	Viton	PVC
PVDF	PVDF	PVC	PVDF	Ceramic	PTFE	PTFE	PVDF
316 SS	316 SS	316 SS	316 SS	316 SS	PTFE	Viton	316 SS

• GM0690-GM0500

Liquid End	Liquid End Body	Valve Body	Seal	Ball	Diaphragm	Seal	Connection
PVC	PVC	PVC	PVC	Glass	PTFE	Viton	PVC
PVDF	PVDF	PVDF	PVDF	Ceramic	PTFE	PTFE	PVDF
316 SS	316 SS	316 SS	316 SS	316 SS	PTFE	Viton	316 SS

• GB1000-GB1500

Liquid End	Liquid End Body	Valve Body	Seal	Ball	Diaphragm	Seal	Connection
PVC	PVC	PVC	PVC	Ceramic	PTFE	Viton	PVC
PVDF	PVDF	PVDF	PVDF	Ceramic	PTFE	PTFE	PVDF
316 SS	316 SS	316 SS	316 SS	316 SS	PTFE	Viton/PTFE	316 SS

• GB1800

Liquid End	Liquid End Body	Valve Body	Valve Stopper	Ball	Diaphragm	Seal	Connection
PVC	PVC	PVC/PVC	PVC/PVC	hastelloy C	PTFE	Viton	PVC
PVDF	PVDF	PVDF/PVDF	PVDF/PVDF	hastelloy C	PTFE	PTFE	PVDF
316 SS	316 SS	316 SS/316 SS	316 SS/316 SS	hastelloy C	PTFE	Viton	316 SS

ACCESSORIES

For GM0002-GM0050 (PVC & PVDF liquid end), pumps are supplied with 1 injection nozzle, 1 foot valve + 1 weight and 1 reinforced PVC hose (6m)

