

Pumping Liquid/Liquid Motive Models LL, LM, LH

One of the most common applications for a Penberthy jet pump is to pump liquids using a liquid motive. In the process industry, this is perhaps one of the most recognized uses for a jet pump. Like all Penberthy jet pumps, liquid motive jet pumps are simple in design with no moving parts to wear out, they require no lubrication, are virtually maintenance-free and are easy to install without special structures or foundations. All Penberthy jet pumps are self-priming and are available in a variety of materials to suit the specific characteristics of the liquids involved in the process.

The **L Series** jet pumps, **Models LL, LM and LH**, are specifically designed to operate well in a range of liquid pumping applications. Some industries in which these models are particularly well-suited include chemical processing, textile manufacturing, petroleum production & refining, power generation, mining, nuclear power generation, waste water treatment & processing, construction, distilling and potable water processing. Specific applications within these industries might include: handling condensate, flow volume multiplication, for pumping, making dilutions, pumping wells, circulating solutions, emptying cesspools, pumping brine solutions, extracting solvents, draining cellars & tanks, pumping out barges, acidifying, causticizing oils, producing emulsions and elevating/lifting liquids.

Models Available

LL, LM, LH



Selection Guide

To determine the correct jet pump for a specific application, certain operating information is necessary. Simply make note of the individual specification data that is required under each of the functions listed below: MOTIVE, SUCTION and DISCHARGE. By completing our application form with the required information, identifying the correct jet pump will be easy. Then simply contact your Penberthy representative who will be able to select the optimum jet pump based on the data.

MOTIVE:

- Liquid
- Pressure (Available)
- Flow Rate (Available volume)
- Specific Gravity/Viscosity
- Temperature/Vapor Pressure

SUCTION:

- Liquid
- Suction Lift or Static Head
- Specific Gravity/Viscosity
- Temperature/Vapor Pressure
- Required Pumping Capacity

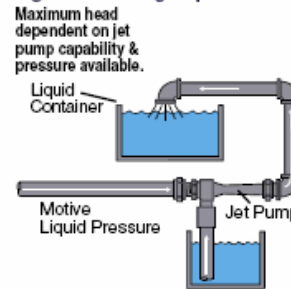
DISCHARGE:

- Pressure or Discharge Head (That unit must overcome)

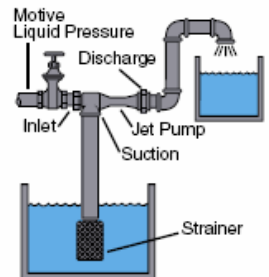
All conditions are measured at the Motive, Suction and Discharge ports.

Typical Applications

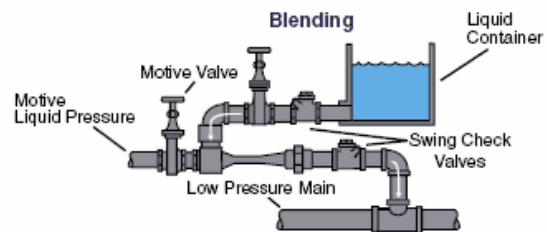
Lifting Or Elevating Liquids



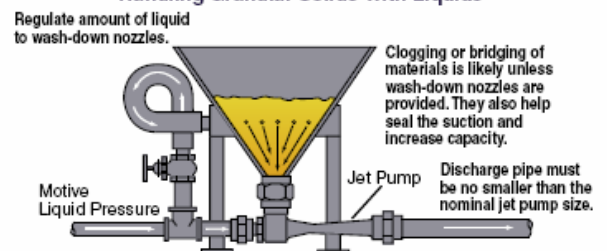
Draining Sump or Well



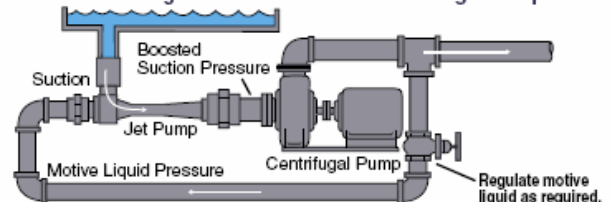
Blending



Handling Granular Solids With Liquids



Boosting Suction Pressure To Centrifugal Pump



Model Construction Data

Model	LL, LM, LH	
Sizes Available	1/2"A-4"	Standard Materials
		Cast: Low Lead Bronze, Iron, Carbon Steel, 316 STS
	4" & up	Fabricated: Carbon Steel, 316 STS
	1/2"A-3"	Non-Metallic: PVC, PP, PVDF (Kynar™)

Model Specifications

Model	LL Low Head	LM Medium Head	LH High Head
Based on water at Sp. Gr. = 1.0			
Motive medium pressure range	15-200 psig (100-1380 kPag)	15-200 psig (100-1380 kPag)	15-200 psig (100-1380 kPag)
Nominal motive medium pressure-psig/psig of discharge (kPag/kPag)	2 psig (15 kPag) (Sp. Gr. 1.0)	1.5 psig (10 kPag) (Sp. Gr. 1.0)	1 psig (7 kPag) (Sp. Gr. 1.0)
Discharge head pressure range	to 50 ft. (15.2 m)-H ₂ O	40 to 80 ft. (12.2-24.4 m)-H ₂ O	80 ft. (24.4 m) or more-H ₂ O
Suction lift	up to 27 ft. (8.2 m)-H ₂ O	up to 27 ft. (8.2 m)-H ₂ O	up to 27 ft. (8.2 m)-H ₂ O
Minimum NPSH	3 ft. (0.9 m)-H ₂ O	3 ft. (0.9 m)-H ₂ O	3 ft. (0.9 m)-H ₂ O