

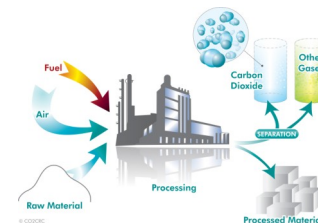


**Lobee Pump & Machinery Co.**  
Industrial Pumps and Accessories

Since 1899...Noted for Highest Quality Pumps and Equipment

Process Pumps for Industry

*Proudly made in the USA*

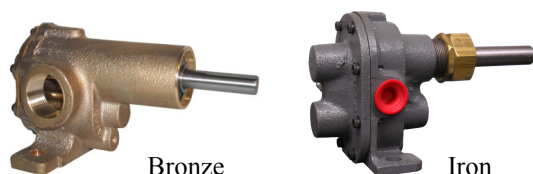


# 2013 PRODUCT CATALOG

Industrial Pumps and Accessories for Stationary and Mobile Applications are available in Bronze, Stainless Steel, Nickel Alloy, and Cast Iron.

## HEAVY-DUTY GEAR PUMPS

A broad range of rotary gear pumps are available in Stainless Steel, Bronze and Cast Iron. Sizes from 1/8" to 2" NPT ported and flows to 90 GPM. Working pressures to 150 PSI continuous, 200 PSI intermittent. Shaft seals include mechanical, lip and packing.



Bronze

Iron



Stainless Steel

## VERTICAL SUMP PUMPS

Floor mounted and cover Suspended models up to 150 GPM, 85' TDH. These are heavy-duty industrial continuous duty closed impeller pumps designed to last. Available in cast iron, stainless steel and bronze 'wetted' construction. Premium Efficient, TEFC, ODP, Washdown, and Explosion-Proof motors available in single or three phase voltage. Control switching includes general purpose, water-tight and explosion-proof.



## LIQUID RING PUMPS

A versatile self-priming liquid ring pump design that excels at pumping combination liquid/vapor/gas and foaming solutions in a high vacuum environment. Vertical suction lift to 28 foot, flows to 80 GPM liquid, total dynamic head to 230 feet.



## DIRECT AND BASE MOUNTED PUMP/MOTOR UNITS

1/3 to 5 HP, Available with ODP, TEFC, Washdown or Explosion - Proof motors. Single or three phase, 1800 or 1200 RPM and variable speed inverter duty a standard option. Flows to 50 GPM, 150 PSI. Other options include mounted VFD, speed reducer, relief valve, special enclosures and materials.



## FLOW RATERS

Our in-line flow indicators are available in 316 Stainless Steel, Brass and PVC. Sight tubes available in Acrylic or Pyrex. Port sizes are 1/2", 3/4" and 1" NPT, flows to 40 GPM





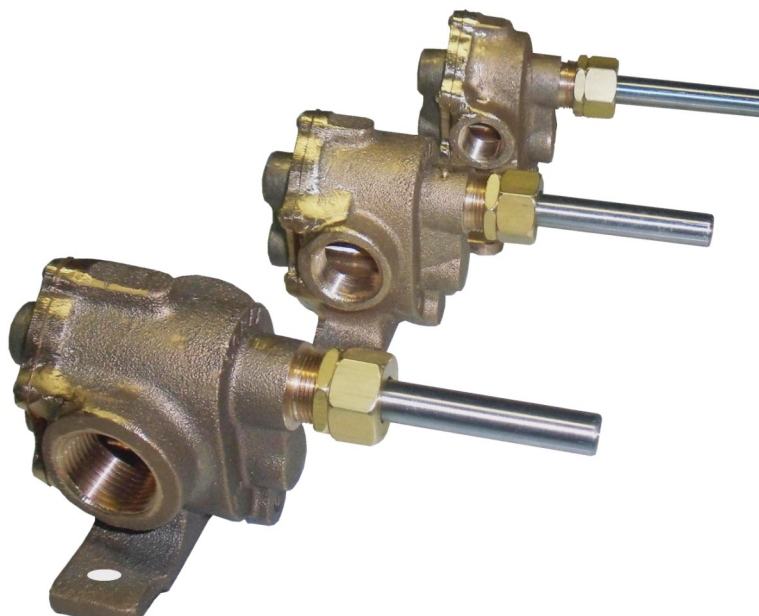
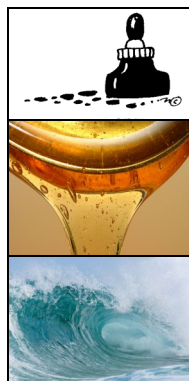
## MODEL LOS

### Markets

Agriculture-fertilizers, pesticides  
Automotive-coolants, lubricants  
Book Mfg-adhesives, glue  
Construction & Mining-lubricants, fuels, coolants  
Filtration System Pumps-portable, stationary  
Food & Beverage-syrups, additives, oils  
Furniture-adhesives, glue  
Institutional (Hospitals, Schools)-Boiler feed pump  
Machine Tool-coolant & lubricant circulation  
Marine-bilge pump, fresh water  
Mills-coolants, lubricants  
Municipalities-liquids transfer  
Power Plants & Utilities-coolants, lubricants, fuels  
Printing-inks, solvents  
Processing Plants-speed variable material transfer  
Refineries-liquid transfer

### Applications

Adhesives, Glue  
Alcohols  
Ethylene Glycol, Anti-Freeze  
Fuels-Petrol, Diesel, Kerosene  
Glycerin's  
Heating Oils  
Inks  
Molasses  
Salt Brine  
Sea Water  
Solvents  
Syrups  
Vegetable/Cooking Oils  
Vinegars  
Water-Tap, Grey, Soapy  
Weed Killers



### Standard Features and Benefits

- ✓ All Bronze Federalloy™
- ✓ 3 Sizes - 1/2", 3/4", 1" NPT Port Sizes
- ✓ Acrylic Graphite Packing
- ✓ Flows to 18 GPM
- ✓ Bi-Directional Rotation
- ✓ Temperature to 350 F
- ✓ Pressure to 100 PSI
- ✓ 1/2" Shaft Diameter, 416 SS

### Performance and Sizing

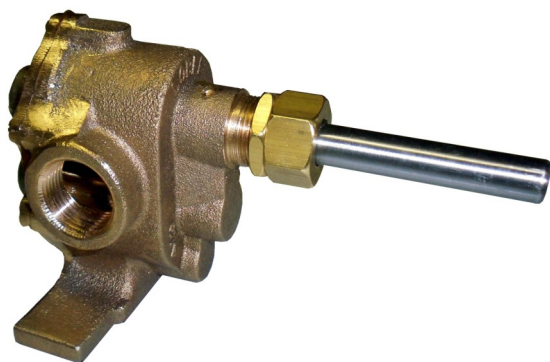
SHAFT SPEED	PUMP MODEL	NPT Ports	GPM/100 RPM	0 PSI			20 PSI		40 PSI		60 PSI		80 PSI		100 PSI	
				~ CIR	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1750 RPM	4LOS	1/2"	0.556	1.28	9.7	1/2	9.4	1/2	9	3/4	8.6	1	8.2	1	7.9	1 1/2
	6LOS	3/4"	0.836	1.93	14.6	1/2	14	1/2	13.5	1	13	1	12.4	1 1/2	11.8	1 1/2
	8LOS	1"	1.070	2.47	18.8	1/2	17.7	3/4	17	1	16.6	1 1/2	15.8	2	15	2
1150 RPM	4LOS	1/2"	0.556	1.28	6.6	1/4	6.2	1/4	5.9	1/3	5.6	1/2	5.4	3/4	5.2	3/4
	6LOS	3/4"	0.836	1.93	9.6	1/3	9.2	1/3	8.8	1/2	8.5	1/2	8.2	1	7.7	1
	8LOS	1"	1.070	2.47	12.4	1/3	11.6	1/2	11.1	3/4	10.9	1	10.3	1	9.8	1 1/2
575 RPM	4LOS	1/2"	0.556	1.28	3.2	1/4	3	1/4	2.9	1/3	2.8	1/3	2.7	1/3	2.6	1/2
	6LOS	3/4"	0.836	1.93	4.8	1/4	4.6	1/4	4.4	1/3	4.2	1/3	4	1/2	3.8	1/2
	8LOS	1"	1.07	2.47	6.2	1/4	5.8	1/4	5.5	1/3	5.3	1/2	5.1	1/2	4.9	3/4

\* Consult factory for operating temperatures and pressures that may exceed published limits

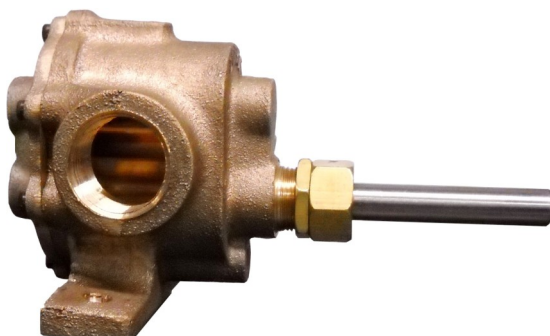


# BRONZE GEAR PUMPS

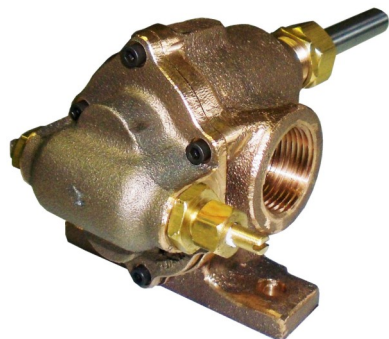
## MODEL LOS



1" NPT with Standard Graphite Packing

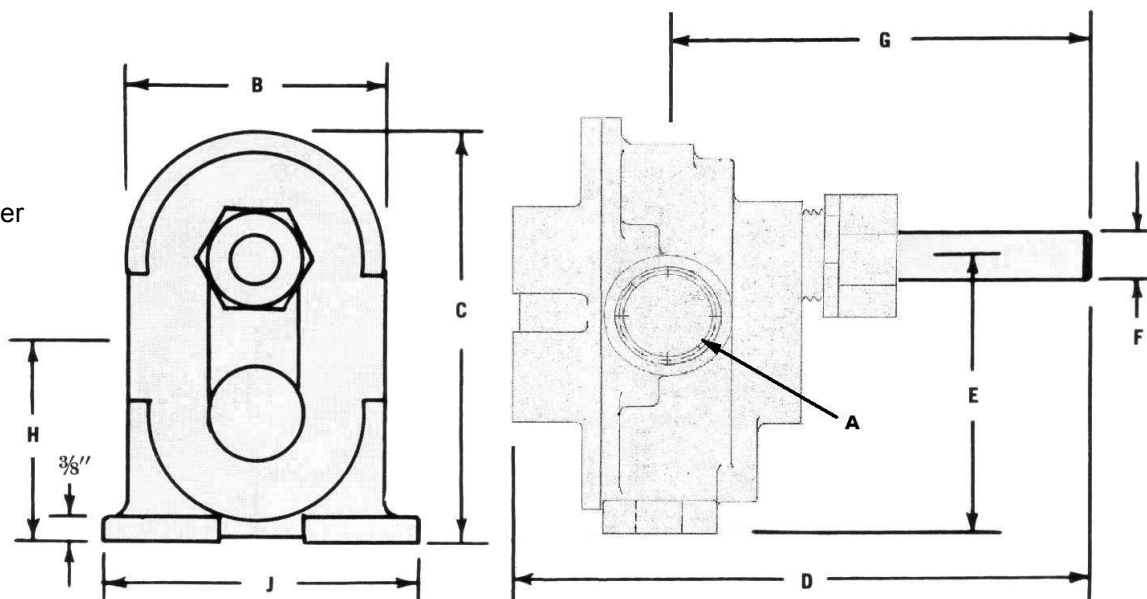
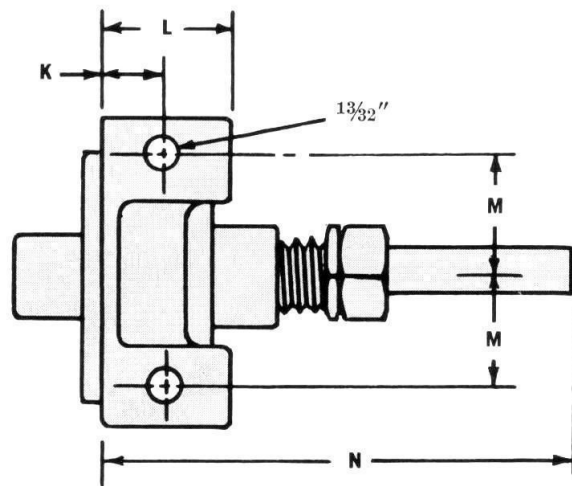


1" NPT 8LOS Bottom Shaft



With 0-100 PSI Relief Valve Cover

The **Lobee Model LOS Bronze Gear Pump** is recommended for forced feed oil lubrication, machine tool lubrication/cooling, salt water and many other industrial applications where non-abrasive liquids are transferred in and around plant and equipment. The pump shell and cover are bored to an extremely high degree of accuracy. The flange of the shell and surface of the cover are machine tooled to insure perfect alignment. Available with top or bottom single shaft or double shaft, integral relief valve, lip seal or standard carbon graphite packing. The Lobee LOS Bronze Gear pump is available in flows up to 17 gpm and continuous duty pressure to 100 psi. It will outperform the competition while delivering years of dependable service.



