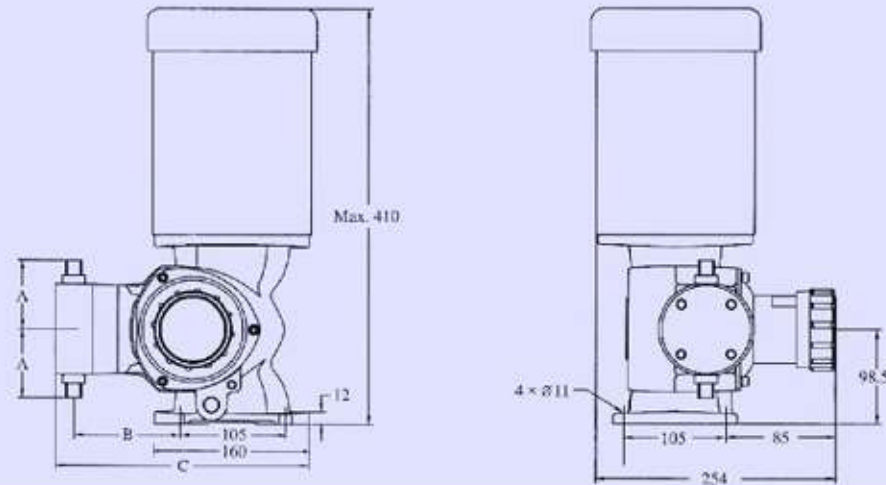


## PUMP OUTLINE DRAWING

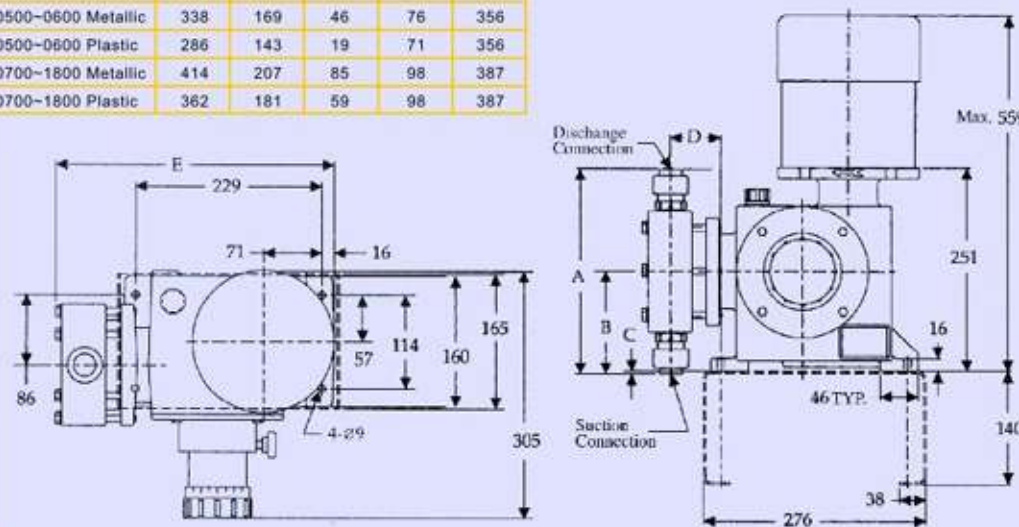
GM0002-GM0050				GM0090-GM0500			
LE Material	Conn. Code	A	B C	Conn. Code	A	B C	
PVC	P	108		Q	127		
PVDF	P	108	116 250	N	131 159 322		
316SS	N	102		N	131		

### GM Series



LE Material	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
0080-0450 Metallic	260	130	4	60	341
0080-0450 Plastic	237	128	5	62	341
0500-0600 Metallic	338	169	46	76	356
0500-0600 Plastic	286	143	19	71	356
0700-1800 Metallic	414	207	85	98	387
0700-1800 Plastic	362	181	59	98	387

### GB 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	19	22
	25-50	23	26	20	23
	90-500	25	28	21	24
	Add Ecc			+5	
	without 0.25 motor			-6	
without 0.37 motor			-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	610 x 410 x 700 (mm)
GB	460 x 360 x 555 (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.



