



Lobee Pump & Machinery Co. Industrial Pumps and Accessories Since 1899...Noted for Highest Quality Pumps and Equipment

Simple in Design, Long in Life, Very Repairable

Family of Quality Products



STAINLESS STEEL GEAR PU JMPS

Our newly expanded line of Stainless Steel Gear Pumps will now cover the broadest range of applications ever. We offer as standard 316 Stainless Steel construction materials with Alloy-20 (Carpenter 20 ™) and C276 (Hastelloy ™) optionally available. A variety of gear, bearing sleeve and shaft seal materials are available as standard to fit applications where high heat, corrosive fluids and higher pressure demand. Flow rates range from 1 to 18 GPM and pressures to 150 PSI.

Markets

Adhesives, Coatings - solvents, plasticizers Chemical Processing - acids, corrosives Construction & Mining - knockout fluids Energy/Biofuel - ethanol, deionized water, urea Food/Beverage- additives, oils OEM/Manufacturing - resins, coatings, soaps Pharmaceutical - mixing chemicals, alcohols Pulp/Paper - binders, distillates

Applications High Temperature Acids Corrosives Harsh Chemicals Foods, Beverages Hot Oils Metal Finishing Laboratory Testing

Solvents Polymers Viscous Fertilizers



STANDARD OPERATING AND CONSTRUCTION MATRIX

	Δ	PSI] [Con	struction Mate	erial				
 Cor tinuc		Inter- Max Oper. s mittent Temp.		Body/Shaft	Body/Shaft Drive Gear		Gear Housing Design	Journal Bearings	Shaft Seal	
LOE	75	100	450° F	316 SS	316 SS	Glass Filled PTFE	Glass Laminated PTFE Liner and Washers for Drive Gear	Caged Rulon LR 'T' Strip	PTFE Braided Packing	
				Alloy 20	Alloy 20					

	LOX	75	100	450° F	316 SS	316 SS	Glass Filled PTFE	Glass Laminated PTFE Liner and Washers for Drive Gear	Caged Rulon LR 'T' Strip	Mechanical Seal
					Alloy 20	Alloy 20				

	MOE	125	150	300° F	316 SS	WM88 High-Nickel	PEEK HPV	Close Tolerance Machined	Solid Sleeve PEEK HPV	PTFE Braided Packing
							PEEK 1000		Solid Sleeve PEEK 1000	

	мох	125	150	300° F	316 SS	WM88 High-Nickel	PEEK HPV	Close Tolerance Machined	Solid Sleeve PEEK HPV	Mechanical Seal
							PEEK 1000		Solid Sleeve PEEK 1000	

STAINLESS STEEL GEAR PUMPS

Completely 'Made in the USA', not just "designed, assembled and tested."

Common Features and Benefits

- 1) All 316 Stainless Steel Construction Standard
- 2) 6 Flow Range Sizes- 1/4" Rear Port, 1/4", 3/8", 1/2", 3/4", 1" NPT Side Ports
- 3) Flows to 18 GPM
- 4) Bi-Directional Shaft Rotation
- 5) 200-1800 RPM Standard Operating Range, 0-600 RPM for High Viscosity Fluids
- 6) Viscosity to 15,000 Centipoises'
- 7) Operating Temperatures to 450 F+
- 8) Continuous Working Pressure to 125 PSI, Intermittent to 150 PSI
- 9) ¹/₂" Shaft Diameter with 1/32" Flat
- 10) 2 or 4 Bolt Foot Mount



Model 1MOX 1/4" NPT Rear Ported



Mode	Is LOE/LC	X/MOE/M	OX NI	NPSHR @ Maximum Speed							
Size	1	2	3	4	6	8					
RPM	1750	1750	1750	1750	1750	1750					
GPM	2.3	4.7	7.3	9.7	14.6	18.8					
NPSHR	2	4	4.9	4.9	4	4					



