

# Liberty Pumps®

## LEH100-Series



### High Head Sewage Pumps

**1 hp  
2" Solids-Handling  
2" or 3" Flanged  
Discharge  
53' Maximum TDH**

#### Features:

- Rugged 2 vane, semi-open cast iron impellers
- Cast iron housings and volute with all stainless steel and brass fasteners
- 17-4 PH stainless steel shaft
- Oil-filled, hermetically sealed motors
- Built-in thermal protection on single phase models
- 2" or 3" flanged discharge
- Permanently lubricated upper and lower ball bearings
- Unitized shaft seals
- Single float mechanical level control with series plug for manual bypass operation—standard on single-phase automatic models
- Adjustable pumping range
- Quick-disconnect 10' standard power cord allows replacement of cord in seconds without breaking seals to motor (25' and 35' lengths optional)

#### Models:

##### SINGLE PHASE

LEH102M 230V, 12a, manual  
LEH102A 230V, 12a, automatic

##### 3-PHASE

LEH103M 208-230V, 9a, manual\*  
LEH104M 440-480V, 4.5a, manual\*  
LEH105M 575V, 3.3a, manual\*

\*Note: 3-phase models require control panel for automatic operation. See sewage accessories literature for complete information on all simplex and duplex controls.

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# LEH100-SERIES TECHNICAL SPECIFICATIONS

## PUMP

The pump(s) shall be model \_\_\_\_\_ as manufactured by Liberty Pumps, Bergen, N.Y. or equal. The pump(s) shall have a capacity of \_\_\_\_\_ GPM at a total dynamic head of \_\_\_\_\_ feet. Motor size shall be 1 horsepower, \_\_\_\_\_ phase, 60 hz. and \_\_\_\_\_ volt operation.

## MOTOR

The pump motor shall be of the submersible type, oil filled, and hermetically sealed. Single phase motors shall have thermal overload protection embedded in the windings, and shall automatically reset when motor cools. Three-phase motors shall have overloads incorporated into the control panel, properly sized for the horsepower and amperage of the pump(s).

The rotor shaft shall be made of 17-4 PH stainless steel and shall be supported by upper and lower ball bearings.

The power cord shall be of the quick-disconnect design.

## IMPELLER

The pump impeller shall be cast iron, 2 vane, semi-open, and shall be capable of passing a 2" spherical solid.

## SEAL

The shaft seal on single phase units shall be of the carbon/ceramic unitized design, with BUNA N elastomers and stainless housings. 3 phase units are silicon carbide.

## EXTERNAL CONSTRUCTION

The pump volute, legs and motor housing shall be heavy gray iron castings, class 25 or better. All castings shall be powder coated before assembly.

All fasteners shall be of 300-series stainless steel.

## LEVEL CONTROL

The pump shall be controlled by an adjustable mechanical switch sealed in a PVC float, and shall have a series plug for manual bypass operation.

## ALL MODELS: 1 HP, 3450 RPM

	MODELS	VOLTS	PHASE	AMPS	DISCHARGE	AUTOMATIC
SINGLE PHASE	LEH102M2	230	1	12	2" FLANGED	NO
	LEH102A2	230	1	12	2" FLANGED	YES
	LEH102M3	230	1	12	3" FLANGED	NO
	LEH102A3	230	1	12	3" FLANGED	YES
3-PHASE	LEH103M2-2	208-230	3	9	2" FLANGED	NO
	LEH104M2-2	440-480	3	4.5	2" FLANGED	NO
	LEH103M3-2	208-230	3	9	3" FLANGED	NO
	LEH104M3-2	440-480	3	4.5	3" FLANGED	NO
	LEH105M2-2	575	3	3.3	2" FLANGED	NO
	LEH105M3-2	575	3	3.3	3" FLANGED	NO

10' cord standard on single phase models. For 25' cord option, add a "-2" suffix to model number. Example: LEH102A2-2  
For 35' cord add "-3" suffix to model number. Example: LEH102A2-3

25' cord is standard on 3-Phase models. 3-Phase models require panel for automatic operation.  
See sewage accessories literature for complete information on all simplex and duplex controls.

## DIMENSIONAL DATA:

**Weight:** LEH102M: 64 LBS.

**Height:** 18.9"

**Major Width:** 12.5"

**Maximum fluid temperature:** 140 degrees F.

**NOTE:** LEH-Series high-head pumps require a minimum application of 15' head.



Specifications subject to change without notice.

## PERFORMANCE CURVE 60 HZ