### Dimensional Specifications

MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N
4LOS	1/2"	2-13/16"	3-7/8"	6-1/4"	2-21/32"	1/2"	4-29/32"	2-1/16"	4"	17/32"	1-1/32"	1-1/2"	5-1/2"
6LOS	3/4"	2-3/4"	3-7/8"	6-3/4"	2-21/32"	1/2"	5-1/4"	2-1/16"	4"	17/32"	1-1/32"	1-1/2"	6"
8LOS	1"	2-3/4"	3-7/8"	7-1/4"	2-21/32"	1/2"	5-7/16"	2-1/16"	4"	3/4"	1-5/16"	1-1/2"	6-1/2"





# BRONZE GEAR PUMPS

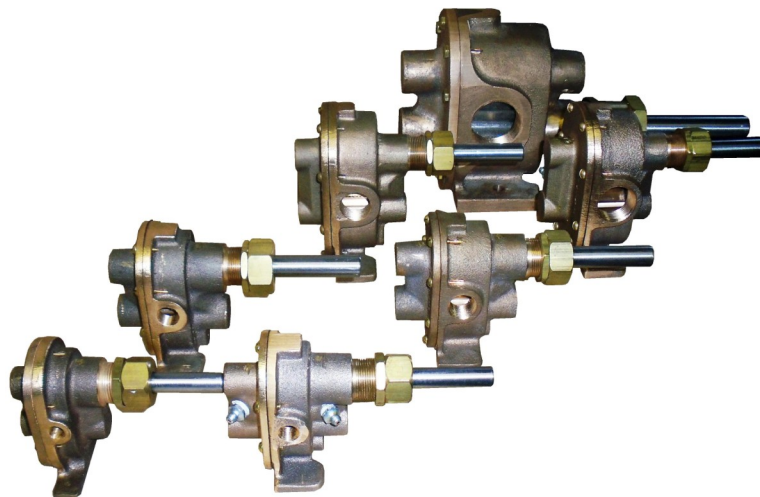
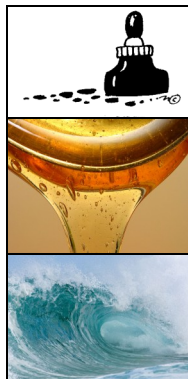
## MODEL LOL - HEAVY DUTY

### Markets

Agriculture-fertilizers, pesticides  
Construction & Mining-lubricants, fuels, coolants  
Food & Beverage-syrups, additives  
Machine Tool-coolant & lubricant circulation  
Marine-bilge pump, fresh water  
Mills-coolants, lubricants  
Municipalities-liquids transfer  
Power Plants & Utilities-coolants, lubricants, fuels  
Printing-inks, solvents  
Refineries-liquid transfer  
Filtration System Pumps

### Applications

Adhesives, Glue  
Alcohols  
Ethylene Glycol, Anti-Freeze  
Fuels-Petrol, Diesel, Kerosene  
Glycerin's  
Heating Oils  
Inks  
Molasses  
Salt Brine  
Sea Water  
Solvents  
Syrups  
Vegetable/Cooking Oils  
Vinegars  
Water-Tap, Grey, Soapy  
Weed Killers



### Standard Features and Benefits

- 1) Federalloy™ Bronze Body and Gears
- 2) 416 Stainless Steel Drive and Idler Shaft
- 3) High Durability for Severe Service
- 4) Std Carbon Graphite Packing
- 5) Mechanical Shaft Seal is Standard Option
- 6) 0-1800 RPM Range of Operation, Flows to 90 GPM
- 7) Bi-Directional Shaft Rotation
- 8) Operating Temperatures to 400 F
- 9) Continuous Working Pressure to 150 PSI
- 10) 1/2", 5/8" & 1" Shaft Diameters

### Performance and Sizing

SHAFT SPEED	PUMP MODEL	NPT Ports	GPM/100 RPM		0 PSI		20 PSI		40 PSI		60 PSI		80 PSI		100 PSI	
				~ CIR	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1750 RPM	1LOL	1/8"	0.13	0.30	2.3	1/4	2.1	1/4	1.9	1/2	1.7	1/4	1.6	1/3	1.4	1/3
	2LOL	1/4"	0.268	0.62	4.7	1/4	4.6	1/4	4.4	1/3	4.2	1/2	4	1/2	3.8	3/4
	3LOL	3/8"	0.451	1.04	7.9	1/2	7.6	1/2	7.4	3/4	7.2	1	7	1	6.8	1 1/2
	4LOL	1/2"	0.622	1.44	10.9	1/2	10.5	3/4	10.2	1	9.7	1	9.5	1 1/2	9	2
	6LOL	3/4"	1.075	2.48	18.8	1	18	1 1/2	16.5	2	15.5	2	14.5	2 1/2	13	3
	8LOL	1"	1.266	2.92	22.1	1 1/2	21	2	20	2	19	3	18	3	16.5	5
1150 RPM	1LOL	1/8"	0.13	0.30	1.5	1/4	1.3	1/4	1.1	1/4	0.9	1/4	0.7	1/4	0.5	1/4
	2LOL	1/4"	0.268	0.62	3.1	1/4	2.9	1/4	2.7	1/4	2.5	1/4	2.3	1/3	2.1	1/2
	3LOL	3/8"	0.451	1.04	5.2	1/4	4.8	1/4	4.5	1/3	4.1	1/2	3.8	3/4	3.5	1
	4LOL	1/2"	0.622	1.44	7.2	1/4	6.8	1/3	6.4	1/2	6	3/4	5.6	1	5.2	1
	6LOL	3/4"	1.075	2.48	12.3	1/3	11.8	1/2	11.3	3/4	10.8	1	10.3	1 1/2	9.8	2
	8LOL	1"	1.266	2.92	14.5	1/2	14	3/4	13.5	1	13		12.5	2	12	3
575 RPM	1LOL	1/8"	0.13	0.30	0.75	1/4	0.7	1/4	0.6	1/4	0.5	1/4	0.4	1/4	0.3	1/4
	2LOL	1/4"	0.268	0.62	1.54	1/4	1.2	1/4	0.9	1/4	0.7	1/4	0.6	1/4	0.5	1/4
	3LOL	3/8"	0.452	1.04	2.6	1/4	1.8	1/4	1.2	1/4	0.9	1/3	0.8	1/3	0.7	1/2
	4LOL	1/2"	0.622	1.44	3.6	1/4	3.2	1/4	2.8	1/3	2.4	1/3	2	1/2	1.6	1/2
	6LOL	3/4"	1.075	2.48	6.2	1/4	5.9	1/3	5.6	1/2	5.3	3/4	5.1	1	4.9	1
	8LOL	1"	1.266	2.92	7.4	1/3	7	1/2	6.6	3/4	6.2	1	5.8	1	5.4	1
	10LOL	1-1/4"	3.44	7.95	19.8	1/2	17.9	3/4	15.8	1	13.8	1 1/2	11	2	9.1	3
	12LOL	1-1/2"	5.01	11.57	28.8	1	25.7	2	23	3	20	3	17.2	5	14	5

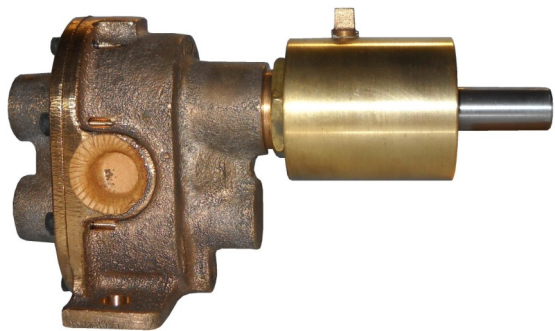
\* Consult factory for operating temperatures and pressures that may exceed published limits



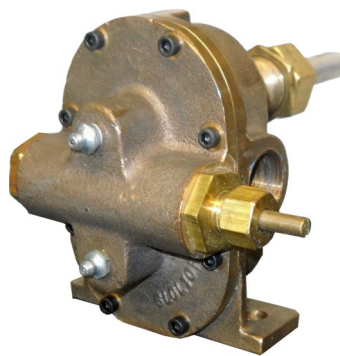
## BRONZE GEAR PUMPS

### MODEL LOL - HEAVY DUTY

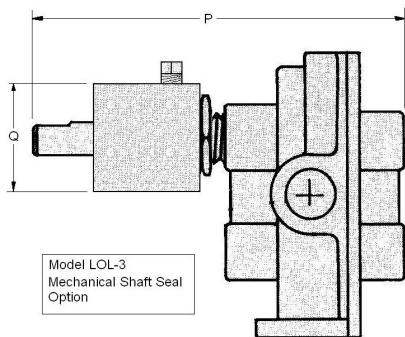
The **Lobee Model LOL Bronze Gear Pump** is designed for extra heavy duty performance in forced feed lubrication/cooling, fuel/solvent transfer, salt water, ink, glue pumping as well as many other industrial applications where non-abrasive liquids are transferred in and around plant and equipment. The Lobee Model LOL is designed for severe service where standard pumps will not do the job. Available with top or bottom single shaft or double shaft, integral relief valve, lip or mechanical seal and standard carbon graphite packing. Made completely of bronze, and to the most exacting standards of workmanship, the Model LOL pump is larger and heavier than standard pumps of equal intake diameters and has greater capacities...flows to 90 gpm and continuous duty pressures to 150 psi.



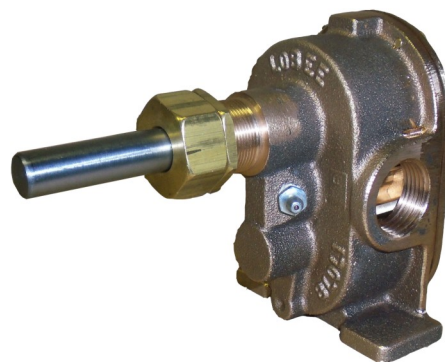
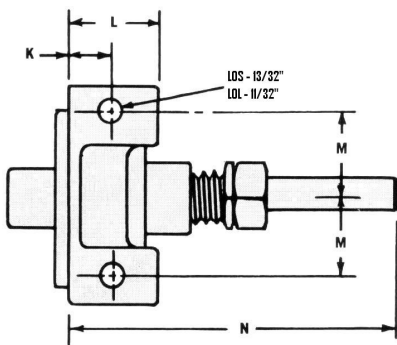
6LOL with Mechanical Seal



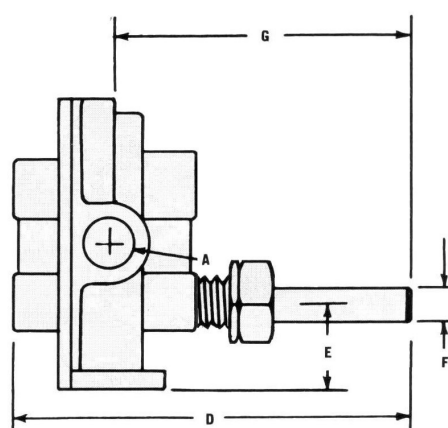
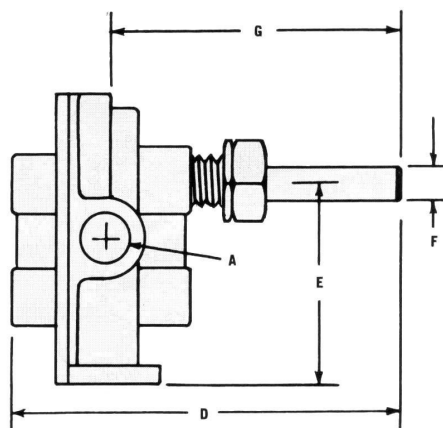
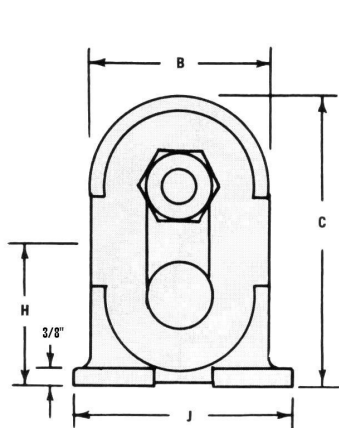
6LOL with Relief Valve Cover



