



L-Series
Liquid Ring Systems



Product overview



L-BL2
"Pump in a Box"

L-BL2

Also known as the Elmo Rietschle "Pump in a Box", these self-contained portable units are oil free and air cooled. They include an L-BV liquid ring pump, industrial electric motor, discharge separator, seal water cooler and discharge air cooler. To install – simply connect the suction line and motor and fill the water tank – its ready to go!

Maintenance and wear are minimal thanks to contact free compression and a built-in discharge air cooler. Additional features include: quiet operation, continuous duty design and suitability for humid environments.

Water loss is minimized due to the collection of condensate from the exhaust; as a result, many applications require little or no additional water after start-up.



L-BL2
Frame mounted unit

L-BL2 frame mounted units

These units combine L-BL2 liquid ring pumps and side channel blowers G-BH1 (or vacuum pumps using another operating principle) mounted on a frame. The blower can operate either at a fixed rotational speed or at variable speed using a frequency converter. This increases the pump's performance many times over in the 1.19 to 4.43 in. HgV range.

L-BL2 split design

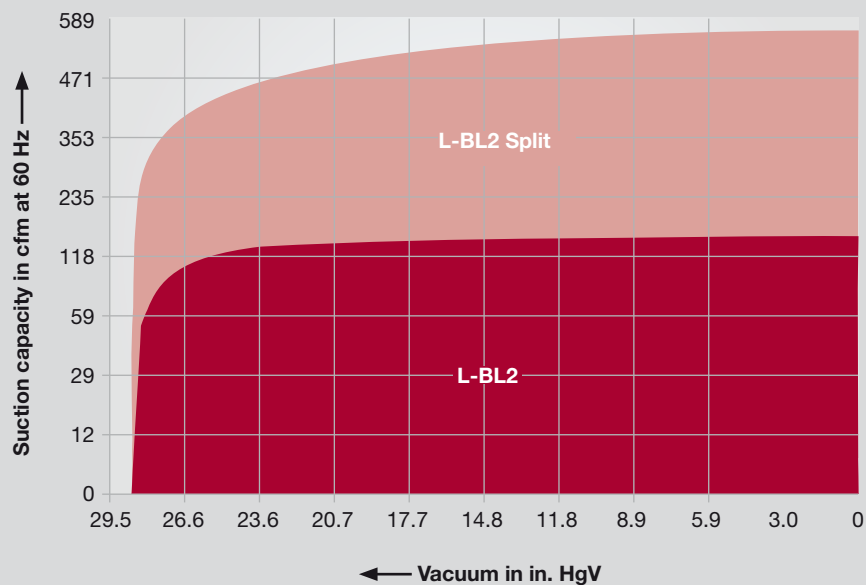
For very high volumes of air, the L-BL2 pumps are first split into individual components. Then tubing, valves and other accessories are added before the different parts are eventually reassembled and mounted on a steel plate. These split design units are suitable for applications involving aggressive suction materials (e.g. food & beverage) and are available in versions made entirely of stainless steel.

We also sell versions for integration into a CIP cleaning process. Air-to-water heat exchangers or plate heat exchangers are available.



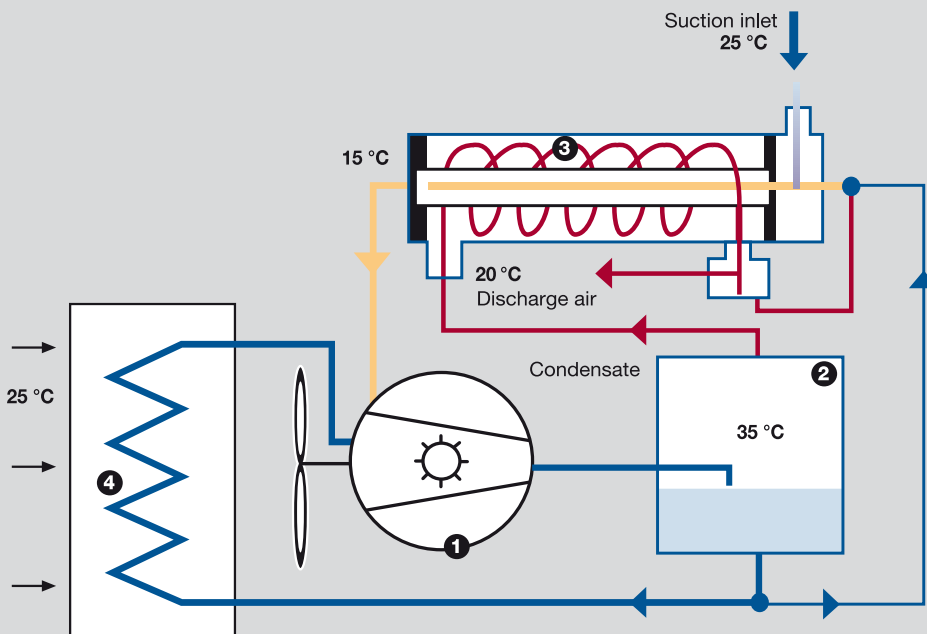
L-BL2
Split design

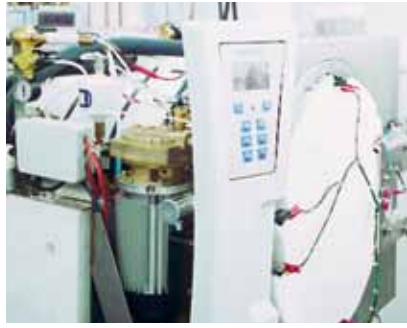
Technical specifications



Operating principle

The discharge air cooling system in the L-BL2 has been patented and needs no additional energy: unlike conventional closed circuit systems with liquid ring vacuum pumps, the L-BV pump (1) cools the warm, vapor saturated discharge air downstream from the water separator (2) via the discharge air cooler (3). The temperature falls below room temperature. Water vapor condenses as the temperature drops and is returned to the operating liquid. Which means that the L-BL2 vacuum pumps can be operated without continuously supplying make-up water. An air water cooler (4) cools down the circulating water to 7 K below ambient temperature and returns it to the pump.





Applications

Ceramic and brick industry

- Degassing

Drying systems

Environmental engineering

- Filter technology – mobile processing of hydraulic oil
- Sanitation technology
- Vacuum tankers

Food and beverage industries

- Central vacuum systems
- Dairy industry
- Filtering systems
- Food preservation
- Salt water desalination
- Sugar production
- Water degassing of beverages

Lifting and handling

Medical industry

- Central vacuum systems
- Steam sterilization (autoclaves)

Packaging industry

- Blister pack machines
- Filling and sealing machines
- Filling PET bottles with beer
- Rolling machines

Plastics industry

- Adhesion of plastic parts
- Calibrating
- Degassing rubber parts
- EPS foaming
- Extruder degassing
- Granulate conveying
- Removal and compression of vinyl chloride gas

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