

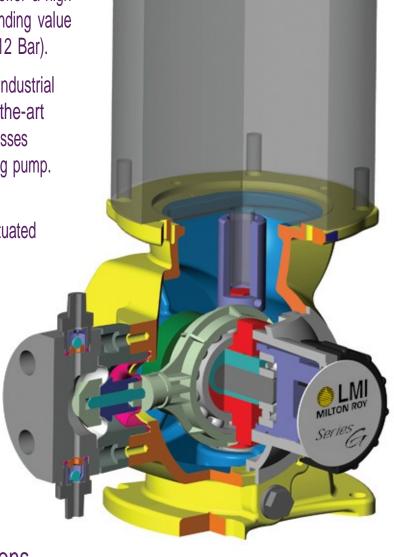
# Series G

The SD & SG metering pumps offer a high level of reliability with outstanding value for applications up to 175 psi (12 Bar).

LMI has combined heavy-duty industrial drive technology with state-of-the-art design and manufacturing processes in creating the Series G metering pump.

This family of Mechanically Actuated Diaphragm metering pumps is designed for durability and cost effectiveness.

Illustrated to the right is a SD4 with a PVC liquid end, featuring NPT connections.



# Series G Features and Specifications

- Flow Rates up to 312 GPH (1180 Liters/hr)
- Mechanically Actuated Diaphragm liquid end eliminates flow restrictions
- Durable, metallic housing designed to withstand tough environments
- High efficiency motors minimize heat buildup
- A robust metallic, worm gear drive coupled with the industrial duty variable eccentric stroke adjustment mechanism yields a 10 to 1 turn down ratio with smooth velocity profiles as compared to the pulsating flows of solenoid pumps or lost motion designs.
- The PTFE, high performance, diaphragm design increases diaphragm life by eliminating the stresses inherent in most designs

- Reliable low flow performance is a result of high performance check valves with machined seats
- All gear components operate in an oil bath for long life
- Precision stroke adjustment can be operated while the pump is running or stopped
- Steady State Accuracy ± 1% of full capacity over the 10 to 1 turndown ratio
- Liquid Temperature Range 14° to 122° F (-14° to 50° C)
- Coating 2 part epoxy
- Average Weight Frame D: 45 lbs (20 kgs) Frame G: 105 lbs (48 kgs)
- Relevant model codes are ETL Certified to conform to ANSI/NSF Std 50

# Pump Selection by Capacity and Pressure

Pump Selection Series G Liquid Gear Frame End Code			Capacity @ 60 Hz (1725 RPM)		Maximum Ratings Capacity@50Hz (1425 RPM)		Pressure			
Frame End Code		GPH	Liter/Hr	GPH GPH	Liter/Hr	PSI	Bar			
	2	1	0.18	0.7	0.15	0.6	175	12		
		2	0.35	1.3	0.29	1.1			40	
		6	0.48	1.8	0.40	1.5				
		3	0.7	2.6	0.58	2.2				
]		1	3.0	11	2.5	9.5				
	4	2	6.6	25	5.5	21	150	10	kW)	
	4	6	10	38	6.9	26	150	10	P (.25	
D		3	14.4	45	12	45			1/4 H	
"		1	13	49	10	39		7	ed on	
	7	2	25	95	21	79	100		Ratings based on 1/4 HP (.25 kW)	
	,	6	34	129	28	106				
		3	50	189	42	159				
	8	1	31	117	26	98	75	5		
		2	57	216	47	178				
		6		87	329	72	273	13	J	
		3	127	481	106	401				
	5	1	26	98	22	82	150			
		2	53	201	44	167		10		
		6	75	284	62	237				
		3	106	401	88	334				
		8	_	_	110	416				
		1	37	140	31	117			Ratings based on 1 HP (.75 kW)	
		2	74	280	62	233			₩ (.7	
G	6	6	104	394	87	328	100	7	1 on 1	
		3	147	555	122	464			basec	
		8	_	_	154	583			Ratings	
	7	1	75	284	62	237			ا ا	
		2	150	568	125	473				
		7 6	_	208	787	173	656	50	3.5	
		3	300	1136	250	946				
		8	_	_	312	1181				