Model LOL-3  
Mechanical Shaft Seal  
Option



3/4" NPT with Graphite Packing



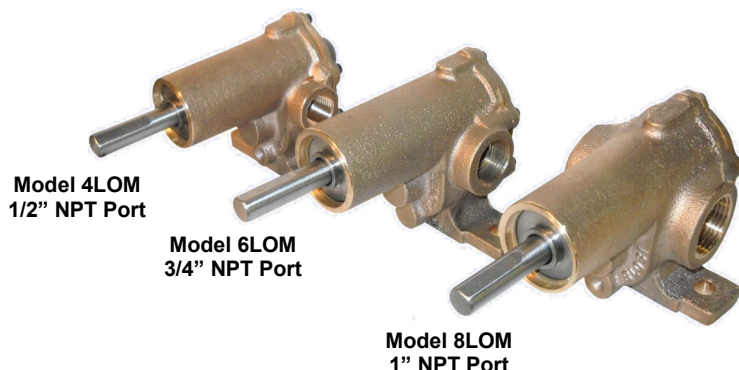
#### Dimensional Specifications

MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N
1LOL	1/8"	2-3/16"	3-9/16"	5"	2-7/16"	1/2"	3-29/32"	1-27/32"	3"	11/32"	21/32"	1-1/8"	4-1/8"
2LOL	1/4"	2-3/8"	3-5/8"	6-7/16"	2-13/32"	1/2"	4-15/16"	1-3/4"	2-7/8"	3/4"	1-1/4"	1-1/8"	5-3/8"
3LOL	3/8"	2-5/8"	4"	7"	2-11/16"	5/8"	5-3/8"	1-15/16"	3-1/2"	5/8"	1-15/16"	1-3/8"	5-7/8"
4LOL	1/2"	2-5/8"	4"	7-3/8"	2-11/16"	5/8"	5-5/8"	1-15/16"	3-1/2"	5/8"	1-15/16"	1-3/8"	6-1/4"
6LOL	3/4"	3-3/8"	5-5/16"	7-3/8"	3-5/8"	5/8"	5-1/2"	2-5/8"	4-1/8"	3/4"	1-3/8"	1-1/2"	6-1/4"
8LOL	1"	3-3/8"	5-5/16"	7-5/8"	3-5/8"	5/8"	5-5/8"	2-5/8"	4-1/8"	3/4"	1-1/2"	1-1/2"	6-1/2"
10LOL	1-1/4"	4-5/8"	6-3/4"	12-13/16"	4-7/16"	1"	9-3/4"	3-5/16"	5-1/4"	1-1/4"	2-1/4"	1-7/8"	10-5/16"
12LOL	1-1/2"	4-5/8"	6-3/4"	13-7/8"	4-7/16"	1"	10-5/8"	3-5/16"	5-1/4"	1-5/16"	3-1/4"	2-1/16"	12"



## New Model LOM Gear Pump

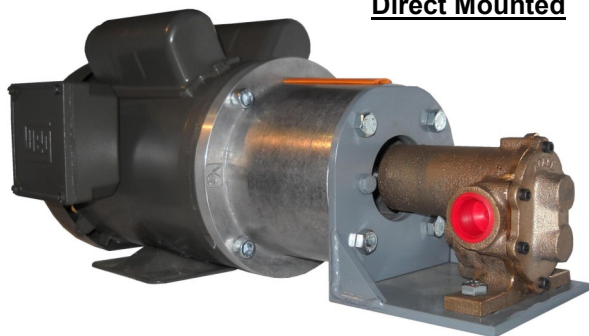
Our newest Bronze Gear Pump incorporates state of the art technology into the 'tried and true' performance of the industry standard all bronze Model LOS positive displacement gear pump. The new Model LOM includes environmentally friendly Federalloy™ cast bronze, an integral mechanical shaft seal, sleeve bearings and a keyed drive gear.



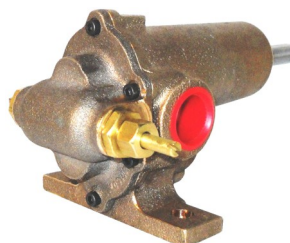
### Standard Features and Benefits

- ✓ Keyed Drive Gear -Operating Pressure to 150 PSI, Higher Continuous Torque for High Viscosity Materials
- ✓ Ertalyte™ Sleeve Bearings -Long Life, Broad Material Compatibility, FDA Compliant
- ✓ Federalloy™ Bronze Cast Body and Cover is Lead -Free and meets NSF Regulations for Leaching Copper and Bismuth
- ✓ 416 Stainless Steel Drive, Idler Shaft and Seal Retainer
- ✓ John Crane™ Type 2106 Viton™ Mechanical Seal -No Leak Operation
- ✓ Plated Steel Socket Head Cover Screws -No Stretching for Higher Pressure Applications
- ✓ 200-1800 RPM Operating Range for Accurate Control of Pumped Material

### Direct Mounted



### Relief Valve Option



### Application and Operation

- ✓ 3 Sizes- 1/2", 3/4" and 1" NPT Ports
- ✓ Flows to 18 GPM
- ✓ Bi-Directional Operation
- ✓ Temperature to 350 F
- ✓ 1/2" Shaft Diameter
- ✓ Two Hole Base Mount

### Options

- ✓ 25-150 PSI Adjustable Relief Valve
- ✓ Rulon™ 641 Sleeve Bearings for Temperatures above 180 F
- ✓ Base and Direct Mounted Pump Systems

### Uses

Adhesives, Glue  
Alcohols  
Ethylene Glycol, Anti-Freeze  
Fuels-Petrol, Diesel, Kerosene  
Glycerines  
Heating Oils  
Inks  
Molasses  
Salt Brine  
Sea Water  
Solvents  
Syrups  
Vegetable/Cooking Oils  
Vinegars  
Water-Tap, Grey, Soapy  
Weed Killers

### Markets

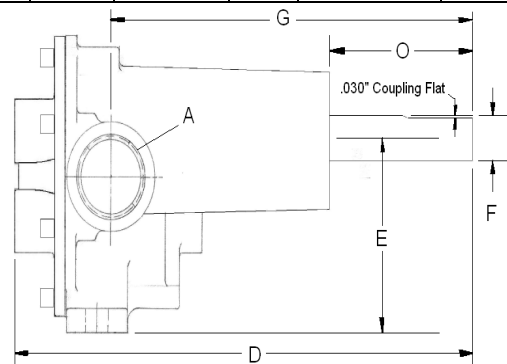
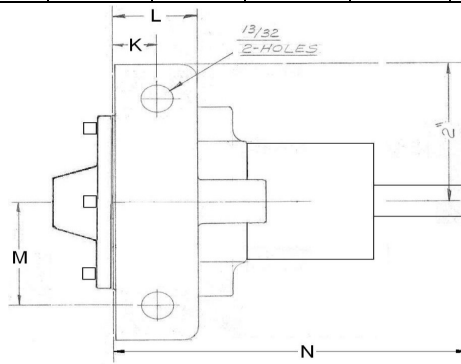
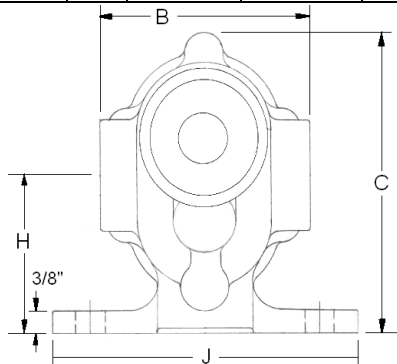
Agriculture-fertilizers, pesticides  
Automotive-coolants, lubricants  
Book Mfg-adhesives, glue  
Construction & Mining-lubricants, fuels, coolants  
Filtration System Pumps-portable, stationary  
Food & Beverage-syrups, additives, oils  
Furniture-adhesives, glue  
Institutional (Hospitals, Schools)-Boiler feed pump  
Machine Tool-coolant & lubricant circulation  
Marine-bilge pump, fresh water  
Mills-coolants, lubricants  
Municipalities-liquids transfer  
Power Plants & Utilities-coolants, lubricants, fuels  
Printing-inks, solvents  
Processing Plants-speed variable material transfer  
Refineries-liquid transfer



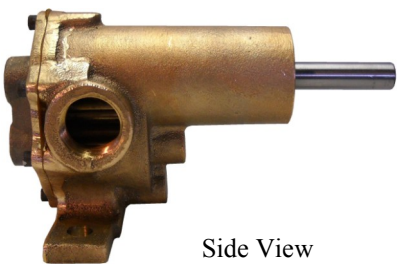
## LOM Performance and Sizing Data

### Dimensions

MODEL	Port	Body Width	Body Height	Overall Length	Mount to Shaft CL	Shaft Dia	Port CL to Shaft End	Mount to Port CL	Base Mount Width	Mount Hole Position	Base Mount Depth	Foot Mount Holes	Base Mount Rear to Shaft End	Shaft Extension
4LOM	1/2"	2-7/8"	4-1/16"	6-5/16"	2-21/32"	1/2"	4-29/32"	2-1/16"	4-1/8"	17/32"	1-1/32"	1-1/2"	5-1/2"	1-7/8"
6LOM	3/4"	2-7/8"	4-1/16"	6-3/4"	2-21/32"	1/2"	5-1/4"	2-1/16"	4-1/8"	17/32"	1-1/32"	1-1/2"	6"	1-7/8"
8LOM	1"	3"	4-1/16"	7-1/4"	2-21/32"	1/2"	5-7/16"	2-1/16"	4-1/8"	3/4"	1-5/16"	1-1/2"	6-1/4"	1-7/8"



Performance tested with 70 F Water. The viscosity and specific gravity of other fluids will vary results. Please contact factory for applications with estimated pressure above those listed. Our positive displacement gear pumps have excellent suction characteristics and are self priming when wetted, with up to 20' lift dependent on vapor point of volatile liquids. 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.

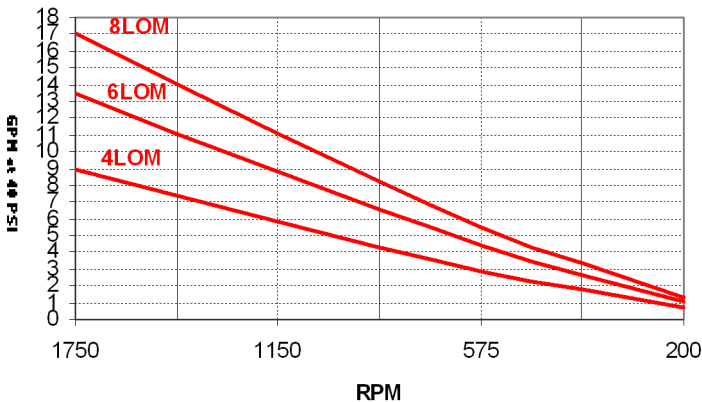


Side View

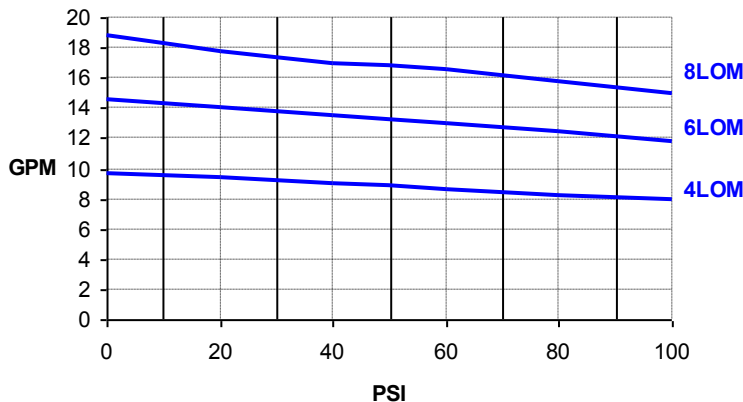


Front View

LOM RPM Operating Range



LOM Pump Flow Curve - 1750 RPM



SHAFT SPEED	PUMP MODEL	NPT Ports	GPM/100 RPM	~ CIR	0 PSI		20 PSI		40 PSI		60 PSI		80 PSI		100 PSI	
					GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1750 RPM	4LOM	1/2"	0.556	1.28	9.7	1/2	9.4	1/2	9	3/4	8.6	1	8.2	1	7.9	1 1/2
	6LOM	3/4"	0.836	1.93	14.6	1/2	14	1/2	13.5	1	13	1	12.4	1 1/2	11.8	1 1/2
	8LOM	1"	1.070	2.47	18.8	1/2	17.7	3/4	17	1	16.6	1 1/2	15.8	2	15	2
1150 RPM	4LOM	1/2"	0.556	1.28	6.6	1/4	6.2	1/4	5.9	1/3	5.6	1/2	5.4	3/4	5.2	3/4
	6LOM	3/4"	0.836	1.93	9.6	1/3	9.2	1/3	8.8	1/2	8.5	1/2	8.2	1	7.7	1
	8LOM	1"	1.070	2.47	12.4	1/3	11.6	1/2	11.1	3/4	10.9	1	10.3	1	9.8	1 1/2
575 RPM	4LOM	1/2"	0.556	1.28	3.2	1/4	3	1/4	2.9	1/3	2.8	1/3	2.7	1/3	2.6	1/2
	6LOM	3/4"	0.836	1.93	4.8	1/4	4.6	1/4	4.4	1/3	4.2	1/3	4	1/2	3.8	1/2
	8LOM	1"	1.07	2.47	6.2	1/4	5.8	1/4	5.5	1/3	5.3	1/2	5.1	1/2	4.9	3/4





# CAST IRON GEAR PUMPS

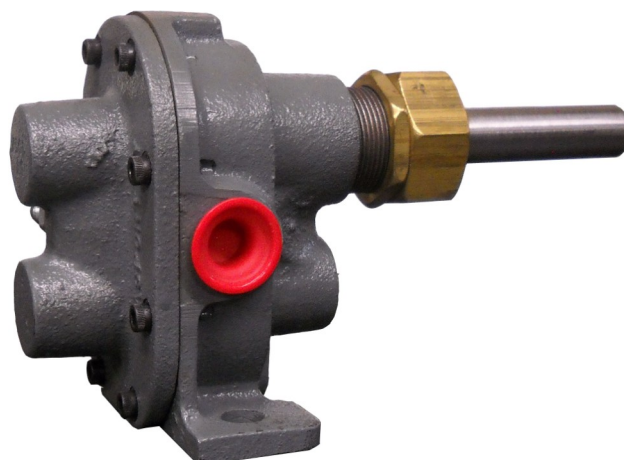
## MODEL LOI

### Markets

Construction & Mining-lubricants, fuel oils  
Power Plants & Utilities-lubricants, fuel oils  
Refineries-liquid transfer  
Industrial Plant Maintenance-liquid transfer and filter

