

# 450-SERIES

Submersible Sump Pumps

# Liberty Pumps®

A Family and Employee Owned Company

**1/2 hp**  
**1-1/2" Discharge**  
**3/8" Solids Handling**

## Features

- Vortex impeller permits passage of solids without clogging
- Polypropylene and powder coated aluminum construction
- Stainless-steel rotor shaft
- Non-corrosive stainless-steel fasteners
- Oil-filled, hermetically sealed motors with thermal overload protection
- Permanently lubricated upper and lower bearings
- Quick-connect 10' standard power cord allows replacement of cord in seconds without breaking seals to motor. (25' length optional)

Deep finned powder coated aluminum motor housing provides over 200% more cooling capacity than cast iron housings!



Model 457 VMF



## Models

- 450** Manual
- 451** Mercury-free wide-angle float switch, integrally wired, with Quick-connect feature
- 453** Mercury-free wide-angle float switch, with series plug
- 457** VMF, Vertical Magnetic Float switch



innovate. evolve.

# 450-Series

## Impeller

Vortex style high temp engineered thermoplastic

## Finishing

Powder coat

## Max Fluid Temperature

140°F (60°C) Intermittent  
104°F (40°C) Continuous duty

## Power Cord Type

SJTW Quick-connect 10' standard (25' length optional). For 25' optional cord length, add a "-2" suffix to model number. Example: 451-2 for Model 451 with 25' cord

## Motor Housing

Aluminum

## Shaft

Stainless

## Hardware

Stainless

## Mechanical Shaft Seal

Engineered double lip seal with stainless-steel springs

## Bearings

Permanently lubricated upper and lower ball bearings

## Motor Specifications

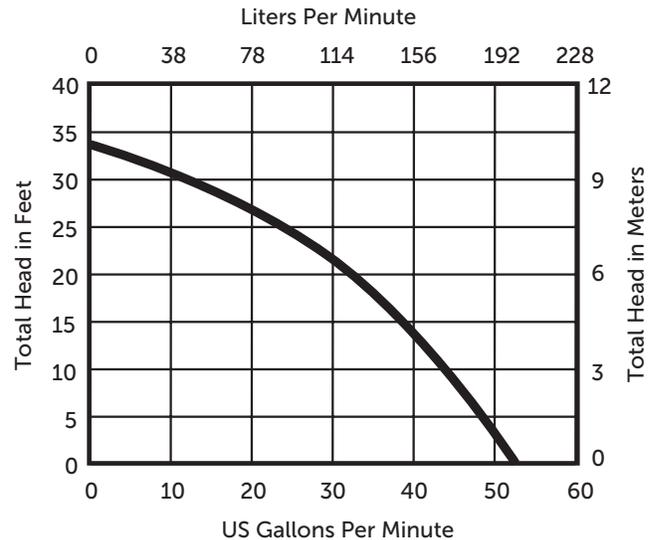
1/2hp 115V 7.5A  
Oil-filled; Thermally protected

## Dimensional Data

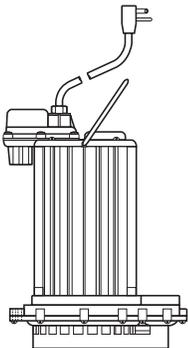
**Weight:** 12.5 lbs  
**Height:** 12.5"  
**Major Width:** 9.6"  
**Minimum Sump Diameter:** 14" (10" on Model 457)

## Performance Curve

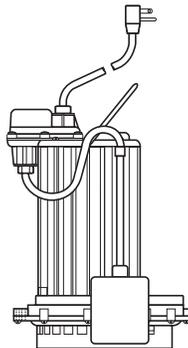
60 Hz, 3450 RPM



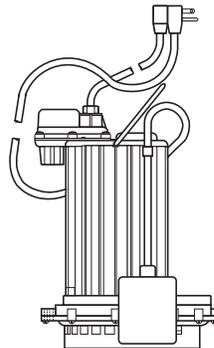
## Effluent Models



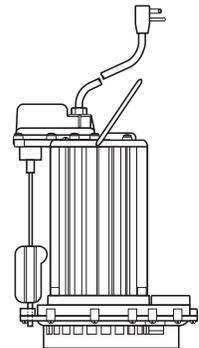
**Model 450**  
Manual, no float switch



**Model 451**  
Quick-connect wide-angle float switch



**Model 453**  
Wide-angle float switch with series (piggyback) plug allows for manual operation of pump



**Model 457 VMF**  
VMF, magnetically operated vertical float switch - operates in a 10" diameter sump

## Sump Models