The LMI SG7 with PVC liquid end and manual micrometer stroke adjustment





# Series G Product Code

S [					
	Frame	Gear	Motor &/	Liquid	Connection
		Ratio	or Mount	End Material	

Frame	Motor &/or Mount
D Frame	8 = 1 ph 60 Hz 115/230 VAC 1725 RPM TE
D2	J = 3 ph 60 Hz 230/460 VAC 1725 RPM TE
D4	9 = 1 ph 50 Hz 115/230 VAC 1425 RPM TE
D7	L = 3 ph 50 Hz 220/380 VAC 1425 RPM TE
D8	X = Nema 56C Mount
G Frame	Less Motor
G5	P = DC Motor with Variable Speed Drive
G6	1 — Bo Motor With Validade opeca Blive
G7	Liquid End Material
	4 = Polypropylene
Gear Ratio Code	

### Gear Ratio Code

1 = 43 SPM

2 = 86 SPM

6 = 120 SPM

 $3 = 173 \, \text{SPM}$ 

8 = 180 SPM @ 1425 RPM (SG only) 2 = PVDF

7 = 316 SS

8 = PVC

P = Polymer Service

L = Slurry Applications

 $N = H_2SO_4$  Applications

### Connections

P = NPT

### Optional Degassing Valve Information. Use only with PVC Liquid end.

Series G	Frame	No Fitting	
SD	2	39672	
	4	39672	

Supplied with 10' of 1/4" Polyethene Tubing

Series G	Frame	Valve w/Adapter	
SD*	7	61411	
	8	61411	
SG*	5	61411	
	6	61421	
	7	61421	

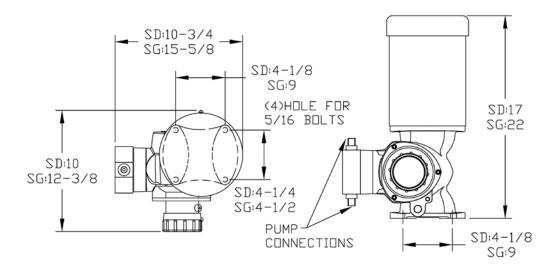
\* Connection 1/4 NPT F



The photograph to the right is a SD4 with a PVC liquid end, featuring a Degassing Valve - p/n 39672



Approximate for envelope estimations. Certified prints are available. Dimensions are showing for both D and G Frames in inches.







Section 1	Liquid End Size	Connection Port Size for the following materials							
Frame		PP, PVC & PVDF		Applications	316SS				
To the state of		PC	olymer	Slurry	HSO4				
	2	1/ <sub>4</sub> " Male		¹N/A	¹/, " Male	¹/₄" Male			
D	4	7 <sub>4</sub> Wale		1/2" Male	1 <sub>4</sub> IVIAIC	1/2" Male			
	7 & 8	1/2	Famala						
•	5	$T_2$	Female						
G	6 & 7	1" Female		1" Male	1" Female	1" Male			

# Materials of Construction

<b>9000</b>		Liquid End Size	Head	Diaphragm Cap	Check Valve Body	Seals	Seats	Balls	Diaphragm
Polypropylene (PP)	G	5	PP	PP	PVDF	- Viton	PVC		
т аургоруюло (т т у	-	6	FF	"	PVC				
	D	2* 4*			ם/יסר	Aflas	Alloy C22 PTFE	Ceramic	
PVC***		7 & 8 5	PVC	PVC	PVDF	Viton	PVC	- Celanic	PTFE
	G	6 & 7 2*			PVC		All Occ		
PVDF	D G	4*	PVDF	PVDF	PVDF	Aflas	Alloy C22 PTFE		
1 401		7 & 8 All				PTFE	PVDF		
Polymer Applications**	D & G	All	PVC		PVDF				
,	D	4	316 SS			\"		040.00	
Slurry Applications	D	7 & 8		PVC	316 SS	Viton	316 SS	316 SS	
	G	All	PVC						
H2SO4 Applications	D & G	All	PVC	PVC	PVDF	Aflas/Viton	CA 20	CA 20	
		2				PTFE	316 SS		
040.00***	D G	4		316 SS		1111	316 SS		
316 SS***		7 & 8 5	316 SS		316 SS	Viton	316 SS	316 SS	
		6 & 7	-			PTFE	310 00		

<sup>\*</sup> Note: A polyethylene dimensional spacer is used in all plastic D2 and D4 check valves.

<sup>\*\*</sup> Hastalloy C spring

<sup>\*\*\*</sup> ETL Certified to conform to ANSI/NSF STD 50 when using these liquid end materials.



The LMI Series "G" pump 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 distributor can assist you in applying the SD

## Accessories



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.



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.



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