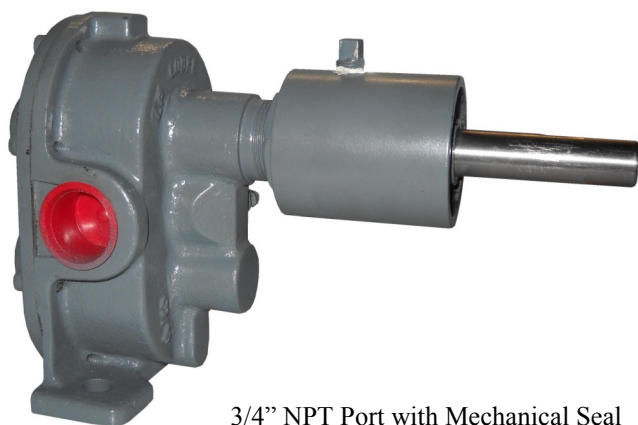
### Uses

Fuels-diesel, kerosene  
Heating, Lubricating and Hydraulic Oils  
Closed or open loop circulation systems  
Mobile or stationary filtration systems  
Machine tool lubrication and cooling  
Low pressure hydraulics



### Features and Benefits

- ✓ Iron Body and Gears
- ✓ 416 Stainless Steel Drive and Idler Shaft
- ✓ Sleeve Bearings - Greased Iron or Optional Bronze
- ✓ High Durability for Severe Service
- ✓ 5/8" Shaft Diameter
- ✓ 4 Sizes -3/8", 1/2", 3/4" and 1" NPT Ports
- ✓ Std Carbon Graphite Packing
- ✓ Mechanical or Lip Shaft Seal Available
- ✓ 0-1800 RPM Range of Operation, Flows to 16 GPM
- ✓ Bi-Directional Shaft Rotation
- ✓ Operating Temperatures to 300° F
- ✓ Continuous Working Pressure to 150 PSI



3/4" NPT Port with Mechanical Seal

### Performance and Sizing

SHAFT SPEED	PUMP MODEL	NPT Ports	GPM/100 RPM		0 PSI		20 PSI		40 PSI		60 PSI		80 PSI		100 PSI	
				~ CIR	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1750 RPM	3LOI	3/8"	0.451	1.04	7.9	1/2	7.6	1/2	7.4	3/4	7.2	1	7	1	6.8	1 1/2
	4LOI	1/2"	0.622	1.44	10.9	1/2	10.5	3/4	10.2	1	9.7	1	9.5	1 1/2	9	2
	6LOI	3/4"	1.075	2.48	18.8	1	18	1 1/2	16.5	2	15.5	2	14.5	2 1/2	13	3
	8LOI	1"	1.266	2.92	22.1	1 1/2	21	2	20	2	19	3	18	3	16.5	5
1150 RPM	3LOI	3/8"	0.451	1.04	5.2	1/4	4.8	1/4	4.5	1/3	4.1	1/2	3.8	3/4	3.5	1
	4LOI	1/2"	0.622	1.44	7.2	1/4	6.8	1/3	6.4	1/2	6	3/4	5.6	1	5.2	1
	6LOI	3/4"	1.075	2.48	12.3	1/3	11.8	1/2	11.3	3/4	10.8	1	10.3	1 1/2	9.8	2
	8LOI	1"	1.266	2.92	14.5	1/2	14	3/4	13.5	1	13		12.5	2	12	3
575 RPM	3LOI	3/8"	0.452	1.04	2.6	1/4	1.8	1/4	1.2	1/4	0.9	1/3	0.8	1/3	0.7	1/2
	4LOI	1/2"	0.622	1.44	3.6	1/4	3.2	1/4	2.8	1/3	2.4	1/3	2	1/2	1.6	1/2
	6LOI	3/4"	1.075	2.48	6.2	1/4	5.9	1/3	5.6	1/2	5.3	3/4	5.1	1	4.9	1
	8LOI	1"	1.266	2.92	7.4	1/3	7	1/2	6.6	3/4	6.2	1	5.8	1	5.4	1

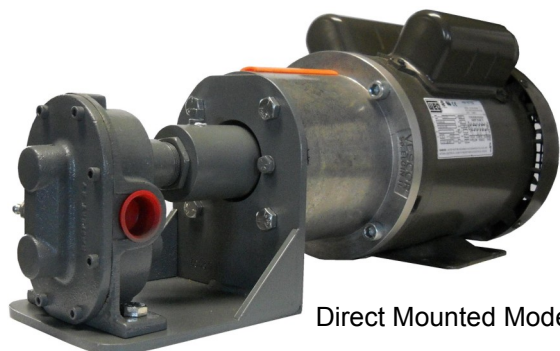




# CAST IRON GEAR PUMPS

## MODEL LOI

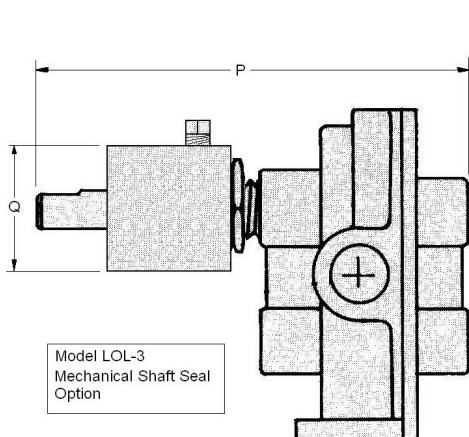
The **Lobee Model LOI Cast Iron Gear Pump** is designed for extra heavy duty performance in forced feed lubrication/cooling, fuel/solvent transfer as well as many other industrial applications where non-abrasive liquids are transferred in and around plant and equipment. The Lobee Model LOI is designed for severe service where standard pumps will not do the job. Available with top or bottom single shaft or double shaft, integral relief valve, lip seal, standard carbon graphite packing or mechanical seal. The Model LOI pump is larger and heavier than standard pumps of equal intake diameters and has greater capacities...flows to 22 gpm and continuous duty pressures to 150 psi.



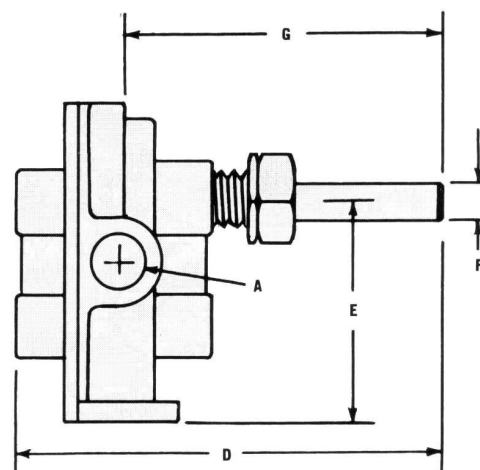
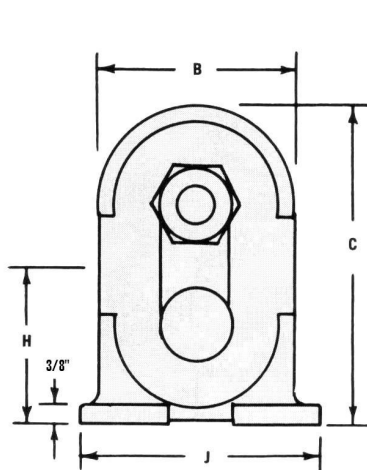
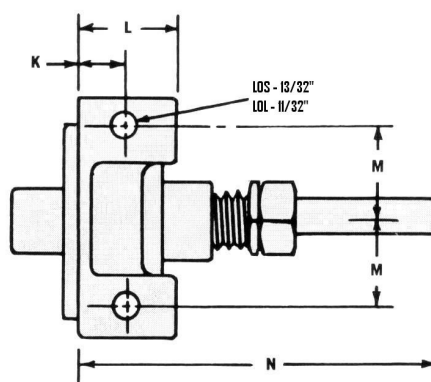
Direct Mounted Model 8LOI



Model 6LOI with Relief Valve Cover



Model LOL-3  
Mechanical Shaft Seal  
Option



### Dimensional Specifications

MODEL	Port	Body Width	Body Height	Overall Length	Mount to Shaft CL	Shaft Dia	Port CL to Shaft End	Mount to Port CL	Base Mount Width	Mount Hole Position	Base Mount Depth	Foot Mount Holes	Base Mount Rear to Shaft End	Overall Length with Mech Seal	Mechanical Seal housing
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
3LOI	3/8"	2-5/8"	4"	7"	2-11/16"	5/8"	5-3/8"	1-15/16"	3-1/2"	5/8"	1-15/16"	1-3/8"	5-7/8"	8-1/16"	2"
4LOI	1/2"	2-5/8"	4"	7-3/8"	2-11/16"	5/8"	5-5/8"	1-15/16"	3-1/2"	5/8"	1-15/16"	1-3/8"	6-1/4"	8-3/4"	2"
6LOI	3/4"	3-3/8"	5-5/16"	7-3/8"	3-5/8"	5/8"	5-1/2"	2-5/8"	4-1/8"	3/4"	1-3/8"	1-1/2"	6-1/4"	8-3/4"	2"
8LOI	1"	3-3/8"	5-5/16"	7-5/8"	3-5/8"	5/8"	5-5/8"	2-5/8"	4-1/8"	3/4"	1-1/2"	1-1/2"	6-1/2"	8-3/4"	2"



# STAINLESS STEEL GEAR PUMPS

## MODELS LOE, LOX, MOE, MOX

Our newly expanded line of **Stainless Steel Gear Pumps** now covers the broadest range of applications ever. We offer as standard 316 Stainless Steel construction materials with Alloy-20(Carpenter 20<sup>™</sup>) and C276 (Hastelloy<sup>™</sup>) 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



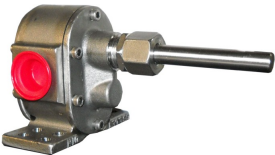
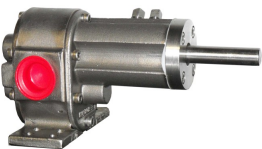
- Adhesives, Coatings - solvents, plasticizers
- Chemical Processing - acids, corrosives
- Construction & Mining - knockout fluids
- Energy/Biofuel - ethanol, deionized water, urea
- Food/Beverage- additives, oils
- OEM/Manufacturing - resins, coatings, soaps
- Pharmaceutical - mixing chemicals, alcohols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

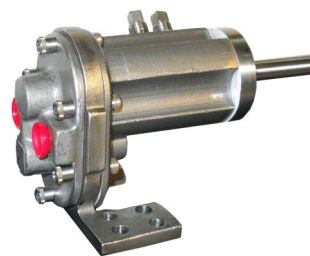
		Δ PSI			Construction Material			Gear Housing Design	Journal Bearings	Shaft Seal
		Con- tinuous	Inter- mittent	Max Oper. Temp.	Body/Shaft	Drive Gear	Idle Gear			
	LOE	75	100	450° F	316 SS	316 SS	Glass Filled PTFE	Glass Laminated PTFE Liner and Washers for Drive Gear	Caged Rulon LR 'T' Strip	PTFE Braided 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	
	MOX	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	



## 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

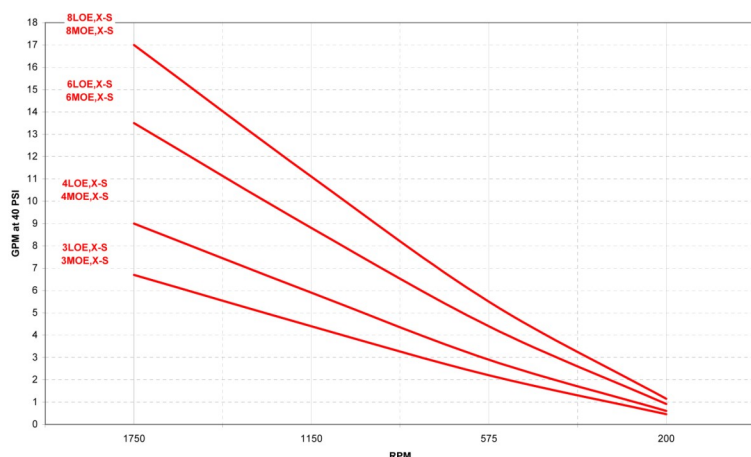
## Model 1MOX 1/4" NPT Rear Ported



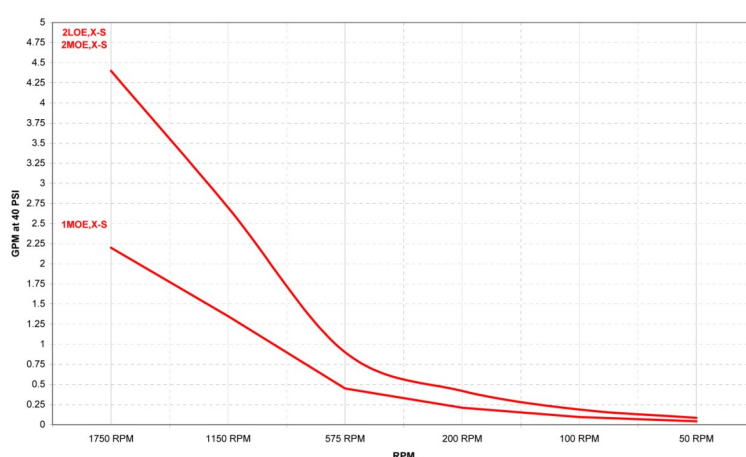
Models LOE/LOX/MOE/MOX NPSHR @ Maximum Speed