1-2LOE, X and MOE, X Shaft Speed Operating Range

SHAFT	PUMP	NPT	GPM/100	0 P	SI	20	PSI	40	PSI	60	PSI	80	PSI	100	PSI	125	PSI *	150 P	'SI *
SPEED	MODEL	Ports	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
	1MOE,X-S	1/4"	0.134	2.35	1/4	2.3	1/4	2.2	1/4	2.1	1/4	2	1/3	1.9	1/2	1.8	1/2	1.7	1/2
	2(XXX)-S	1/4"	0.268	4.7	1/3	4.6	1/3	4.4	1/3	4.2	1/2	4	1/2	3.8	3/4	3.7	3/4	3.6	3/4
1750	3(XXX)-S	3/8"	0.418	7.3	1/3	7	1/3	6.7	1/3	6.2	1/2	6	1/2	5.5	3/4	5.4	1	5.3	1
RPM	4(XXX)-S	1/2"	0.556	9.7	1/2	9.4	1/2	9	3/4	8.6	1	8.2	1	7.9	1 1/2	7.8	1 1/2	7.7	1 1/2
	6(XXX)-S	3/4"	0.836	14.6	1/2	14	1/2	13.5	1	13	1	12.4	1 1/2	11.8	1 1/2	11.6	2	11.4	2
	8(XXX)-S	1"	1.07	18.8	1/2	17.7	3/4	17	1	16.6	1 1/2	15.8	2	15	2	14.8	3	14.5	3
	1MOE,X-S	1/4"	0.134	1.6	1/4	1.45	1/4	1.35	1/4	1.25	1/4	1.15	1/4	1.05	1/3	0.9	1/3	0.8	1/3
	2(XXX)-S	1/4"	0.268	3.1	1/4	2.9	1/4	2.7	1/4	2.5	1/3	2.3	1/3	2.1	1/2	1.9	1/2	1.7	1/2
1150	3(XXX)-S	3/8"	0.418	4.8	1/4	4.6	1/4	4.4	1/3	4.1	1/3	4	1/3	3.6	1/2	3.2	3/4	2.8	3/4
RPM	4(XXX)-S	1/2"	0.556	6.6	1/4	6.2	1/4	5.9	1/3	5.6	1/2	5.4	3/4	5.2	3/4	4.9	3/4	4.6	1
	6(XXX)-S	3/4"	0.836	9.6	1/3	9.2	1/3	8.8	1/2	8.5	1/2	8.2	1	7.7	1	7.4	1 1/2	7.1	1 1/2
	8(XXX)-S	1"	1.07	12.4	1/3	11.6	1/2	11.1	3/4	10.9	1	10.3	1	9.8	1 1/2	9.4	1 1/2	9	2
	1MOE,X-S	1/4"	0.134	0.76	1/4	0.6	1/4	0.45	1/4	0.35	1/4	0.3	1/4	0.25	1/4	0.18	1/4	0.1	1/3
	2(XXX)-S	1/4"	0.268	1.54	1/4	1.2	1/4	0.9	1/4	0.7	1/4	0.6	1/4	0.5	1/4	0.4	1/4	0.3	1/3
575	3(XXX)-S	3/8"	0.418	2.2	1/4	2.3	1/4	2.2	1/4	2.1	1/4	2	1/4	1.8	1/4	1.6	1/3	1.3	1/3
RPM	4(XXX)-S	1/2"	0.556	3.2	1/4	3	1/4	2.9	1/3	2.8	1/3	2.7	1/3	2.6	1/2	2.4	1/2	2	1/2
	6(XXX)-S	3/4"	0.836	4.8	1/4	4.6	1/4	4.4	1/3	4.2	1/3	4	1/2	3.8	1/2	3.5	3/4	3.1	3/4
	8(XXX)-S	1"	1.07	6.2	1/4	5.8	1/4	5.5	1/2	5.3	1/2	5.1	1/2	4.9	3/4	4.5	3/4	4.1	1

(XXX) covers Models LOE, LOX, MOE and MOX. Size '1' available in MOE/MOX configurations only.

* Pressures above 100 PSI are recommended for Models MOE and MOX only. For continuous pressures above recommended please contact factory. Wear factor versus pressure is strongly influenced by type of material being pumped. E.G., Water causes greater wear on pump internals then does oils.

