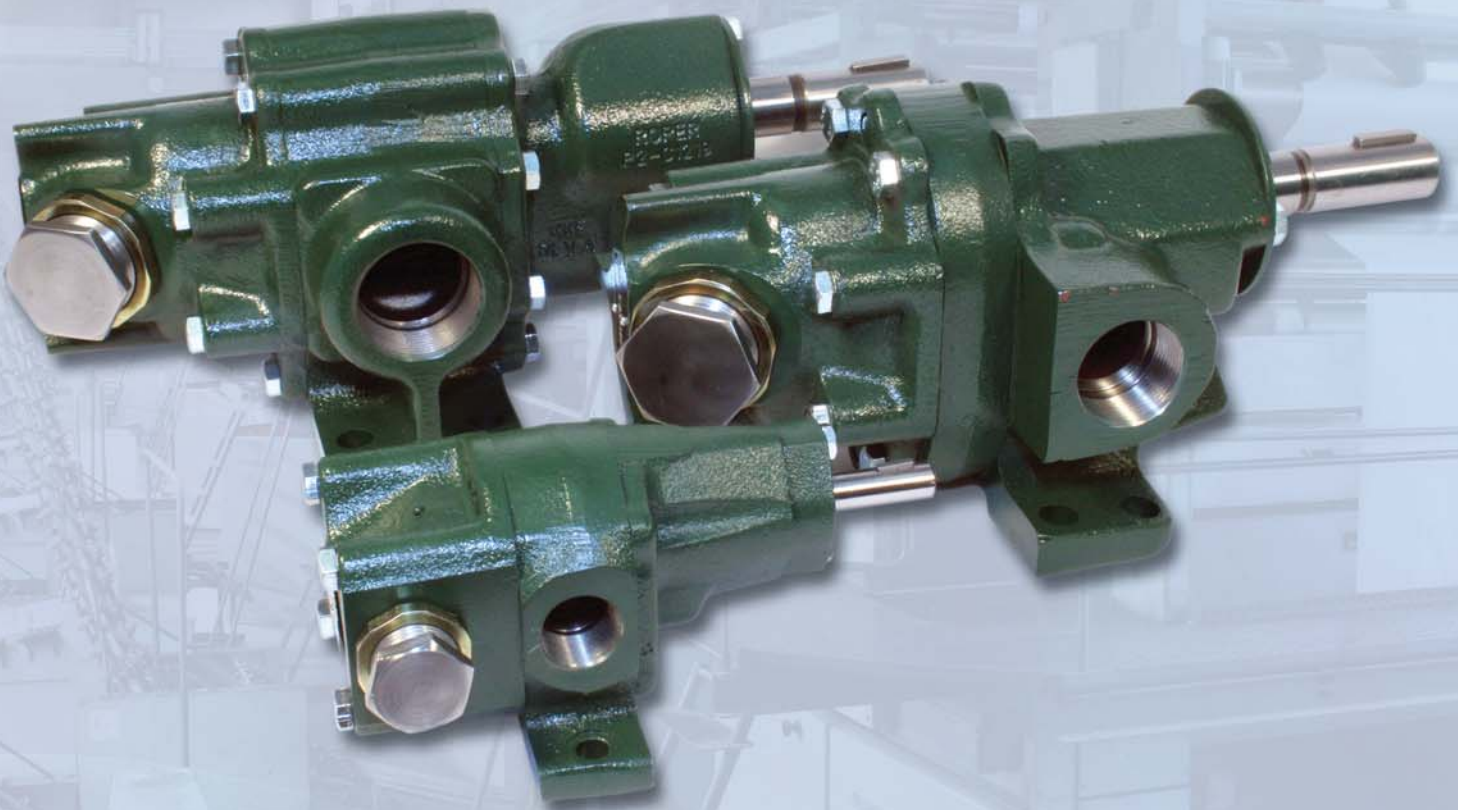







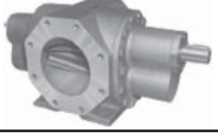








**THE LEADING FORCE** behind liquids™ since 1857



## **A Series General Purpose Pumps**

General Purpose Pumps for Pressure Lubrication,  
Hydraulic Service, Fuel Supply and General Transfer