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

3-4-6-8LOE, X and MOE, X Shaft Speed Operating Range



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



SHAFT SPEED	PUMP MODEL	NPT Ports	GPM/100 RPM	0 PSI		20 PSI		40 PSI		60 PSI		80 PSI		100 PSI		125 PSI *		150 PSI *	
				GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1750 RPM	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
	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
	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
1150 RPM	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
	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
	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
575 RPM	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
	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
	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



**Lobee Pump & Machinery Co.**  
Industrial Pumps and Accessories

Since 1899...Noted for Highest Quality Pumps and Equipment

## WETTED MATERIALS

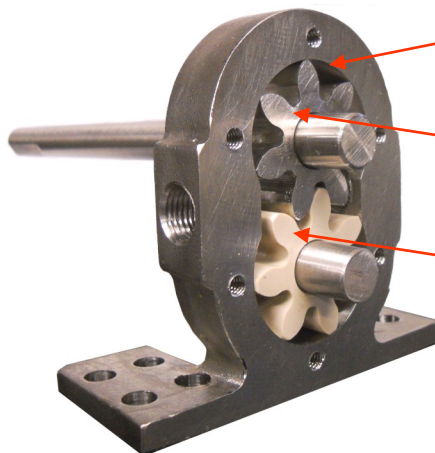
### PUMP INTERNALS

<u>LOE</u>	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
<u>MOE</u>	316 Stainless Steel WM88 Stainless Steel Ketron™ PEEK HPV, 1000 Glass Laminated PTFE Gasket
<u>MOX</u>	316 Stainless Steel WM88 Stainless Steel Ketron™ PEEK HPV, 1000 Glass Laminated PTFE Gasket
<u>Optional:</u>	316L Carpenter™ 20 Hastelloy™ C

### SHAFT SEALS

<u>PACKING</u>	Braided PTFE
<u>MECHANICAL</u>	316 Stainless Steel Composite Glass/PTFE Carbon Ceramic Viton™ Rulon™
<u>Optional:</u>	Tungsten Carbide Silicon Carbide Titanium 304 Stainless Steel Carpenter™ 20 Hastelloy™ C Monel™ Aflas™ Ethylene Propylene Chloroprene

### Model MOE/MOX Features:

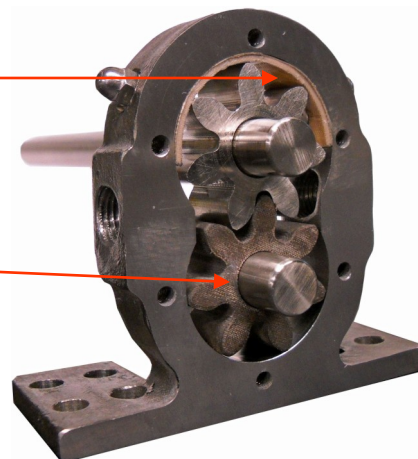


Close tolerance machined gear housing for efficient performance

WM88 High Nickel drive gear means no galling at higher pressures.

PEEK Idler gear delivers high performance and FDA compliance.

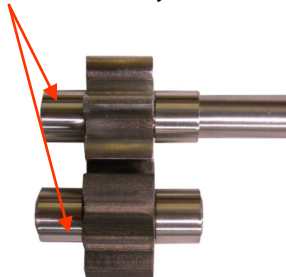
### Model LOE/LOX Features:



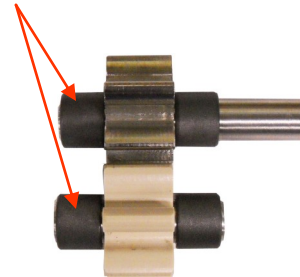
Composite Glass/PTFE drive gear liner for efficiency and durability in harsh operating conditions.

Composite Glass/PTFE Idler Gear for High Temperatures and Caustic Acids.

Caged Rulon™ journal bearings for high temperature and durability.



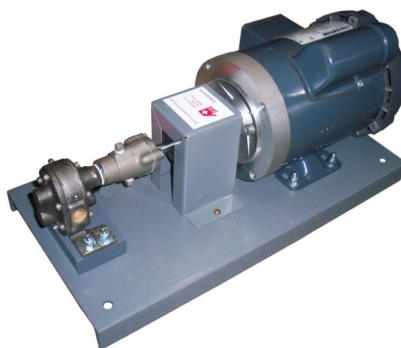
PEEK journal bearings for higher pressures and broad spectrum of chemical resistance.



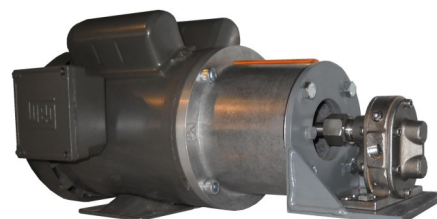
## Electric Motor Mounted Pump Units



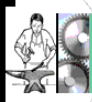
Direct Mount to XP Motor



Base Mounted



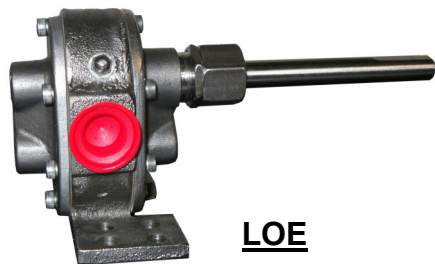
Direct Mount to 1 Ph Motor



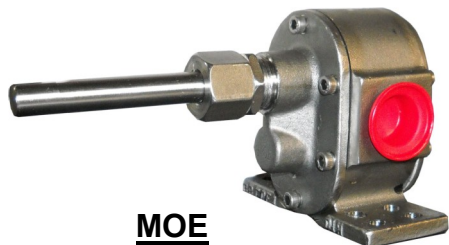
**Lobee Pump & Machinery Co.**  
Industrial Pumps and Accessories

Since 1899...Noted for Highest Quality Pumps and Equipment

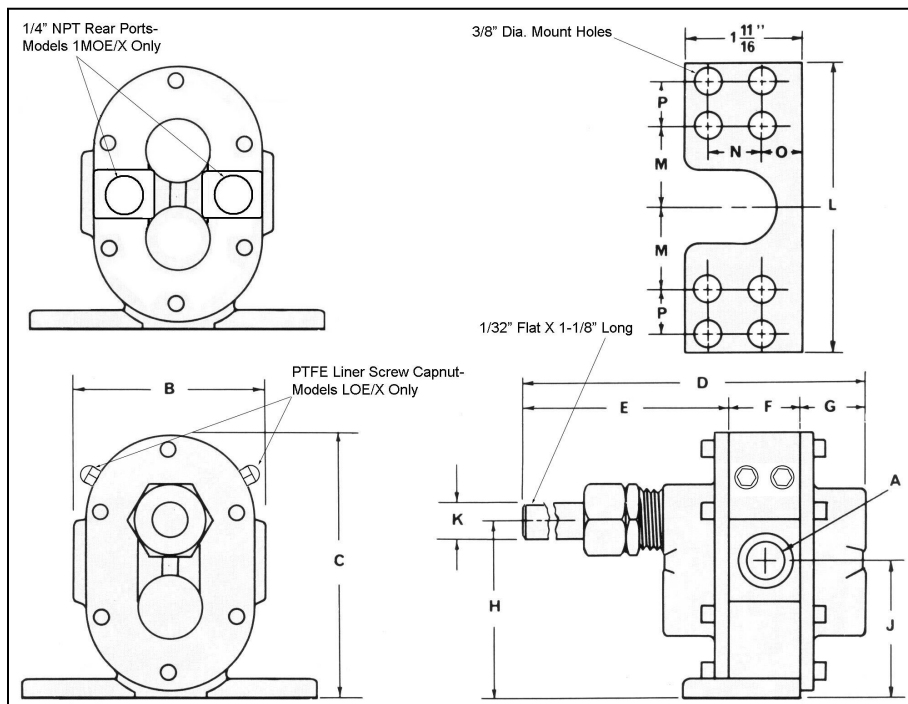
# STAINLESS STEEL GEAR PUMPS



**LOE**

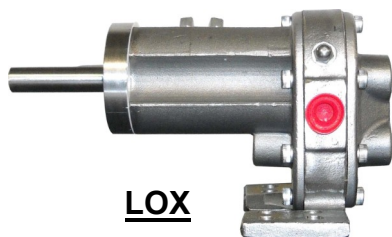


**MOE**

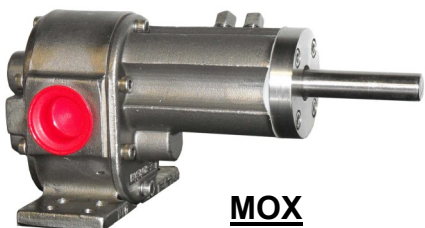


**Dimensions- Model LOE, MOE**

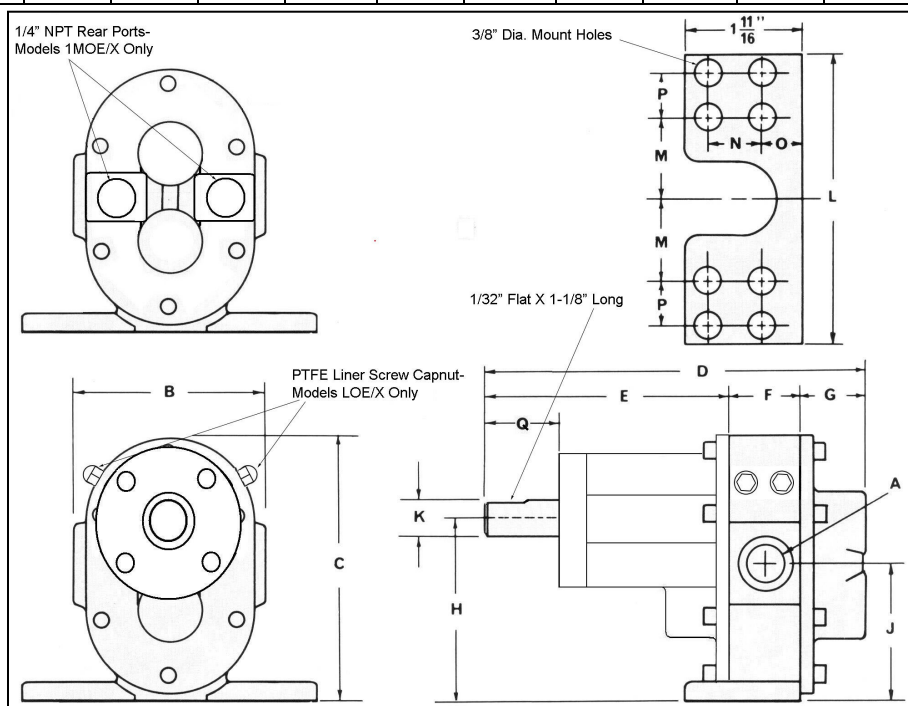
MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q
1***-S	1/4"	2-9/16"	3-7/8"	7-13/32"	5-7/8"	11/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-11/16"
2***-S	1/4"	2-9/16"	3-7/8"	7-23/32"	6-3/16"	21/32"	7/8"	2-15/32"	1-7/8"	1/2"	4"	1-1/8"	3/4"	9/16"	9/16"	1-11/16"
3***-S	3/8"	2-9/16"	3-7/8"	7-25/32"	6-3/16"	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"



**LOX**



**MOX**



**Dimensions- Models LOX, MOX**

MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	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"	2-3/4"
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"	2-3/4"
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"	2-3/4"
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"	2-13/32"
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"	2-1/8"
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"	2-1/4"



**Lobee Pump & Machinery Co.**  
Industrial Pumps and Accessories

Since 1899...Noted for Highest Quality Pumps and Equipment

# POSITIVE DISPLACEMENT PUMP UNITS - 1/3 TO 5 HP

Lobee Positive Displacement Pump Units are now available in a range of sizes and configurations. Standard built to order pump units come in 1/3, 1/2, 3/4, 1, 1-1/2, 2, 3 and 5 HP ratings. Each unit is assembled to customer specification including pump type, flow and pressure rating, with or without relief valve, direct or base mounted, and coupled to ODP, TEFC(NV), Wash-Down or Explosion-Proof motor. Designed for pumping viscosities from water to molasses. Speed control options include 1200 RPM Motors, Mechanical Gear Reducers and VFD (Variable Frequency Drive).