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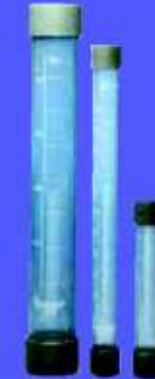
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Distributed By :

## 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



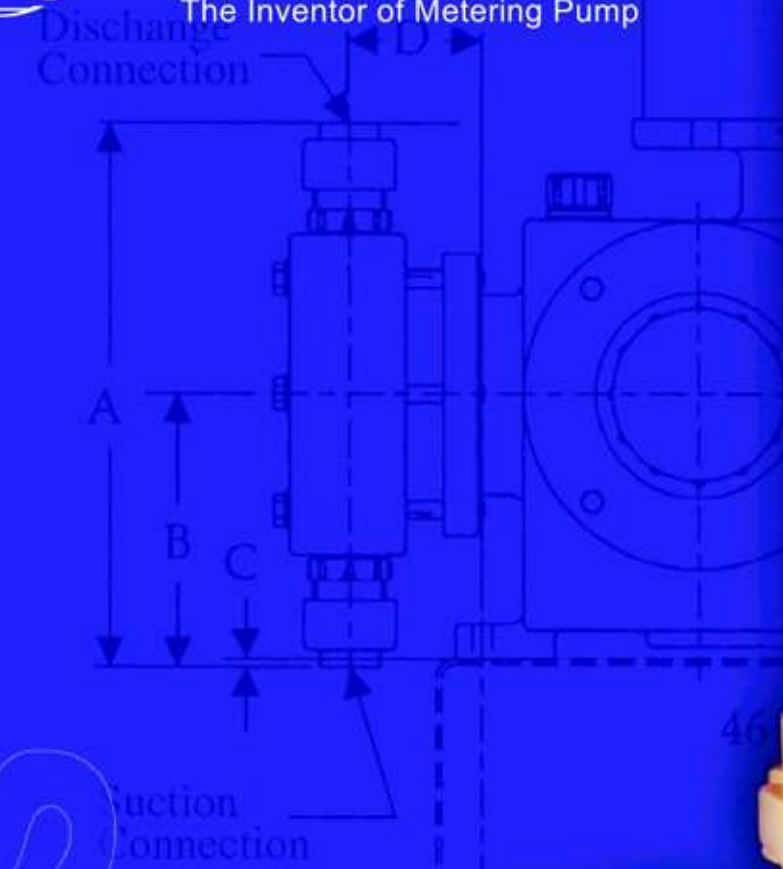
### Back Pressure Valves

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



# MILTON ROY

The Inventor of Metering Pump

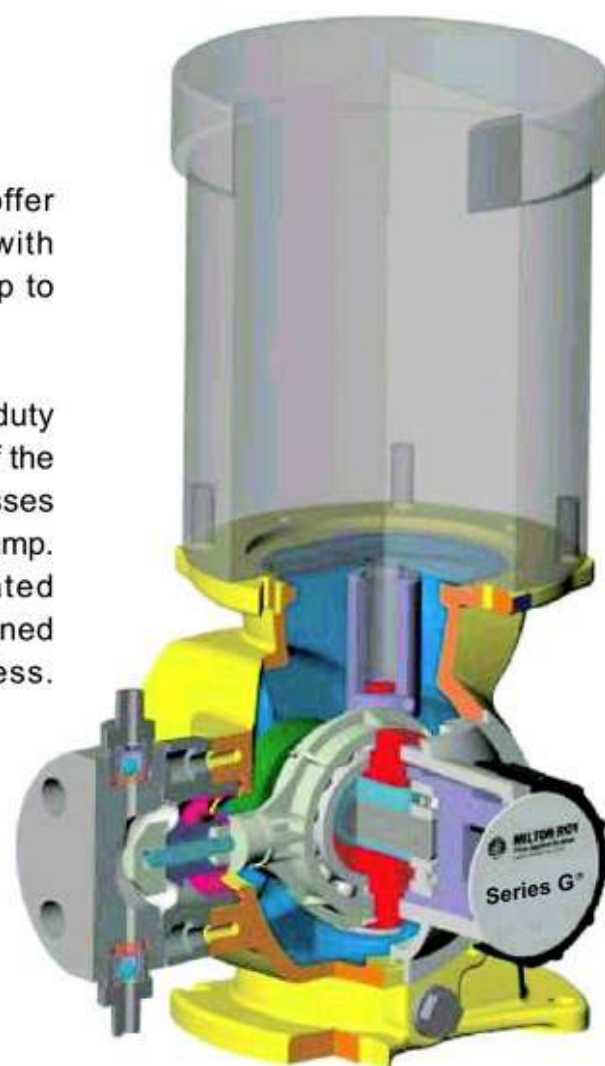


# G SERIES

## G SERIES

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	Head	Ball Guide	Seat	Ball Check	Diaphragm	O-rings	Connection
PVC	PVC	PVC	Polyprel	Ceramic	PTFE/PVC	Viton	PVC
PVDF	PVDF	PVDF	PTFE	Ceramic	PTFE/PVDF	Viton	PVDF
316 SS	316 SS	316 SS	316 SS	316 SS	PTFE/316 SS	Viton	316 SS

#### • GM0090~GM0500

Liquid End	Head	Ball Guide	Seat	Ball Check	Diaphragm	O-rings	Connection
PVC	PVC	PVDF	PE	Glass	PTFE/PP	Viton	PVC
PVDF	PVDF	PVDF	PVDF	Ceramic	PTFE/PVDF	FEP	PVDF
316 SS	316 SS	316 SS	316 SS	316 SS	PTFE/316 SS	Viton	316 SS

#### • GB0080~GB1200

Liquid End	Head	Ball Guide	Seat	Ball Check	Diaphragm	O-rings	Connection
PVC	PVC	PVDF/PVC	PVDF/PE	Ceramic	PTFE/PVC	Viton	PVC
PVDF	PVDF	PVDF	PVDF	Ceramic	PTFE/PVDF	Viton	PVDF
316 SS	316 SS	316 SS	316 SS	316 SS	PTFE/316 SS	Viton/PTFE	316 SS

## PRODUCT CODE

Code Structure: Series Capacity LE Connection Motor Adjustment Base Options

Series	Code	Description
GM		GM Series MAD Metering Pump
GB		GB Series MAD Metering Pump

Capacity	GM						GB							
	Code	LPH @ P <sub>max</sub>		SPM		P <sub>max</sub> bar	Power	Code	LPH @ P <sub>max</sub>		SPM		P <sub>max</sub> bar	Power
	0002	2.25	2.7	36	43	12	250W <sup>(2)</sup>	0080	82	98	36	43	10	550W 750W <sup>(2)</sup>