# The Roper Pump Family of Gear Pumps

		Typical Applications	Primary Features
	3600	<ul style="list-style-type: none"> <li>Mix, circulate, and transfer viscous liquids</li> <li>Gasoline, asphalt, molasses</li> <li>Ink, roofing compounds, oils</li> </ul>	<ul style="list-style-type: none"> <li>Precise tolerances for maximum efficiency</li> <li>Direct drive or built-on gear reducers</li> <li>Bi-directional rotation*</li> <li>Configurations available for close coupled drive and close coupled hydraulic drive</li> </ul>
	Z	<ul style="list-style-type: none"> <li>Industrial applications requiring a special mechanical seal</li> </ul>	<ul style="list-style-type: none"> <li>ANSI Flanges</li> <li>Many parts interchangeable with 3600 Series</li> <li>Direct drive or built-on gear reducers</li> <li>Bi-directional rotation*</li> <li>Configurations available for close coupled drive and close coupled hydraulic drive</li> </ul>
	3800	<ul style="list-style-type: none"> <li>Oilfields including light &amp; heavy crude oil</li> <li>Kerosene mixtures, condensates and hot oils</li> </ul>	<ul style="list-style-type: none"> <li>Sealed ball bearings</li> <li>Quadruple grease purged lip seals</li> <li>Helical gears for quiet operation</li> <li>Bi-directional rotation*</li> </ul>
	Bulk	<ul style="list-style-type: none"> <li>Fuels, solvents, petrochemicals</li> <li>Residual fuel oils, molasses, resins</li> <li>Tankers, barges, process plants, refineries</li> </ul>	<ul style="list-style-type: none"> <li>Large ports (6" and 8" available) allow more efficient transfer of fluids</li> <li>Thru port design allows for lower inlet and outlet losses</li> </ul>
	5600	<ul style="list-style-type: none"> <li>Hydroseeding</li> <li>Grouting, seal coating, oil and sand</li> <li>Wastewater, waste oil, sludge, slurries</li> <li>Brine, paper pulp, fertilizer feeds</li> </ul>	<ul style="list-style-type: none"> <li>Rubber covered gears</li> <li>Bi-directional rotation</li> <li>Abrasive applications; up to pea size particles</li> </ul>
	A	<ul style="list-style-type: none"> <li>Pressure lubrication</li> <li>Hydraulic service</li> <li>General transfer applications</li> </ul>	<ul style="list-style-type: none"> <li>Operates at motor speeds</li> <li>Bi-directional rotation*</li> <li>Close coupled capability</li> </ul>
	2835	<ul style="list-style-type: none"> <li>Roofing Compounds</li> <li>Molasses</li> <li>Feed Supplements</li> </ul>	<ul style="list-style-type: none"> <li>Operates at standard motor speeds</li> <li>Large ports allow easier fluid entry</li> <li>Built-in relief valve</li> </ul>
	V	<ul style="list-style-type: none"> <li>Hazardous liquid transfer</li> <li>"Zero leakage" applications due to environmental concerns</li> <li>Chemical and petroleum applications</li> </ul>	<ul style="list-style-type: none"> <li>Mag-drive, sealless design eliminates seal repair costs and down time</li> <li>C-face mount eliminates misalignment</li> <li>Bi-directional rotation and self-priming</li> </ul>
	F	<ul style="list-style-type: none"> <li>Hydraulic power for lifts, machine actuation, fuel burners, and blenders</li> <li>General transfer of oil and petroleum fluids</li> </ul>	<ul style="list-style-type: none"> <li>2 inlet ports, 2 outlet ports allows multiple piping arrangements (except F150 - F300)</li> <li>High Pressure Range</li> <li>Maintain pump without pipe removal</li> </ul>
	ROC	<ul style="list-style-type: none"> <li>Chemical processing</li> <li>Pharmaceutical industry</li> <li>Injection or transfer of acids &amp; solvents</li> </ul>	<ul style="list-style-type: none"> <li>Stainless steel construction</li> <li>Bi-directional rotation*</li> <li>Mag-drive, sealless option (X5-03 only)</li> </ul>
	9622	<ul style="list-style-type: none"> <li>Chemical and transport applications</li> <li>Corrosive liquid transfer</li> </ul>	<ul style="list-style-type: none"> <li>316SS Housing</li> <li>17-4 PH SST Gears / Shafts</li> <li>Built-in Relief Valve</li> </ul>
	PC	<ul style="list-style-type: none"> <li>Viscous, abrasive and solids-containing liquids</li> <li>Transfer of wastewater sludge, polymers, grouts, paints and adhesives</li> </ul>	<ul style="list-style-type: none"> <li>Pulsation free pumping</li> <li>High suction lift capabilities</li> <li>Ideal for shear sensitive liquids</li> </ul>