## Typical Applications:

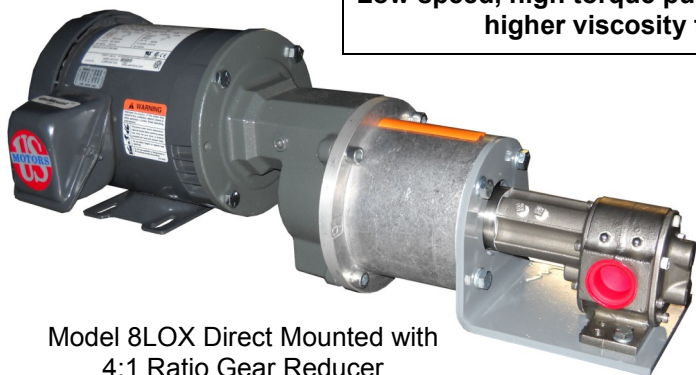
- Food oils, syrups, coatings and additive transfer
- Water, glycol and oil based coolant and heating systems
- Laboratory chemical and solution testing
- Marine fresh water systems
- Caustic and corrosive fluid transfer
- Liquids mixing systems
- Filtration and circulation systems



## Features and Benefits

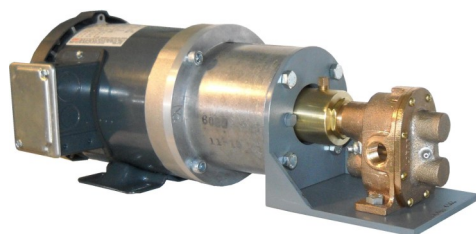
- ✓ Base or Direct Mounted Units
- ✓ Motors up to 5 HP, 256 Frame, Single and Three Phase
  - Enclosures - ODP, TEFC(NV), Wash-Down, Explosion Proof
  - Available in Standard, High and Premium Efficient
  - Optional inverter duty, 10:1 turndown ratio
- ✓ Variable Frequency Drives for precise pump speed control
- ✓ Flows to 40 GPM
- ✓ Viscosity to 100,000 SSU(17,000 CPs)
- ✓ Choose from any Lobee Gear Pump—Stainless Steel, Bronze, Cast Iron
- ✓ Port sizes from 1/8" to 1-1/2" NPT
- ✓ Multiple Shaft Seal Options - Mechanical, Lip, Packing
- ✓ 0-1800 RPM Range of Operation
- ✓ Bi-Directional Shaft Rotation
- ✓ Operating Temperatures to 450° F
- ✓ Continuous Working Pressure up to 150 PSI
- ✓ Integral In-Pump or Externally Plumbed Adjustable Relief Valves
- ✓ Suction Screens Available for Particulate Removal

**Low speed, high torque pump systems for  
higher viscosity fluids**



Model 8LOX Direct Mounted with  
4:1 Ratio Gear Reducer

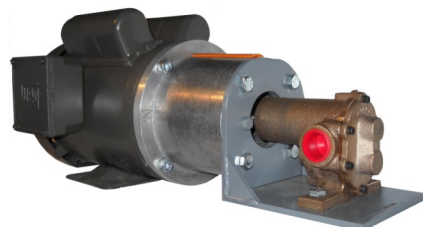
## Direct Mounted Pump Units



Model 4LOL with 3 Phase TEFC Motor



Model 2LOX 316 SS with Exp Proof Motor

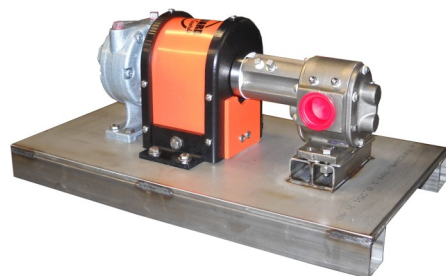


Model 6LOM with 1 Phase TEFC Motor

## Base Mounted Pump Units



Model 8LOL with Gear Reducer/TEFC Motor



Model 8LOX, 304 SS Base with Air Motor





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# POSITIVE DISPLACEMENT PUMP UNITS - 1/3 TO 5 HP

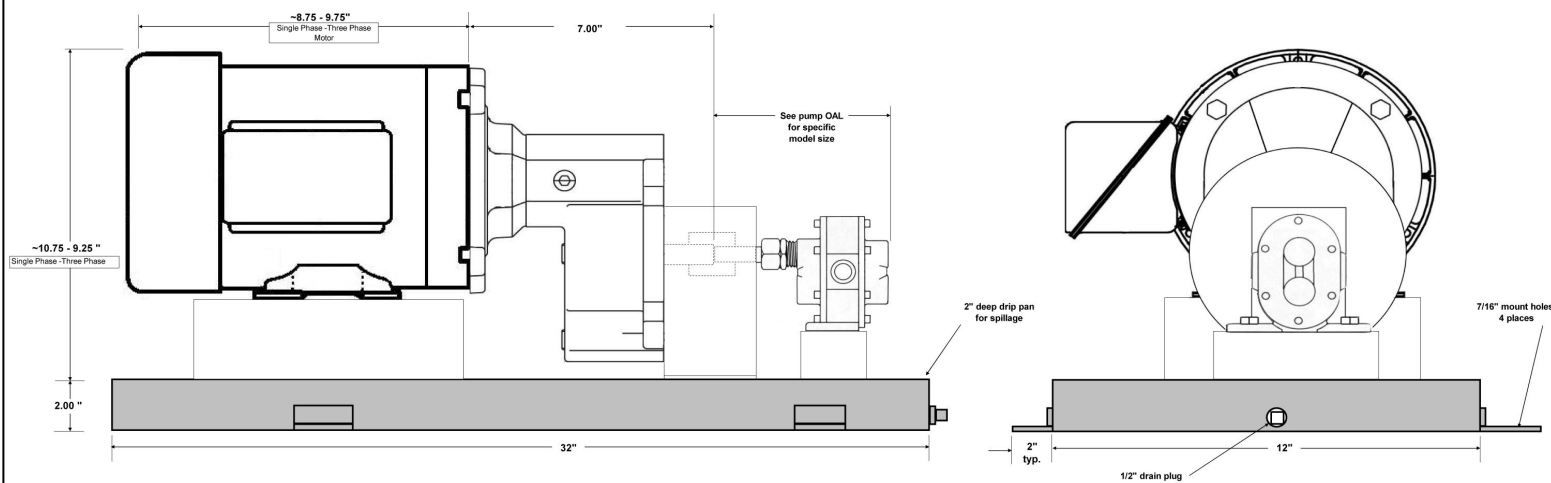
Variable Speed Motor Drives



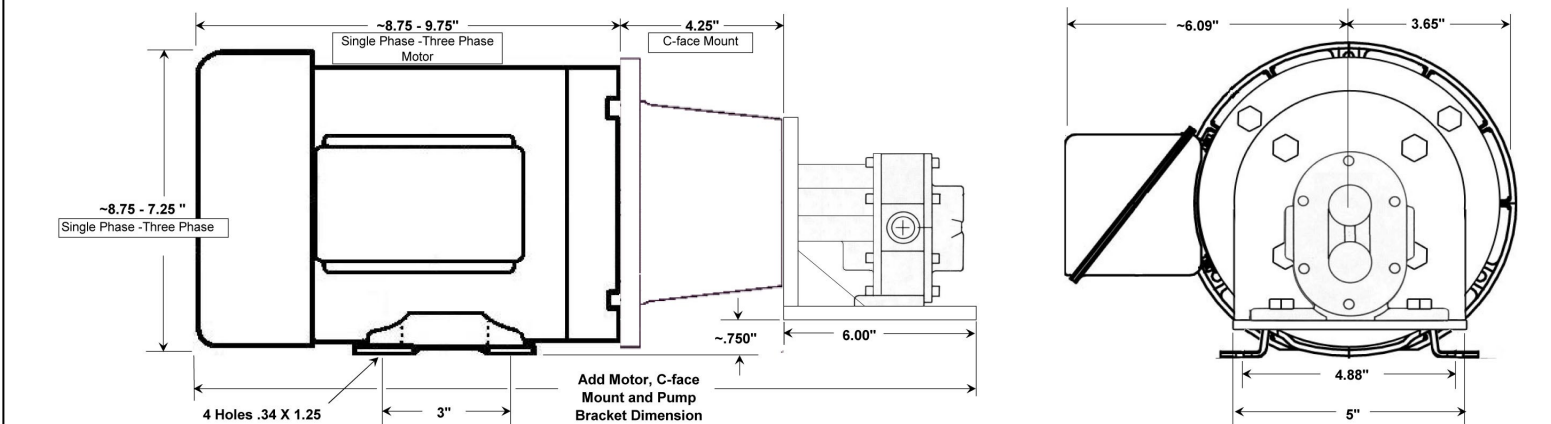
Speed Reducers for Viscous Liquids



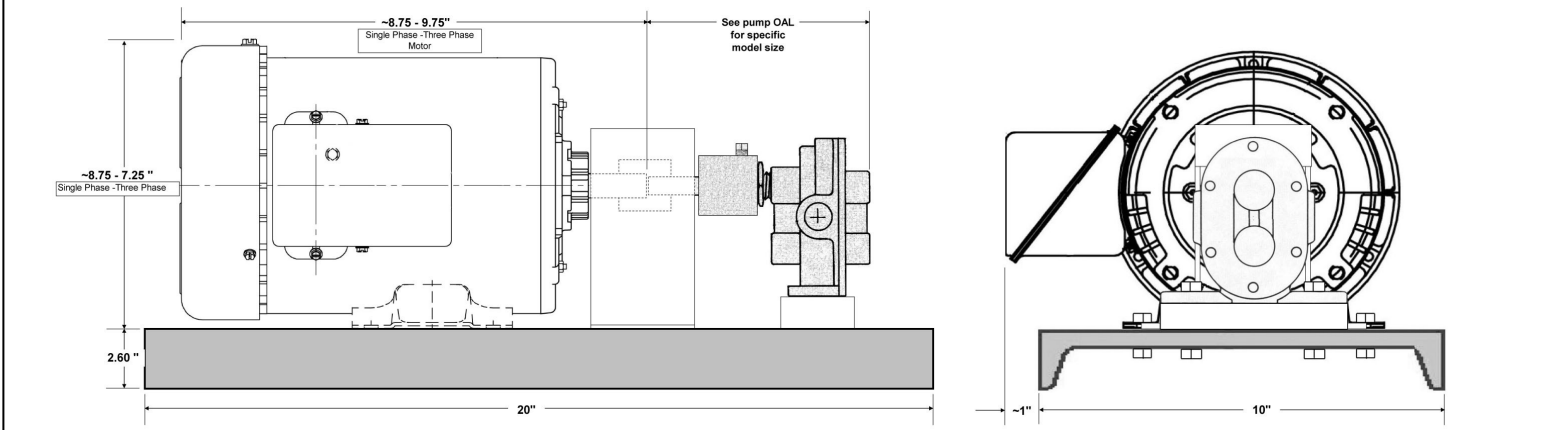
## Base Mount Pump Units with Gear Reducer—Typical Dimensional Layout



## Direct Mount Pump Units—Typical Dimensional Layout



## Base Mount Pump Units—Typical Dimensional Layout



Actual dimensions will vary based on specific motor and pump combination used. Go to our website at [www.Lobee.com](http://www.Lobee.com) for detail dimensions.



# VERTICAL SUMP PUMPS

## Standard Features and Benefits

- 1) Heavy Duty Industrial, Continuous Operation Design
- 2) 1/3, 1/2, 3/4, 1 1/2, 2 and 3 HP Models, Special Application up to 5 HP
- 3) 1800 and 3600 RPM Motors, Up to 150 GPM
- 4) Total Dynamic Head to 85' Vertical
- 5) Column Lengths to 10'6", Special Lengths Upon Request
- 6) Floor Mount or Suspended-From-Cover Models; Standard and Custom Suspended Cover Designs Available.
- 7) Cast Iron, 316 Stainless Steel, and Bronze Construction Materials Available as Standard
- 8) Bronze or Rulon™ Bearings for High Temp or Corrosive Applications
- 9) Motors include: Premium/Energy Efficient, TEFC, Washdown, Explosion Proof, Single or Three Phase
- 10) Water Tight and Explosion Proof Float Switches
- 11) Duplex Pump Systems for 100% Redundancy

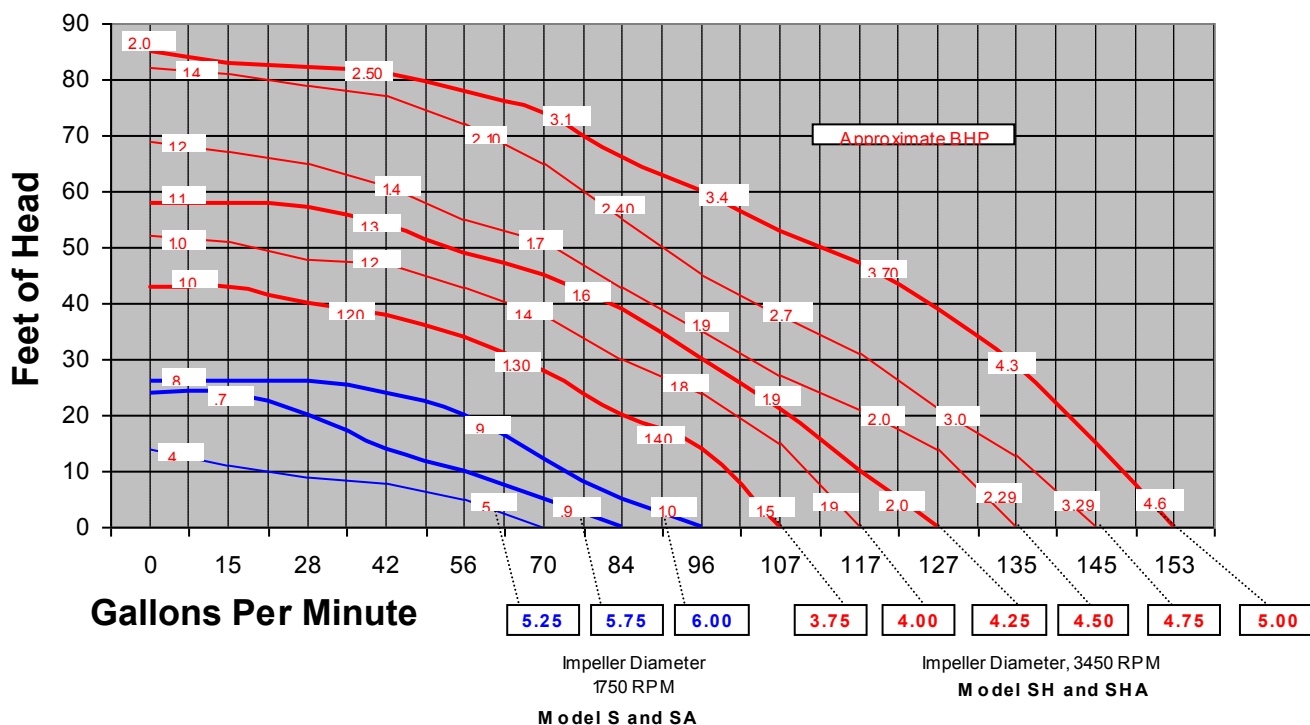
### Model S/SH Floor Mounted



### Model SA/SHA Cover Suspended



## Model Range Sump Pump Performance





# VERTICAL SUMP PUMPS

**Dependable performance is what you expect and get when you install a Lobee Sump Pump.** The overall design as well as each individual part has been engineered, tested and proven for trouble-free service and long life. The strainer eliminates the possibility of pump stoppage from trashy material often present in drainage or flood waters. Extra strength pump casing and motor mount castings plus heavy duty bearings reduce vibration and wear even in pumps with extra long columns for deep sumps. Model S/SH pump for open pits has a pedestal base permitting unit to rest directly on the pit floor. Model SA/SHA pump is suspended from a cover plate which is placed over the sump opening. Standard units are available in column lengths up to ten feet six inches; special longer lengths are available upon request. Cover plates are available for mounting two units together when a duplex installation is required.