	0005	4.5	5.4	72	86			0180	167	200	72	86		
	0010	9	10.5	144	173			0250	237	284	102	120		
	0025	25	30	72	86			0350	334	400	144	173		
	0050	50	60	144	173	10	0450	416	455 <sup>(1)</sup>	180	198	7	750W	
	0090	85	100	72	86	0500	464	556	144	173				
	0120	120	140	72	86	0600	583	640 <sup>(1)</sup>	180	198				
	0170	170	200	144	173	0700	656	787	102	120				
	0240	240	280	144	173	7	1000	946	1136	144	173	3.5	750W	
	0330	315	370	144	173	1200	1200	1300 <sup>(1)</sup>	180	198				
	0400	400	480	144	173	5	1500	1500	1650 <sup>(1)</sup>	180	198			
	0500	500	520	180	187	1800	1800	1730 <sup>(1)</sup>	206	198				

(1) The gear/worm is different from that of 50Hz

(2) Used for both constant & variable speed application

Liquid End	Code			Description			
	P	PVC Liquid End			V	High Viscosity (PVC LE Material)	
S	316 Liquid End			K	Slurry (316 Material GM0025-0500; PVC GB)		
T	PVDF Liquid End			M	Mix (PVC LE Material; GM)		

Connection	Code	Description	GM0002-0050			GM0090-0500			GB0080-0450			GB0500-1200			GB1500-1800		
			PVC	PVDF	316	PVC	PVDF	316	PVC	PVDF	316	PVC	PVDF	316	PVC	PVDF	316
P	NPT, Female	-----	-----	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1" F	1" F	1" M	1 1/2" F	1 1/2" F	1 1/2" M		
Q	Pipe	-----	-----	DN15	-----	-----	DN15	-----	-----	DN25	-----	-----	-----	-----	-----		
R	Hose Pipe	6x12	6x12	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
H	Hose Pipe (High Viscosity Application)	15x23 9x12	-----	-----	DN15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
X	Others, Consult Factory	Describe In Purchase Order						Describe In Purchase Order									