\*Pump reconfiguration may be required.

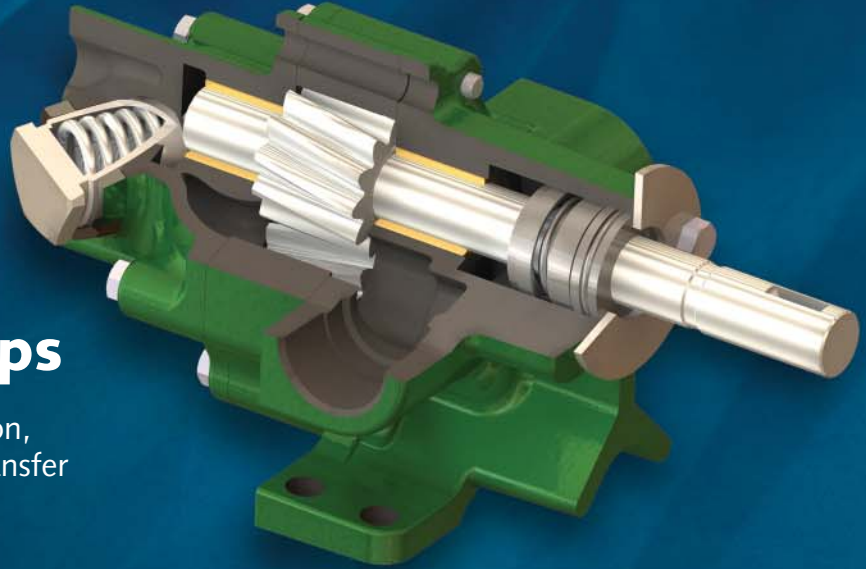




# A Series General Purpose Pumps

General Purpose Pumps for Pressure Lubrication, Hydraulic Service, Fuel Supply and General Transfer

Up to 59 GPM • Up to 300 PSI



Roper A Series pumps are adaptable to a wide range of applications pumping clean fluids, such as pressure lubrication, hydraulic service, fuel supply or general liquid transfer.

These pumps are designed to operate at standard motor speeds, with provisions for flange or foot mounting. The internal bearings are lubricated by the fluid being pumped. With only two moving parts, the pumps run quietly.

They are manufactured and assembled with close tolerances, and regularly tested to insure dependable performance. Factory assembled for clockwise rotation (facing the pump drive shaft end), most may be reassembled for operation with equal efficiency in a counter-clockwise rotation.