Horsepower (HP) ratings are conservative estimates and will vary based on viscosity, temperature and other factors. For power usage concerns please call factory for specific application recommendations.

Performance tested with 70° F Water. The viscosity and specific gravity of other fluids will vary results. Positive displacement gear pumps have excellent suction lift characteristics and are self priming when wetted. For vertical suction lift should pump run dry between uses, re-'wet' pump or use foot valve. Pump flow can be varied by varying input speed with pulleys, a gear reducer, or electric motor inverter (VFD). Never side load pump drive shaft, use a jackshaft/bearing arrangement.

STAINLESS STEEL GEAR PUMPS

WETTED MATERIALS

PUMP INTERNALS

MECHANICAL

LOE	316 Stainless Steel									
	Composite Glass/PTFE									
	Rulon™ Glass Filled PTFE									
	Glass Laminated PTFE Gasket									
<u>LOX</u>	316 Stainless Steel									
	Composite Glass/PTFE									
	Rulon™ Glass Filled PTFE									
	Glass Laminated PTFE Gasket									
MOE	316 Stainless Steel									
	WM88 Stainless Steel									
	Ketron™ PEEK HPV, 1000									
	Glass Laminated PTFE Gasket									
MOX	316 Stainless Steel									
	WM88 Stainless Steel									
	Ketron™ PEEK HPV, 1000									
	Glass Laminated PTFE Gasket									
Optional:	316L									
	Carpenter™ 20									
	Hastelloy™ C									
SHAFT SE	ALS									
PACKING	Braided PTFE									

316 Stainless Steel Composite Glass/PTFE

304 Stainless Steel Carpenter™ 20 Hastelloy™ C Monel™ Aflas™

Ethylene Propylene Chloroprene

Carbon Ceramic Viton™ Rulon™

Optional: Tungsten Carbide Silicon Carbide Titanium

Model MOE/MOX Features:



Caged Rulon™ journal bearings for high temperature and durability.



PEEK journal bearings for higher pressures and broad spectrum of chemical resistance.



Electric Motor Mounted Pump Units



Direct Mount to XP Motor

Base Mounted

Direct Mount to 1 Ph Motor

8425 State Street, Gasport, NY 14067 * Phone 716.772.2651 * Fax 716.772.2555 * Web www.Lobee.com

STAINLESS STEEL GEAR PUMPS









1<u>11</u>"

3/8" Dia. Mount Holes

Dimens	sions-	Model	LOE,	MOE
MODEL	•	C		

MODEL	Α	В	С	D	E	F	G	Н	J	K	L	M	Ν	0	Р	Q
1***-S	1/4"	2-9/16"	3-7/8"	7-13/32"	5-7/8"	11/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-11/16"
2***-S	1/4"	2-9/16"	3-7/8"	7-23/32"	6-3/16"	21/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-11/16"
3***-S	3/8"	2-9/16"	3-7/8"	7-25/32"	6-3/16"	23/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-11/16"
4***-S	1/2"	2-13/16"	3-7/8"	7-13/16"	5-31/32"	31/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-11/16"
6***-S	3/4"	2-13/16"	3-7/8"	7-27/32"	5-1/2"	1-15/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/`16"	9/16"	1-11/16"
8***-S	1"	3-1/16"	3-7/8"	8-1/2"	5-5/8"	2"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-11/16"



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MODEL	Α	в	Ċ	D	Е	F	G	Н	J	Κ	_	М	Ν	0	Ρ	Q
1***-S	1/4"	2-9/16"	3-7/8"	6-3/4"	5-7/8"	11/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	2-1/8"
2***-S	1/4"	2-9/16"	3-7/8"	6-3/4"	6-3/16"	21/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-13/16""
3***-S	3/8"	2-9/16"	3-7/8"	6-3/4"	6-3/16"	23/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-3/4"
4***-S	1/2"	2-13/16"	3-7/8"	7"	5-31/32"	31/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-3/4"
6***-S	3/4"	2-13/16"	3-7/8"	7-1/2"	5-1/2"	1-15/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-3/4"
8***-S	1"	3-1/16"	3-7/8"	8"	5-5/8"	2"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-3/4"

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