STANDARD MOTOR DATA

Supply : 380V, 50 Hz, 3 phase or 220V, 50Hz, 1 phase

Enclosure : IP55

Insulation : Class F

Note : IEC/Nema explosion proof motor and other non-standard motor are available

PRODUCT CODE

Series	Capacity	Liquid End	Connection	Motor	Capacity Control	Base	Option																																																																																																																																																																								
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<p>(1) Used for both constant & variable speed application. Use frequency conversion motor (50-50Hz). (2) The gear/worm is different from that of 50Hz.</p>																																																																																																																																																																															
Liquid End	Code Description			Code Description																																																																																																																																																																											
	P PVC Liquid End S 316 Liquid End T PVDF Liquid End F PVC Liquid End, used for Sodium Hypochlorite			V High Viscosity(PVC LE) K Slurry(GM0002-0010 N/A, GM0025-0500 316 Material; GB: PVC) M Mix (PVC LE, GM only) Z Special material liquid end (Consult with factory. Describe in Purchase Order)																																																																																																																																																																											
* GM0002-0050 EPDM O-ring; GM0090-0300, PTFE encapsulated O-ring.																																																																																																																																																																															
Connection	Code Description			Code Description																																																																																																																																																																											
	GM0002-0010 GM0025-0050 GM0090-0300 GM0090-0300 GM0090-0300 GM0250-0500 GM1500-1800			GM0002-0010 GM0025-0050 GM0090-0300 GM0090-0300 GM0250-0500 GM1500-1800																																																																																																																																																																											
	P NPT 1/4" 1/4" 1/2" 1/2" 1/2" 1/2" 1/2" 1/2" 1" 1" 1" 1" 1-1/2" 1-1/2" 1-1/2"			P NPT 1/4" 1/4" 1/2" 1/2" 1/2" 1/2" 1/2" 1/2" 1" 1" 1" 1" 1-1/2" 1-1/2" 1-1/2"																																																																																																																																																																											
	Q Pipe DN15			Q Pipe DN15																																																																																																																																																																											
	R Hose Pipe 6X12 6X12 6X12 6X12			R Hose Pipe 6X12 6X12 6X12 6X12																																																																																																																																																																											
	H GM Hose Pipe 15X23 15X23			H GM Hose Pipe 15X23 15X23																																																																																																																																																																											
	X Others: Consult with Factory Describe in Purchase Order			X Others: Consult with Factory Describe in Purchase Order																																																																																																																																																																											
Note: Standard configuration is marked in shadow. PVC is the standard material for hose pipe. (2) The standard material of hose pipe is PVC. Please consult factory for PVDF Pipe.																																																																																																																																																																															
Motor	Code Description (GM)			Code Description (GB)																																																																																																																																																																											
	1 250W/JEC71, 1440rpm, 3-50-220/380V, IP55/F/TEFC			550W/JEC71, 1440rpm, 3-50-220/380V, IP55/F/TEFC																																																																																																																																																																											
	1 1/2hp, NEMA36C, 1440rpm, 3-50-220/380V, NEMA, TEFC			1hp, NEMA36C, 1440rpm, 3-50-220/380V, NEMA3, TEFC																																																																																																																																																																											
	3 250W/JEC71, 1440rpm, 3-50-380V, IP55/F/TEFC			550W/JEC90, 1440rpm, 3-50-220/380V, IP55/F/TEFC/Ex-dIBT4																																																																																																																																																																											
	4 370W/JEC71, 1440rpm, 3-50-220/380V, IP55/F/TEFC			750W/JEC80, 1440rpm, 3-50-220/380V, IP55/F/TEFC																																																																																																																																																																											
	5			750W/JEC90, 1440rpm, 3-50-220/380V, IP55/F/TEFC/Ex-dIBT4																																																																																																																																																																											
	6 250W/JEC71, 4P, 3-50-200/400, 3-60-230/460, IP55/F/TEFC			550W/JEC71, 4P, 3-50-200/400V, 3-60-230/460, IP55/F/TEFC																																																																																																																																																																											
	7 370W/JEC71, 4P, 3-50-220/050, 3-60-230/460, IP55/F/TEFC			780W/JEC80, 4P, 3-50-200/400, 3-60-230/460, IP55/F/TEFC																																																																																																																																																																											
	8			550W/JEC80, 1440rpm, 3-50-220/380V, IP55/F/TEFC																																																																																																																																																																											
	9(1) 370W/JEC71, 4P, 3-50-220/050, IP55/F/TEFC/Ex-dIBT4			550W/JEC80, 4P, 3-50-200/400V, 3-60-230/460, IP55/F/TEFC/Ex-dIBT4																																																																																																																																																																											
	9(2)			750W/JEC80, 4P, 3-50-200/400, 3-60-230/460, IP55/F/TEFC/Ex-dIBT4																																																																																																																																																																											
	9(3) 250W/JEC71, 4P, 3-50-380V, 3-60-230/460, IP55/F/TEFC/Ex-dIBT4			Without motor, but with JEC71 connection																																																																																																																																																																											
	9(4) 370W/JEC71, 4P, 3-50-220/050, 3-60-230/460, IP55/F/TEFC/Ex-dIBT4			Without motor, but with JEC71 connection																																																																																																																																																																											
	9(5) Without motor, but with JEC71 connection			Without motor, but with JEC71 connection																																																																																																																																																																											
	9(6) 370W/JEC71, 4P, 1-50-220V, IP55/F/TEFC			Without motor, but with JEC80 connection																																																																																																																																																																											
	9(7) 370W/JEC71, 4P, 1-60-230V, IP55/F/TEFC			Without motor, but with JEC80 connection																																																																																																																																																																											
	9(8)			Without motor, but with JEC80 connection																																																																																																																																																																											
	9 Others: Please consult factory			Others: Please consult factory																																																																																																																																																																											
Single-ph motor can be used with motor on/off controller.																																																																																																																																																																															
Capacity Control	Code Description (GM)			Code Description (GB)																																																																																																																																																																											
	M Manual Adjustment			Manual Adjustment																																																																																																																																																																											
	N ECC, 4-20mA, 230V AC-1Ph			ECC, 4-20mA, 230V AC-1Ph																																																																																																																																																																											
	E			ECC, 4-20mA, 230VAC-1Ph, Ex. Proof																																																																																																																																																																											
	F Variable frequency control, 4-20mA			Variable frequency control, 4-20mA																																																																																																																																																																											
	T Variable and ECC			Used for all GM pumps																																																																																																																																																																											
	P Variable (100-50Hz-220V)			Used for all GM pumps																																																																																																																																																																											
Base Plate	Code Description (GM)			Code Description (GB)																																																																																																																																																																											
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	Y YES			YES																																																																																																																																																																											
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	N N/A			N/A																																																																																																																																																																											
	A Stroke Counter			Stroke Counter																																																																																																																																																																											
	B Double Diaphragm With Pressure Gauge			Double Diaphragm With Pressure Gauge																																																																																																																																																																											
	C ⁽¹⁾ Double Diaphragm With Pressure Switch			Double Diaphragm With Pressure Switch																																																																																																																																																																											
	D ⁽²⁾ Double Diaphragm With Pressure Gauge & Switch			Double Diaphragm With Pressure Gauge & Switch																																																																																																																																																																											
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(1) Base plate included for code C and D

- Mechanically actuated PTFE diaphragm
- Flow rates up to 1800 LPH, pressure up to 12 bar
- Adjustment of flowrate from 0% ~ 100% while running or stopped
- Accuracy +/-2% of 100% rated flow
- Maximum temperature of pumped fluid : 40 °C
- Maximum suction lift up to 3 m water, max. suction pressure 2 bar