Note : standard configuration is marked in shadow

Motor	Code	Description (GM)	Description (GB)
1	250W, IEC71, 1440rpm, 3-50-220/380V, IP55/F/TEFC	550W, IEC71, 1440rpm, 3-50-220/380V, IP55/F/TEFC	
2	1/3hp, NEMA56C, 1440rpm, 3-50-220/380V, NEMA3/TEFC	1hp, NEMA56C, 1440rpm, 3-50-220/380V, NEMA3/TEFC	
3	250W, IEC71, 1440rpm, 3-50-380V, IP55/F/TEFC/diBT4	550W, IEC80, 1440rpm, 3-50-220/380V, IP55/F/TEFC/diBT4	
4	370W, IEC71, 1440rpm, 3-50-220/380V, IP55/F/TEFC	750W, IEC80, 1440rpm, 3-50-220/380V, IP55/F/TEFC	
5	250W, IEC71, 1440rpm, 1-50-220V, IP55/F/TEFC	750W, IEC80, 1440rpm, 3-50-220, 380, IP55/F/TEFC/diBT4	
6	250W, IEC71, 4P, 3-50-200/400, 3-60-230/460, IP55/F/TEFC	550W, IEC71, 4P, 3-50-200/400V, 3-60-230/460, IP55/F/TEFC	
7	370W, IEC71, 4P, 3-50-220/380, 3-60-230/460, IP55/F/TEFC	750W, IEC80, 4P, 3-50-200/400, 3-60-230/460, IP55/F/TEFC	
9	Others, Consult With Factory	Others, Consult With Factory	

Adjustment	Code	Description (GM)	Description (GB)	Remark
M	Manual Adjust	Manual Adjust	Manual Adjust	Standard Configuration
N	ECC, 4-20mA, 230VAC-1Ph	ECC, 4-20mA, 230VAC-1Ph	ECC, 4-20mA, 230VAC-1Ph	
E	-----	ECC, 4-20mA, 230VAC-1Ph, Ex. Proof	-----	
F	Variable Frequency Control, 4-20mA, 3Ph, 230/380/415/440V	Variable Frequency Control, 4-20mA, 3Ph, 230/380/415/440V	-----	
P	Motor "ON/OFF" Controller	-----	-----	GM10, 50, 170, 240, 330, 400

Base	Code	Description	Remark
N	N/A	N/A	Standard Configuration
Y	Base Plate	GB	

Options	Code	Description (GM)	Description (GB)	Remark
N	N/A	N/A	N/A	Standard Configuration
A	Stroke Counter	Stroke Counter	Stroke Counter	
B	Double Diaphragm	Double Diaphragm	Double Diaphragm	Including Gauge

Note : For any special requirement, please consult with Regional Manager or Engineer in the factory.

## Technical Specifications

- 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

- Electrical Capacity Control : Accept external control signal to adjust the stroke length  
Power Supply : 220V-50/60Hz-Single Phase  
Input Signal : 4-20mA
- Variable Speed Device : Accept external control signal to adjust the stroke speed  
Power Supply : 380/500VAC-50/60Hz-three phase  
Input Signal : 4-20mA
- Motor Controller :  
"ON/OFF" control the motor (three phase) to adjust the flowrate  
Power Supply : 200/240V-50/60Hz-single phase  
Input Signal : 4-20mA/Pulse Signal/Manual

## Other Options

- Double diaphragm
- Stroke Counter
- Material for special applications



GM Series Pump with Motor Controller

## Motor Data

Power Supply : 200/230/380/400/460V-50/60Hz-3phase  
Enclosure : IP55  
Insulation : F

Power (W)	Voltage (V)	Frequency (Hz)	Speed (RPM)	Current (A)	Eff(%)	Power Factor
250	200/400	50	1440	1.66/0.83	67	0.68
370	200/400	50	1440	2.24/1.12	69.5	0.72
550	200/400	50	1440	3.12/1.56	73.5	0.73
750	200/400	50	1440	4.02/2.01	75.5	0.75
250	230/460	60	1700	1.4/0.7	70	0.64
370	230/460	60	1700	2.02/1.01	73	0.63
550	230/460	60	1700	2.76/1.38	77	0.65
750	230/460	60	1700	3.26/1.63	82.5	0.70

Note : IEC / Nema explosion proof motors and single phase motors are available.