## MATERIALS OF CONSTRUCTION

### Standard Fitted

Housing.....	Cast Iron
Gears.....	Ductile Iron* Hardened Steel**
Bearings.....	Bronze
Idler Shafts .....	Ductile Iron* Steel**
Drive Shafts.....	Hardened Steel

### Optional Materials

Housing.....	Ductile Iron***
Bearings.....	Iron, Carbon

\*06 and larger sizes. \*\*03 and smaller sizes.

\*\*\* In 005, 01 and 02 sizes

## FEATURES

- Designed to operate at standard motor speeds
- Bi-directional rotation

### Quiet-Running Helical Gears

Accurate machining insures:

- proper meshing
- reduced friction and vibration
- quiet, efficient operation
- long life

### Long-Lasting Bearing Surfaces

- Bearings are special wear-resistant, high-lead bronze. (Iron and carbon bearings are available.)
- Four heavy duty sleeve bearings give positive support to pumping gears and insure long, efficient service.

### Precise, Rugged, Maintenance-Friendly Design

- All castings are cast iron.
- Precise manufacturing tolerances provide minimum clearances for maximum pumping efficiency.
- Large, hardened steel dowel pins insure positive alignment between the faceplate, case, and backplate.

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# Capacities & Nomenclature

## A SERIES NOMENCLATURE

Model	1 - Foot Mounted	25 - Baseplate Mounted
	2 - Foot Mounted with Relief Valve	26 - Baseplate Mounted with Relief Valve
	17 - Flange Mounted	33 - Close Coupled
	18 - Flange Mounted with Relief Valve	34 - Close Coupled with Relief Valve
Seal Option	AL - Lip Seal	
	AM - Mechanical Seal	
	AP - Packed Box	
	AE - Mechanical Seal (AE Series Only)	
Size* [AL, AM, AP]	005 - 0.05 Gal/100 Rev [0.19 L/100 Rev]	12 - 1.3 Gal/100 Rev [4.92 L/100 Rev]
	01 - 0.1 Gal/100 Rev [0.38 L/100 Rev]	16 - 1.7 Gal/100 Rev [6.44 L/100 Rev]
	02 - 0.2 Gal/100 Rev [0.76 L/100 Rev]	21 - 2.2 Gal/100 Rev [8.33 L/100 Rev]
	03 - 0.3 Gal/100 Rev [1.14 L/100 Rev]	27 - 2.7 Gal/100 Rev [10.22 L/100 Rev]
	06 - 0.6 Gal/100 Rev [2.27 L/100 Rev]	32 - 3.3 Gal/100 Rev [12.49 L/100 Rev]
	08 - 0.9 Gal/100 Rev [3.41 L/100 Rev]	40 - 4.2 Gal/100 Rev [15.90 L/100 Rev]
Size [AE Series]	19 - 1.9 Gal/100 Rev [7.19 L/100 Rev]	54 - 5.4 Gal/100 Rev [20.44 L/100 Rev]
	29 - 2.9 Gal/100 Rev [10.98 L/100 Rev]	75 - 7.5 Gal/100 Rev [28.39 L/100 Rev]

\*Size: approximate theoretical flow rate [not including slip]

EXAMPLE: <b>17AM32</b>	<b>17</b> Model	<b>AM</b> Seal Option	<b>32</b> Size	<b>Type 1</b> Internal Construction
EXAMPLE: <b>2AE54</b>	<b>2</b> Model	<b>AE</b> Seal Option	<b>54</b> Size	<b>Type 1</b> Internal Construction

