







L-BL2
"Pump in a Box"





## Liquid ring packages

#### L-BL2

Also known as the Elmo Rietschle "Pump in a Box", these 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.

#### 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 40 to 150 mbar range.

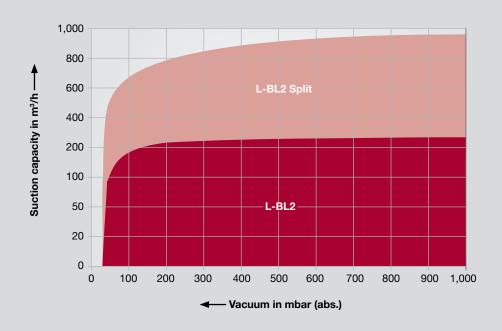
Water loss is minimized due to the collection of condensate from the exhaust; as a result, many applications require little or no additional water after start-up.

#### L-BL2 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 reassambled 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.

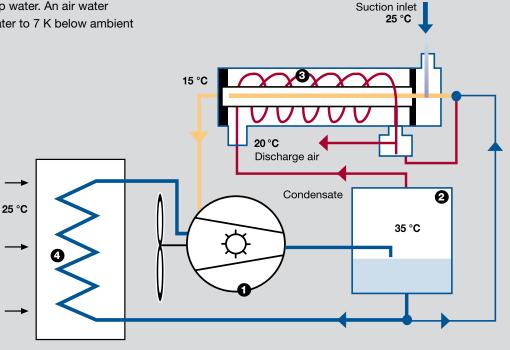
We also sell versions for integration into a CIP cleaning process. Air-to-water heat exchangers or plate heat exchangers are available.

## 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.





# Technologies for all vacuum and pressure applications



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