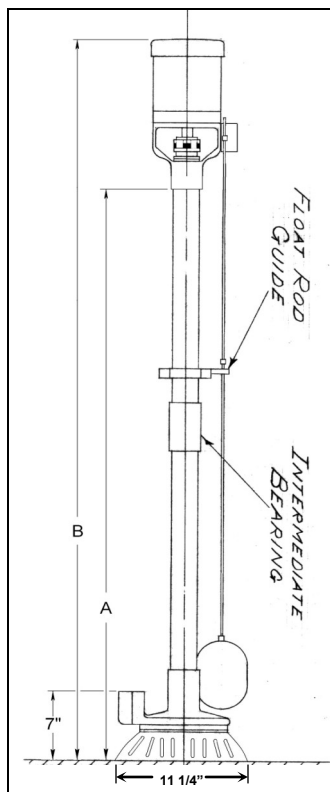
Explosion Proof Motor  
& Water Tight Switch



Optional Materials  
Bronze and 316 Stainless Steel

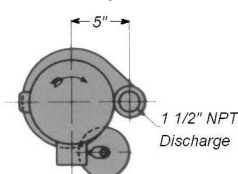


## Model S/SH, Floor Mounted

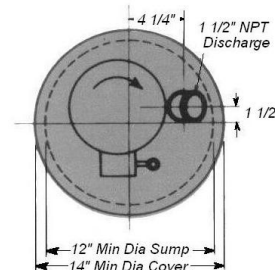


## Model SA/SHA, Suspended

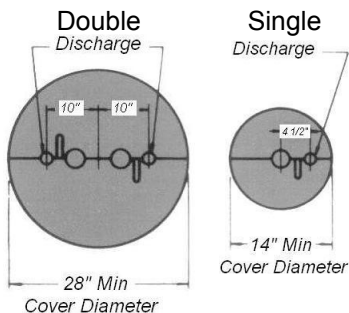
Pump Head



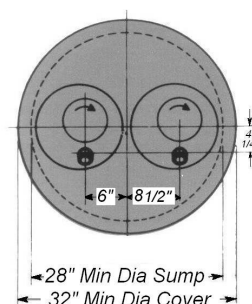
Sump Cover Single



Minimum Sump Cover Diameter



Sump Cover Double

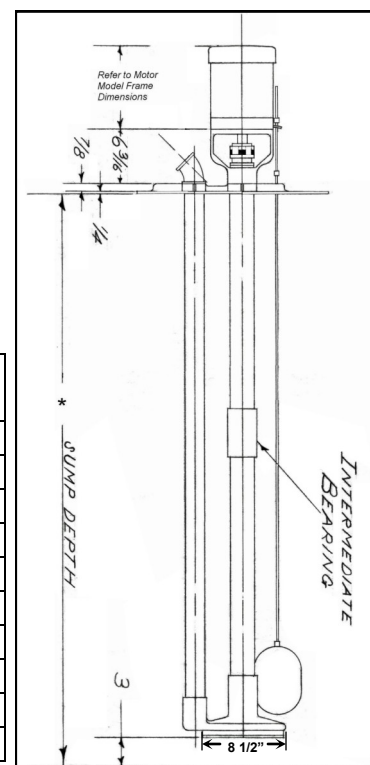


**General Dimensions**

<sup>^</sup>Horsepower Model (3,5,7,15,20,30)

Floor Mount	A	B <sup>^</sup>	Suspended	Sump Depth
S/SH ( * )-2	24 1/2	39	SA/SHA ( * )-2	24
S/SH ( * )-3	36 1/2	51	SA/SHA ( * )-3	36
S/SH ( * )-4	48 1/2	63	SA/SHA ( * )-4	48
S/SH ( * )-5	60 1/2	75	SA/SHA ( * )-5	60
S/SH ( * )-6	72 1/2	87	SA/SHA ( * )-6	72
S/SH ( * )-7	84 1/2	99	SA/SHA ( * )-7	84
S/SH ( * )-8	96 1/2	111	SA/SHA ( * )-8	96
S/SH ( * )-9	108 1/2	123	SA/SHA ( * )-9	108
S/SH ( * )-10	120 1/2	135	SA/SHA ( * )-10	120

<sup>^</sup>For SH models add 1" for 1 1/2 HP, 1.50" for 2 HP, 2.50" for 3 HP







# LIQUID RING PUMPS

**Lobee Liquid Ring Pumps** operate opposite how typical liquid rings pumps do. We do not compete with the volumetric output and efficiencies of dedicated air/gas liquid ring pumps. The Lobee liquid ring pump is designed to handle a higher liquid flow and a minor air/gas flow against a negative pressure environment. As compared to other designs which can flow a large volume of air/gas at various vacuum levels, our liquid ring pumps of comparable HP will pump only 15-20% air/gas volume in the same vacuum environment...but will pump 1,000% more volume of lower viscosity liquids (40 SSU or less).

Conventional design liquid ring pumps typically deliver a higher ACFM air/gas volume with a minimal liquid flow capability, whereas the Lobee LR/CLR/CHLR pumps deliver minimal air/gas volume with a higher fluid flow. Historically our pumps have been used to augment processes in which a stand alone vacuum pump cannot handle the amount of fluid that needs to be evacuated. The dedicated vacuum pump evacuates the air/gas mass at what ever requirement and our liquid ring handles or evacuates the liquids. An example would be vacuum chamber processing during extrusion in the plastics industry.

On applications where the air/gas evacuation demand is low, say < 20 ACFM, but fluid evacuation is relatively higher, our liquid ring works very well, stand alone, because it handles the low air/gas, high liquid ratio very efficiently.

## Features and Benefits

- (1) Self Priming, Up to 28' Lift, Vacuum to 28" Hg
- (2) Flows to 80 GPM, 15 SCFM
- (3) 1800-3600 RPM motor with 10:1 turndown ratio for VFD control
- (4) Performance Capability to 230 TDH, 100+ PSIG
- (5) Up to 20 Horsepower
- (6) 1", 1-1/2" and 2" NPT Port sizes
- (7) Available with Single or Three Phase Motors in Premium Efficient, High Efficient, Explosion Proof, Washdown, TEFC and ODP
- (8) Shaft Seal Systems include Acrylic/Graphite or PTFE Packing for 'Dry Running' and John Crane™ Type 1, 9 or 2106 Mechanical
- (9) Most API Flush Plans are Available for High Temperature, Corrosive or Crystallizing Applications
- (10) Standard Cast Iron, Bronze or 316 Stainless Steel Construction Materials are Available
- (11) Excellent wear characteristics in harsh applications—Where cavitation may occur and the NPSHR not met, pump performance will be minimally affected over the long run. No threat of catastrophic failure due to cavitation erosion

The **Lobee Model LR** is a stand alone liquid ring pump designed for special application electric motors and alternate power drive sources for mobile and stationary applications such as PTO, hydraulic motor, pulley, etc.

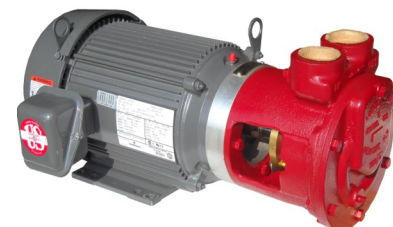
**Models LR and CLR** come standard with an 1800 RPM motor for applications up to 160' head with low NPSH. **Our New CHLR Series** expands the liquid ring product range to accommodate up to 230' total dynamic head. This new series uses a 3600 RPM motor and high speed balanced impeller. Overall efficiency has been improved by over 50% with Total Dynamic Head capability up over 30% as compared to the standard CLR.

A single pump can be used for many pumping tasks, reducing costs and providing increased versatility. Application performance can also be greatly enhanced with the addition of a motor inverter (VFD). All motors have a minimum 10:1 turndown ratio which will enable a fully adjustable air/gas/liquid flow and pressure (head) range that takes full advantage of the CHLR's capabilities.

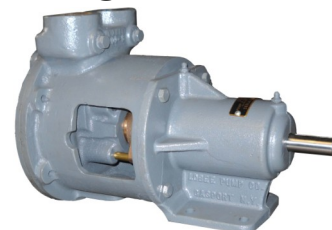
## MODEL CLR



## MODEL CHLR



## MODEL LR



## Applications

- Priming systems for centrifugal pumps
- High suction lift
- Vacuum heating systems
- Condensate service
- Residential/basement water pumps
- Oil transfer service
- Sanitary drinking water supply
- Volatile non-hazardous liquids
- Foaming liquids, entrained gases or air



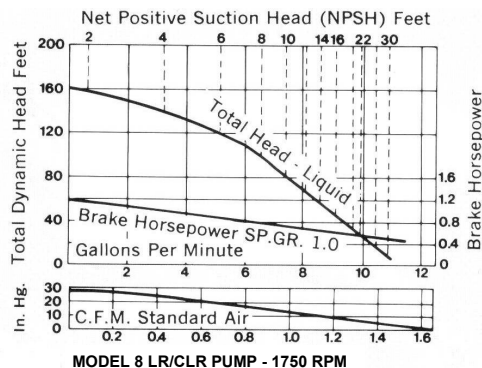
## Markets

- Refineries-fluid transfer
- Machine Tool-coolant & lubricant circulation
- Marine-bilge pump, fresh water
- Agriculture-water, fertilizer
- Plastics-vacuum holding, forming
- Manufacturing Facilities-fluid transfer, portable or stationary filtration pump systems
- Power Plants & Utilities-fluid transfer
- Chemical Processing
- Food and Beverage

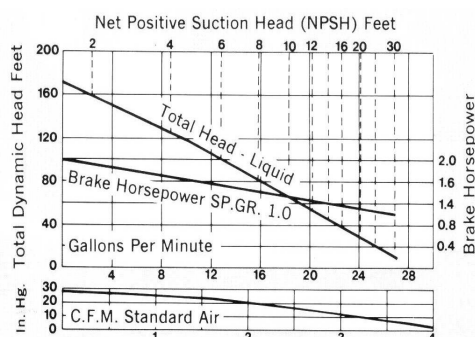


# LIQUID RING PUMPS

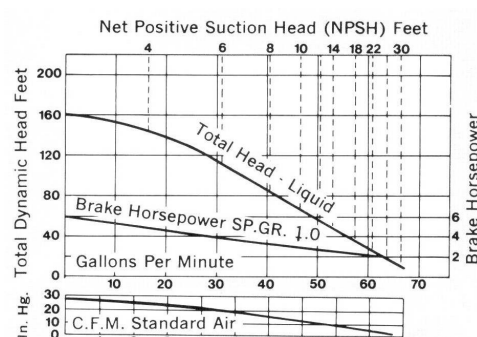
**Lobee Liquid Ring pumps** combine the advantages of the centrifugal and positive displacement type of pump. This is a favorite with engineers for all phases of small capacity, high-head liquid handling. Advanced hydraulic and mechanical design, combined with high quality materials and precision workmanship assures long life and trouble free operation.