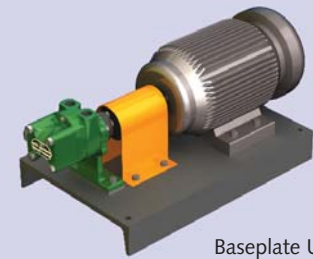
## SIZE 005 THROUGH 02



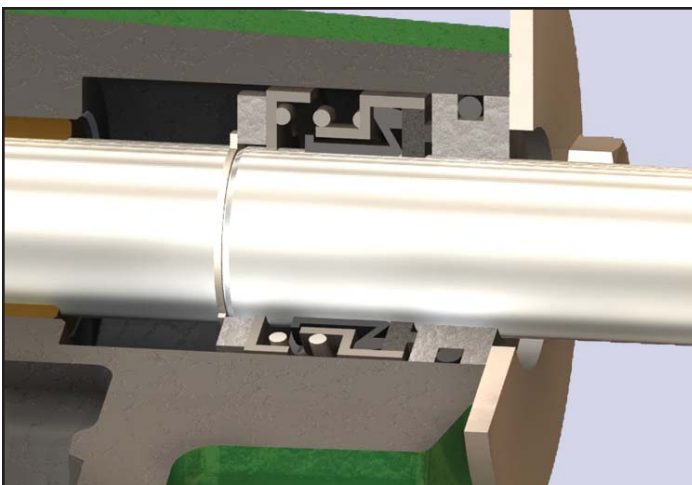
Flange Mounted



With Mounting Bracket

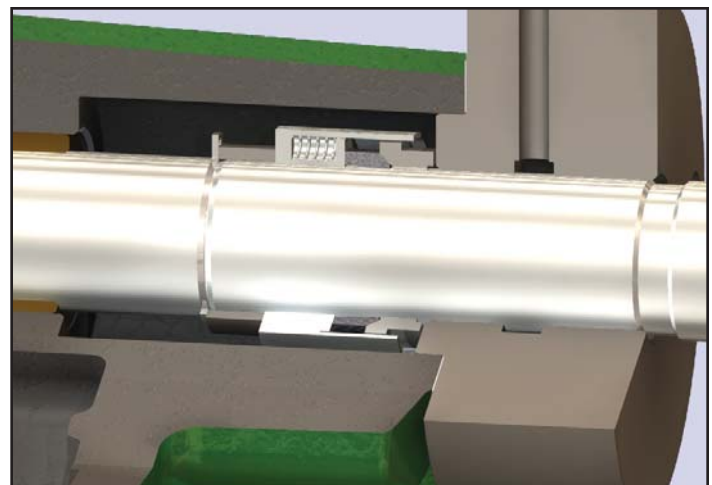


Baseplate Unit



### MECHANICAL SEAL (STANDARD)

Mechanical seals are for those applications where product leakage is unacceptable. The mechanical seal uses less power than the packed box and, under proper conditions, has a longer service life. It does not require adjustment. Our standard mechanical seal is an elastomeric bellows type seal, with a temperature limit of 212°F (100°C). Special fitting is available for higher temperature applications.



### MECHANICAL SEAL (POSITIVE DRIVEN)

These are positive driven seals with a PTFE wedge, for use where corrosive and/or viscous liquids are being processed. Wedge construction of the secondary sealing element virtually eliminates leakage. These seals have a temperature limit of 450°F (232°C). Special fitting is available for higher temperature applications.

