



NPT Connection Sizes

S. 166	Liquid	Connection Port Size for the Following materials							
Frame End Size		Black PP, PVC, PVDF & Acrylic	Applications Slurry	316 SS					
	2	1/," M ale		¹/₄" Male	¹/," Male	¹/₄" Male			
D	4	7 ₄ Wale		1/ ₂ " Male	7 ₄ IVIAIG	1/2" Male			
	7 & 8	- '/ ₂ " Female							
l G	5								
L	6 & 7	1" Female 1" Male 1" Female							

Materials of Construction

Material	Frame	Liquid End Size	Head	Check Valve	Seals	Seats	Balls	Diaphragm
White	G	5	- White PP	PVDF	_ Viton	PVDF		
Polypropylene		6		PP		Polyethylene		
	D	2	PVC	PVDF	Aflas	Alloy C22 PTFE	Ceramic	PTFE
PVC		7 & 8						
	G	5			Viton	PVDF		
		6 & 7		PVC		Polyethylene		
	D	2	- PVDF	PVDF	Aflas	Alloy C22		
PVDF		7 & 8				PTFE		
	G	All			PTFE	PVDF		
Polymer Applications	D & G	All		PVC	V.	240.00	316 SS	
Slurry Applications	D & G	All	PVC	316 SS	- Viton	316 SS	310 33	
H2SO4 Applications	D & G	All		PVDF	Aflas	CA 20	CA 20	
316 SS	D G	2		316 SS	316 SS	316 SS	316 SS	
		4	316 SS			PTFE		
		7 & 8 5			Viton	316 SS		
		6 & 7			PTFE	31033		



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
- Smooth running, low friction bronze gears

- 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)

Pump Selection by Capacity and Pressure

Pump Selection Series G Example Liquid Gear			Capacity@60Hz (1725 RPM)		Maximum Ratings Capacity@50Hz (1425 RPM)		Pressure		
Frame	End	Code	GPH	Liter/Hr	GPH	Liter/Hr	PSI	Bar	
		1	0.18	0.7	0.15	0.6	175		
	2	2	0.35	1.3	0.29	1.1		12	
		6	0.48	1.8	0.40	1.5			
		3	0.7	2.6	0.58	2.2			
1		1	3.0	11.4	2.5	9.5			Ratings based on 1/4 HP (.25 kW)
	4	2	6.0	23	5.0	19	150	10	
	4	6	8.3	31.4	6.9	26	100	10	
D		3	12	45	10	38			
"		1	12.5	47	10.4	39	- 100	7	ᇣ
	7	2	25	95	21	79			Ratings bas
	'	6	34	129	28	107			
		3	50	189	42	158			
		1	28	106	23	88	- - 75	5	
	8	2	57	215	47	180			
	U	6	79	299	66	249			
		3	115	435	96	363			
	5	1	26	98.4	22	82	150	10	
		2	53	200.6	44	167			
		6	75	283.9	62	237			
		3	106	401.2	88	334			
		8	_	_	110	416			
	6	1	37	140.0	31	117	100	7	75 KM
G		2	74	280.1	62	233			Ratings based on 1 HP (.75 kW)
		6	104	393.6	87	328			
		3	147	556.4	122	464			pasec
		8	_	_	154	583			atings
	7	1	75	283.9	62	237	50		
		2	150	567.8	125	473			
		6	213	806.2	177	672		3.5	
		3	300	1135.5	250	946			
		8	_	_	312	1181			

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

Series G Product Code

Frame and Liquid	Gear	Motor &/	Liquid	Connections
Fnd .	Ratio	or Mount	Fnd Material	

Frame and Liquid End

D Frame	
SD2	
SD4	
SD7	
SD8	
G Frame	
SG5	
SG6	
SG7	

Gear Ratio Code

- 1 = 43 SPM
- 2 = 86 SPM
- 6 = 120 SPM
- 3 = 173 SPM
- 8 = 180 SPM @ 1425 RPM(SG only)

Motor &/or Mount

- 8 = 1 ph 60 Hz 115/230 VAC 1725 RPM TE
- ${
 m J}~=~3~{
 m ph}~60~{
 m Hz}~230/460~{
 m VAC}~1725~{
 m RPM}~{
 m TE}$
- 9 = 1 ph 50 Hz 115/230 VAC 1425 RPM TE
- $L \,=\, 3 \; ph \; 50 \; Hz \; 220/380 \; VAC \; 1425 \; RPM \; TE$
- X = Nema 56C Mount

Less Motor

P = DC Motor with Variable Speed Drive

Liquid End Material

- 1 = White Polypropylene
- 2 = PVDF
- 7 = 316 ss
- 8 = PVC
- P = Polymer Service
- L = Slurry Applications
- $N = H_2SO_4$ Applications

Connections

- P = NPT
- T = Tubing
- B = Bleed Valve NPT
- C = Bleed Valve Tubing





The LMI Series "G" 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 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.



201 lvyland Road • lvyland, PA 18974-0577 • ph: 215.293.0401 • fax: 800.327.7563 www.lmipumps.com • www.miltonroy.com • email: info@miltonroy.com

©2003 Milton Roy USA Lit# 1968.A 2/03