Features & Benefits

- Mechanical actuated diaphragm design eliminates contour plates
- Variable eccentric drive mechanism for smooth sinusoidal flow
- Rugged construction designed to withstand tough environments
- Oil bath lubrication for all of drive components
- Lockable micrometer stroke, adjustment can be adjusted while pump is running or stopped
- PVC, PVDF & 316SS liquid end material
- Self-cleaning suction/discharge check valve
- Simplified service-easy access to the main components, large opening and few assemblies

Automatic Capacity Control Options

- Electronic Capacity Control : Automatic stroke adjustment by 4-20mA analog signal
Power Supply : 220V, 50/60Hz, 1 phase
- Variable speed : Automatic speed variation by 4-20mA analog signal
Power Supply : 200V - 240V, 50/60Hz, 1 phase or 380 - 440V, 50/60Hz, 3 phase
- Varipulse Control : Proportional control by 4-20mA analog signal /pulse or manual selection
Power Supply : 220V - 50/60Hz, 1 phase (3 phase optional)

Other Options

- Double diaphragm
- Stroke Counter
- Material for special applications



GM pump with electronic capacity control



GM pump with varipulse control

PUMP OUTLINE DRAWING

Model	GM40(40-40)		GM60(60-60)		GM90(90-90)		GM120(120)		GM160(160)	
	PVC	Metal	PVC	Metal	PVC	Metal	PVC	Metal	PVC	Metal
A	237	280	295	330	362	414	374	446	426	456
B	5	4	18	46	29	85	64	100	87	102
C	80.3	80.3	71.4	76.2	85.4	100	86.8	100	86.4	100
D	333	333	351.2	348	373.1	373.1	373.1	373.1	373.1	373.1
H	1/2" FNPT	1/2" FNPT	1" FNPT	1" M NPT	1 1/2" NPT	1 1/2" MNPT	1 1/2" NPT	1 1/2" M NPT	1 1/2" NPT	1/2" NPT
	DN15		DN20		DN25					

*Optional available with PVC LCP only

GM Series

L.P. Model	GM1062-GM1065B				GM1098-GM1098B			
	Chem/Code	A	B	C	Chem/Code	A	B	C
PVC	P 126				Q 127			
PVDF	P 106	118	258		N 131	159	322	
316	N 102				N 131			

GM Series

Weight

Pump with motor	Metal LE		Plastic LE		
	Net WT (Kgs)	Gross WT (Kgs)	Net WT (Kgs)	Gross WT (Kgs)	
GM	2-10	22	25	18	22
	25-50	23	26	20	23
	90-500	25	28	21	24
	Add Ecc			+5	
	without 0.25 motor			-6	
			-7		
GB	80-450	42	47	39	43
	500-1200	45	50	41	45
	1500-1800	48	53	44	48
	without 0.55 motor			-8	
	without 0.75 motor			-10	

Shipping Dimensions

GM	460 x 360 x 555 (mm)
GB	610 x 410 x 700 (mm)



G SERIES, DEPENDABLE AND VERSATILE

The G Series of pumps has proven its exceptional value over years of solid performance in a wide range of applications and industries. Water treatment chemicals, process additives, acids, out-gassing fluids, slurries, and many more applications are all handled with ease by this robust metering pump design. Your local representative can assist you in applying the G Series metering pump to your process.

MILTON ROY

Milton Roy Asia Pacific Company (Singapore)
23 Tagore Lane #03-06
Tagore 23 Warehouse Complex
Singapore 787501
Tel : (65) 6242 9182 Fax : (65) 6243 4249
Email : mrapsing@miltonroy.com.sg

Thailand

1858/63-74 Nation Tower, 14th Floor
Room A, Bangna-Trad Road, K.M. 4.5
Bangna, Bangkok 10260, Thailand
Tel : 662-7514777 Fax : 662-7514720

Korea

Suite 1417, Sungji Hytz Building III,
#642-6, Yeoksam-dong, Kangnam-gu,
Seoul, Korea.
Tel : 82-02-557-1110 Fax : 82-02-557-1115

Distributed By :

ACCESSORIES

Pulsation Dampeners

Minimize pressure and flow surges in the pump discharge. When applied to pump inlet, more favorable NPSH conditions result.



Calibration Columns

Allow periodic verification of pump performance during routine checks or after system maintenance.



Safety Valves

Protect pump and piping from overpressure.



Back Pressure Valves

Provide smooth, artificial pressure in pump discharge line for atmospheric or low pressure systems to ensure pumping accuracy.