



## MILROYAL G METERING PUMPS Hydraulically Actuated Diaphragm Liquid End

The robust Milroyal G™ metering pump doses all traditional liquids used in water treatment and industrial processes including: acids, bases, coagulants, chlorinated products, and many others. Designed for ease of maintenance and start-up, the Milroyal G features Milton Roy's advanced hydraulically actuated High Performance Diaphragm (HPD) liquid end coupled to a durable variable eccentric drive. The absence of contour plates in this liquid end results in "straight-thru" flow ideal for handling polymers and slurries. A unique tri-mode hydraulic system valve allows for purging of any entrapped gases in the hydraulic oil without disturbing the relief valve setting. Also integral to the liquid end is a view port for visual indication of a relief condition in the hydraulic system. The smooth sinusoidal flow produced by the variable eccentric drive minimizes flow pulsations and mechanical shock to system components.



### Product Features

- HPD liquid end design eliminates contour plates.
- Double diaphragm w/leak detection option available.
- Liquid End Materials: PVC, PVDF, 316SS, Alloy 20.
- High viscosity and slurry liquid end options.
- NEMA and IEC motor options.
- Integral tri-mode valve in hydraulic oil system: automatic air bleed, safety/relief valve, air purge button.
- View port provides visual indication of tri-mode valve operation.
- Non-lost motion drive design minimizes flow pulsations and mechanical shock.
- Optional AC & DC variable speed drives available for automatic control from a 4 -20 mA signal.
- Optional Electronic capacity control (stroke length control) from a 4-20 mA signal.

Plunger Diameter	Gear Code	SPM @		GPH @		Max PSI		LPH @		Max BAR	
		60 Hz	50 Hz	60 Hz	50 Hz	Metal	Plastic	60 Hz	50 Hz	Metal	Plastic
1 1/4"	40	43	36	5	4	600		19	16	41	
	20	86	72	10	8			38	32		
	14	120	102	14	12			53	44		
	10	173	144	20	17			76	63		
1 3/4"	40	43	36	11	9	300	150	42	35	21	10
	20	86	72	22	18			83	69		
	14	120	102	32	27			121	101		
	10	173	144	45	38			170	142		
2 1/2"	40	43	36	22	18	150		83	69	10	
	20	86	72	45	38			170	142		
	14	120	102	64	53			242	202		
	10	173	144	90	75			341	284		
3"	40	43	36	32	27	100	100	121	101	7	7
	20	86	72	65	54			246	205		
	14	120	102	92	77			348	290		
	10	173	144	130	108			492	410		

# Milroyal G Metering Pump

## Product Selection Code

Actual product code will include additional information describing options selected

MGH - ?? ? - ??

Plunger Diameter	
Diameter	Code
1 1/4"	20
1 3/4"	28
2 1/2"	40
3"	48

Liquid End Material	
Material	Code
316 ss	1
PVC	2
Alloy 20	5
PVDF	7

Gear Ratio		
Code	SPM @	SPM @
	60 Hz	50 Hz
40	43	36
20	86	72
14	120	102
10	173	144

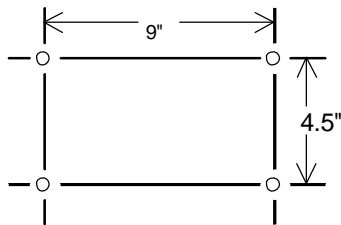
## Materials of Construction

Liquid End Primary Mat'l	Diaphragm Head	Check Valves	Ball Checks	Ball Seats	Diaphragm	Wetted Seals
PVC	PVC	PVC	Ceramic	PVC	PTFE/Nitrile*	Viton
316SS	316SS	316SS	316SS	316SS		
Alloy 20	Alloy 20	Alloy 20	Alloy 20	Alloy 20		
PVDF	PVDF	PVDF	Ceramic	PVDF		

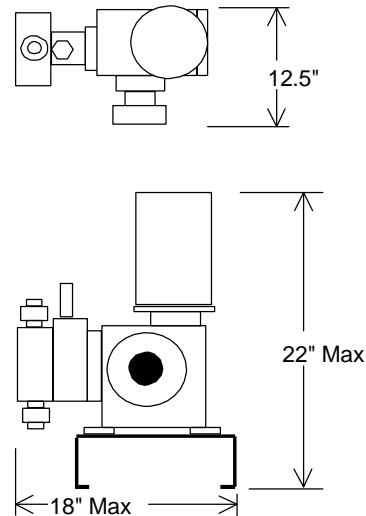
\* Diaphragm is PTFE/Nitrile Composite. Only PTFE is in contact with the process fluid.

## Dimensions

Bolt Hole



Envelope Dimensions



## Available Options Include:

- |   |  |
|---|--|
| <input type="checkbox"/> Electronic Stroke Length Adjustment (4-20 mA input signal) | <input type="checkbox"/> Flanged Connections                     |
| <input type="checkbox"/> Double Diaphragm   | <input type="checkbox"/> Diaphragm Rupture Detection System      |
| <input type="checkbox"/> Various Motors and Variable Speed Drives                   | <input type="checkbox"/> NPT or BSP Piping Connections           |
| <input type="checkbox"/> Slurry Check Valves  | <input type="checkbox"/> High Viscosity Check Valves             |
| <input type="checkbox"/> Process Fluid Air Purge                                    | <input type="checkbox"/> Modifications per Customer Requirements |