# Pump Seals

## SIZE 03



Flange Mounted

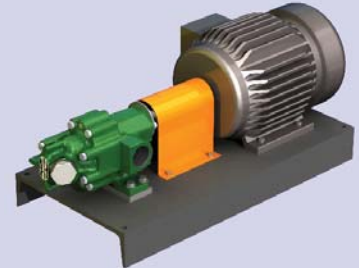


Foot Mounted

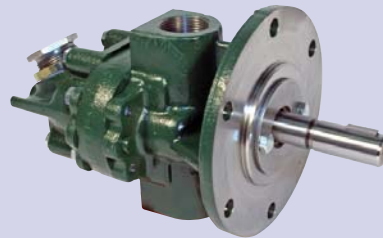
## SIZE 06 THROUGH 40



Foot Mounted



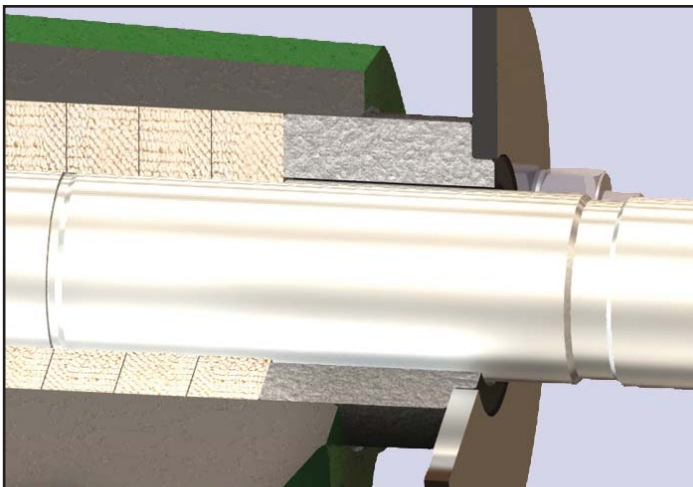
Baseplate Mounted



Flange Mounted

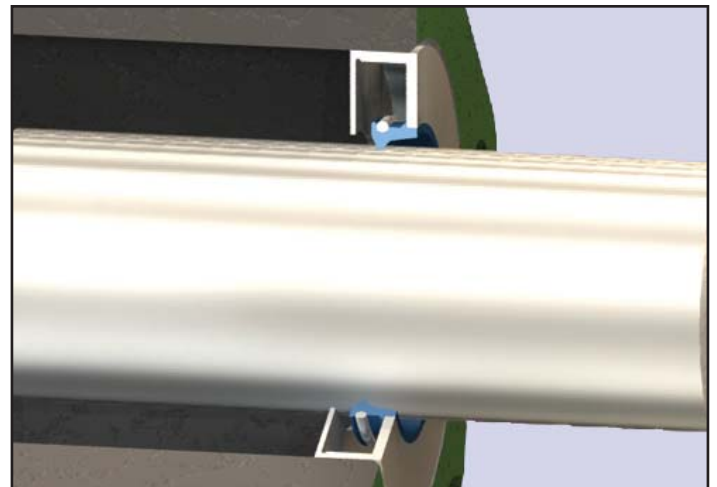


Close Coupled to NEMA "C" Motor



### PACKED BOX

The packed box seal is suited for general purpose applications. The standard packing has a temperature limit of 250°F (121°C), with special fitting available for higher temperature applications. The gland should be adjusted to allow slight seepage.



### LIP SEAL

The lip seal is suitable for low pressure sealing of lubricating fluids. The standard seal has a temperature limit of 212°F (100°C). Special fitting is available for higher temperature applications. Available in CW rotation only and 100 psi maximum discharge.





**THE LEADING FORCE** behind liquids™ since 1857



**Roper Pump Company** is a global supplier of high quality positive displacement pumps, designed to handle a broad range of industrial applications. In addition to helical gear pumps and progressing cavity pumps, we design and develop numerous custom pumps for customers with unique and demanding applications.

From a small pump company founded in 1857, Roper Pump Company has grown into a technological leader. With a large installed base, we have both the knowledge and experience to help you solve your most challenging pumping problems...and our strong global distribution network ensures that your needs are met on time, every time.

## Our Markets



### INDUSTRIAL

Roper Pump Company's rugged and dependable range of positive displacement pumps provides versatile pumping solutions for even the most challenging industrial applications.



### TRANSPORT

With over a century of experience in liquid cargo transfer, Roper Pump Company has always been trusted to load and unload your tankers quickly and safely.



### POWER GENERATION

For reliable operation of engines, compressors and turbines, thousands of customers depend on Roper Pump Company fuel pumps, lube pumps and liquid fuel flow dividers.



### OIL & GAS

Roper Pump Company has numerous pumping solutions from the well to the refinery. Our industry leading DragonSlayer® Power Sections allow mud motors to run longer at unprecedented temperatures and depths.

### Roper Pump Company

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