MODEL 8 LR/CLR PUMP - 1750 RPM



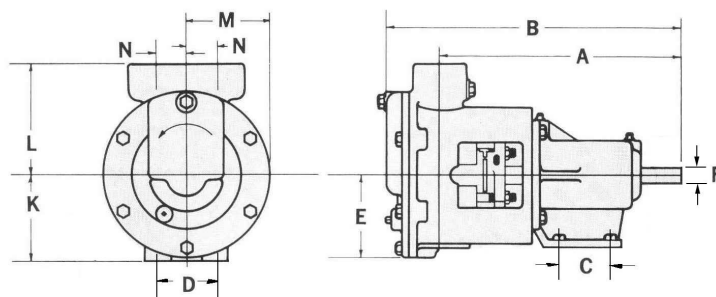
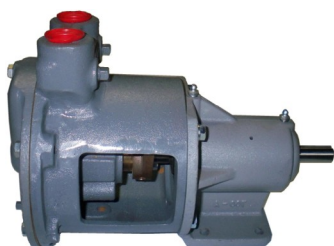
MODEL 12 LR/CLR PUMP - 1750 RPM



MODEL 16 LR/CLR PUMP - 1750 RPM

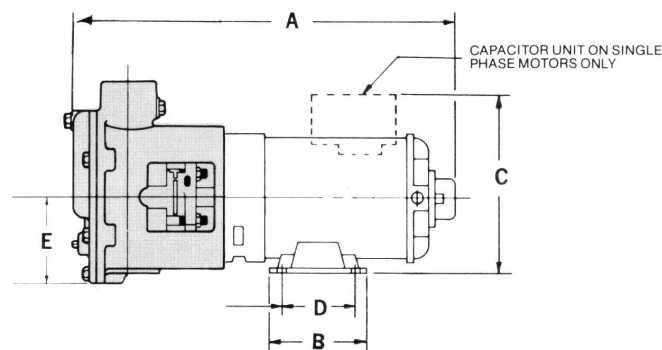
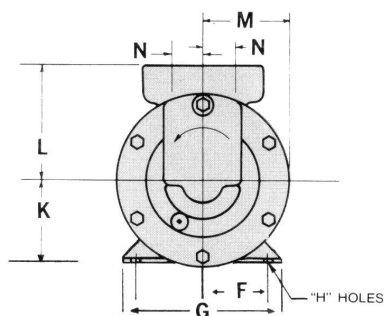
Total dynamic head in feet based on clean, cold water and 1750 rpm motor. The head capacity and efficiency curves apply only for liquids having a viscosity less than 40 SSU. The brake horsepower (BHP) curves are based on a specific gravity of 1.00. To determine the BHP for other liquids multiply these values by the specific gravity.

## LR Dimensional Specifications



Model	Suction Port	Discharge Port	A	B	C	D	E	F	K	L	M	N
8LR	1" NPT	1" NPT	11.688	14.313	2.500	3.000	4.000	0.750	3.500	5.375	4.000	1.500
12LR	1 1/2" NPT	1 1/2" NPT	11.688	14.313	2.500	3.000	4.000	0.750	3.500	5.375	4.000	1.500
16LR	2" NPT	2" NPT	11.812	15.063	2.500	3.000	4.125	0.750	3.500	5.375	4.125	1.500

## CLR Dimensional Specifications



Base Model	Suction/Discharge	HP	Motor Frame	A	B	C	D	E	F	G	H	K	L	M	N
8CLR10P	1	1	143JP	19	5	6 3/4	2	4	2 3/4	6 1/2	11/32	3 1/2	5 3/8	4	1 1/2
8CLR15P	1	1.5	145JP	20	6	6 3/4	2 1/2	4	2 3/4	6 1/2	11/32	3 1/2	5 3/8	4	1 1/2
12CLR10P	1 1/2	1	143JP	19 1/4	5	6 3/4	2	4	2 3/4	6 1/2	11/32	3 1/2	5 3/8	4	1 1/2
12CLR15P	1 1/2	1.5	145JP	20 1/4	6	6 3/4	2 1/2	4	2 3/4	6 1/2	11/32	3 1/2	5 3/8	4	1 1/2
12CLR20P	1 1/2	2	145JP	20 1/4	6	6 3/4	2 1/2	4	2 3/4	6 1/2	11/32	3 1/2	5 3/8	4	1 1/2
12CLR30P	1 1/2	3	182JP	21 3/8	5 3/4	9 1/4	2 1/4	4	3 3/4	8 1/2	13/32	4 1/2	5 3/8	4	1 1/2
16CLR20P	2	2	145JP	20 3/4	6	6 3/4	2 1/2	4 1/8	2 3/4	6 1/2	11/32	3 1/2	5 3/8	4 1/8	1 1/2
16CLR30P	2	3	182JP	21 3/4	5 3/4	9 1/4	2 1/4	4 1/8	3 3/4	8 1/2	13/32	4 1/2	5 3/8	4 1/8	1 1/2
16CLR50P	2	5	182JP	22 3/4	6 3/4	9 1/4	2 1/4	4 1/8	3 3/4	8 1/2	13/32	4 1/2	5 3/8	4 1/8	1 1/2

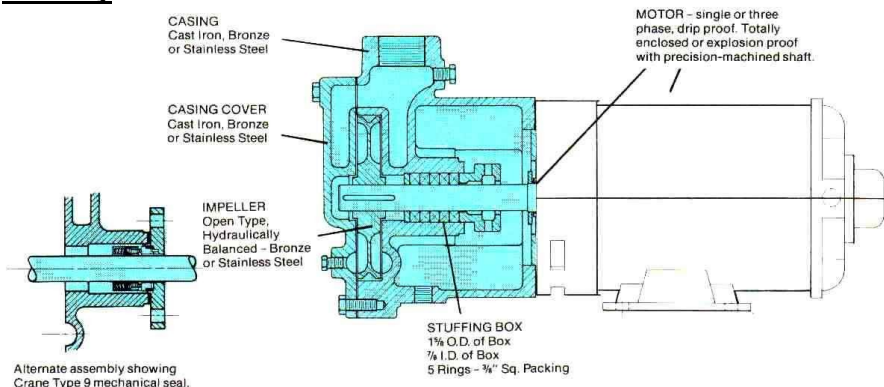


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# LIQUID RING PUMPS

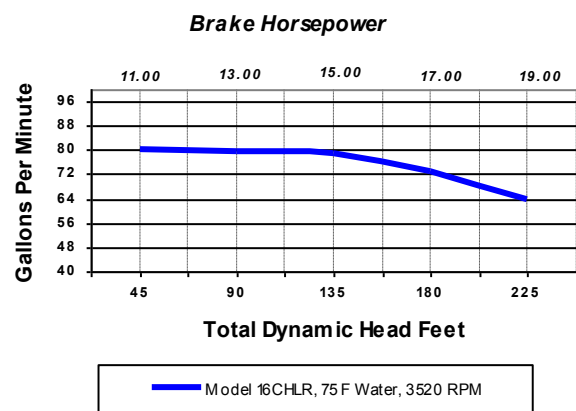
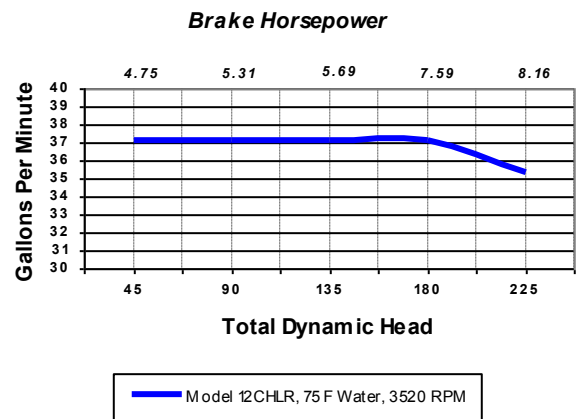
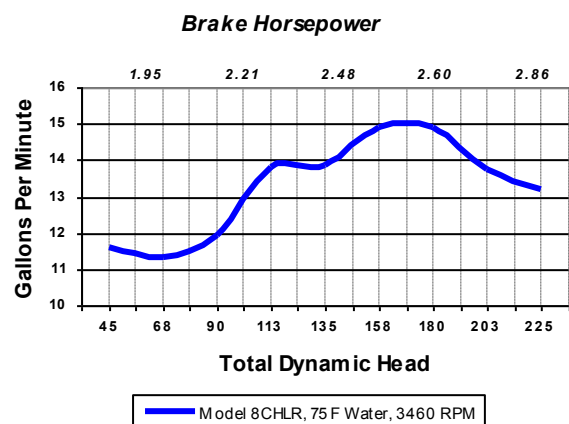
## Cutaway



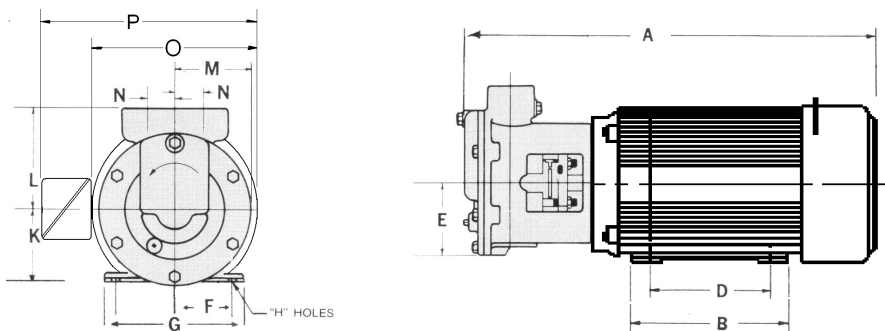
Total dynamic head in feet based on clean, cold water and 3600 rpm motor. The head capacity and efficiency curves apply only for liquids having a viscosity less than 40 SSU. The brake horsepower (BHP) curves are based on a specific gravity of 1.00. To determine the BHP for other liquids multiply these values by the specific gravity. NPSHR (Net Positive Suction Head Required) data for new CHLR Liquid Ring Pumps is forth coming as testing is in process. Based on a higher motor speed NPSHR will be slightly higher than published CLR numbers. For additional performance data please contact factory.

High Horsepower and Special Application configurations available. Additional performance characteristic information available by contacting factory.

## CHLR Performance Curves



## CHLR Dimensional Specifications



Base Model	8CHLR30PT	12CHLR50PT	12CHLR75PT	16CHLR100PT	16CHLR150PT
Port Size NPT	1"	1 1/2"	1 1/2"	2"	2"
HP	3	5	7.5	10	15
Motor Frame	145JP	184JP	184JP	215JP	215JP
A	19 3/8	21 3/4	21 3/4	26 1/2	26 1/2
B	6	6 3/8	6 3/8	8 7/8	8 7/8
D	5 1/2	5 1/2	5 1/2	7	7
E	4	4	4	4 1/8	4 1/8
F	2 3/4	3 3/4	3 3/4	4 1/4	4 1/4
G	6 1/2	8 3/8	8 3/8	9 1/2	9 1/2
H	11/32	13/32	13/32	13/32	13/32
K	3 1/2	4 1/2	4 1/2	4 1/2	4 1/2
L	5 3/8	5 3/8	5 3/8	5 3/8	5 3/8
M	4	4	4	4 1/8	4 1/8
N	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
O	9 1/2	9 1/2	9 1/2	11 1/4	11 1/4
P	12 1/4	12 1/4	12 1/4	13 7/8	13 7/8





For handling industrial liquids where a continuous rate of flow is an operating aid or necessity, it is desirable to know at a glance the rate of flow in GALLONS PER MINUTE. With the **LOBEE GPM RATER**, which has a clear tube entirely around the body and an indicator just inside the tube for easy reading, the rate of flow in GALLONS PER MINUTE is observable at all times. The flange of the float deflects the liquid against the wall of the tube and helps keep it clean so the indicator remains visible even in liquids of high sediment content. The small size of the flow rater permits easy installation.



## Operation and Application

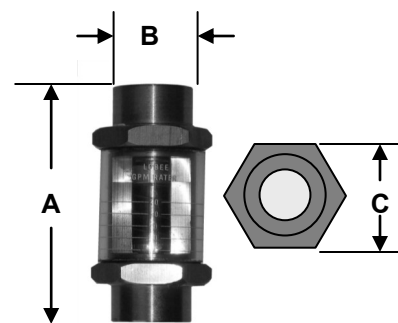
The GPM Rater is a virtually trouble-free unit. It must be installed vertically to insure accuracy and prevent sticking or hang-up of the float. If the float does stick or hang-up for reasons of poor installation alignment, simply tap the pipe above the rater. This will not damage the rater. No lubrication is necessary, but cleanliness is necessary for smooth accurate operation. If sludge or residue builds up inside the unit, remove and clean periodically. Standard calibration is for water at 31.5 SSU. Accuracy is +/- 5% of maximum scale reading. All sizes available in Brass, PVC or 316 Stainless Steel.



## Dimensions and Specifications

Base Model	NPT Port Size	Flow Range <i>As indicated on sight glass</i>	A	B	C
RA(F) 404-(*)	1/2"	1-4 GPM	4"	1-3/32"	1-1/2"
RA(F) 412-(*)	1/2"	3-12 GPM	4"	1-3/32"	1-1/2"
RA(F) 608-(*)	3/4"	2-8 GPM	4-1/2"	1-3/8"	2"
RA(F) 620-(*)	3/4"	5-20 GPM	4-1/2"	1-3/8"	2"
RA(F) 812-(*)	1"	3-12 GPM	5"	1-1/2"	2"
RA(F) 840-(*)	1"	10-40 GPM	5"	1-1/2"	2"

(\*) Indicates Base Model construction, see below



Construction	Tube	Spring	O-Ring	Maximum Operating Pressure	Maximum Operating Temperature
Brass (B)	Plastic	316 SS	Buna-N	125 psi	125° F
PVC (P)	Pyrex	316 SS	Viton	125 psi	125° F
316 Stainless Steel (S)	Pyrex	316 SS	Viton	125 psi	200° F

( ) Indicates Base Model construction