

3LS

3LS Industrial Screw Pumps

Shanley Pump  
& Equipment, Inc.



# 3LS

## Features

The 3LS Series pump is a three rotor screw pump offered by Shanley Pump and Equipment, Inc. The pump has a main drive screw which is connected to the power source. Pump rotation is normally clockwise as viewed from the drive end but can be counter-clockwise as well.

Additionally, a button or pipeline mounted relief valve is an available option on all pumps. The unit is constructed from a variety of special metals, however, as a standard the following applies:

Casing - Cast Iron or optional carbon steel  
Screw - Nitrided steel, hardened and grounded  
Flow Rate (Gpm/M)-2.6 to 1535 GPM  
Viscosity-32ssu to 30,000 SSU  
Speed-750 to 4000 RPM  
Temperature Range -32° to 250° F

## Description

There are two idler screws which are driven hydraulically by the main rotor screw. As the pump turns, these three screws intermesh and run inside of the pump housing. This results in closed cavities which transfer the liquid from the suction to the discharge side of the pump as the pump rotates. Due to the close tolerances of the pump design, a precise flow per pump revolution is achieved.



**Shanley Pump & Equipment, Inc.**  
2525 S. Clearbrook Drive  
Arlington Heights, IL 60005  
P: 847.439.9200  
F: 847.439.9388  
www.shanleypump.com  
sales@shanleypump.com

## Usage

The 3LS Series Pumps are designed for handling lubricating fluids. These fluids are found most commonly in applications where forced oil lubrication is required for rotating machinery. Other applications may include:

Hydraulic services  
Oil Circulation  
Fuel Transfer  
Burner fuel services

Many other types of services are served by these 3LS Series three rotor screw pumps, if the fluid has lubricating properties and the service is within the design parameters of the pump.

## Main Applications

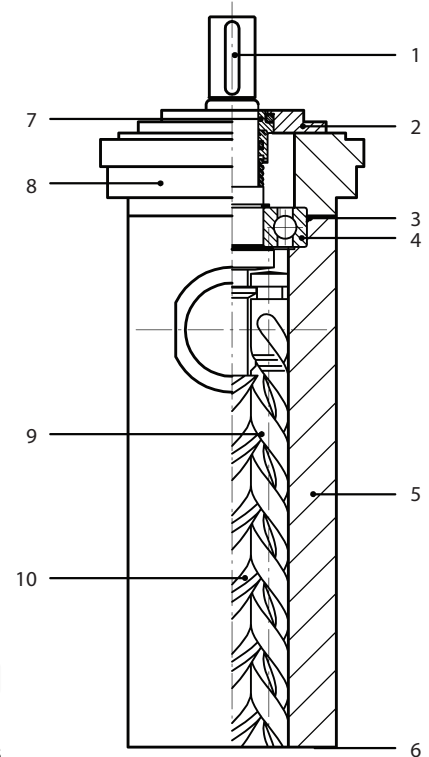
- Plant Engineering Pumping
- Oil Industry Pumping
- High-Viscosity Fluid Pumping
- Plastic Processing & Manufacturing
- General Purpose Pumping
- Hydraulic Fluid Pumping
- Light Oils Recirculation
- Clear Liquids Pumping
- Slightly Polluted Liquids

**GPM** 2.6 - 1535 GPM

**PSI** up to 435 PSI

**TEMP** -32° F - +250° F

- 1.) Key
- 2.) Inspection Flange (not on PXC025)
- 3.) O-Ring
- 4.) Ball Bearing
- 5.) Cast Iron Pump Casing
- 6.) O-Ring
- 7.) Mechanical Seal or Radial Seal
- 8.) Cast Iron Connection Flange
- 9.) Cast Iron Idler Spindle
- 10.) Nitride Steel Driving Spindle



STEEL SS 304 CAST

Sectional Drawings

[Click here for dimensional drawings](#)



### Performance Curve

For specific applications data on viscosity and pressure please contact us and we send you details about flow rates.



To download our screw pump fax form click here