



SIHI® LPH 85/95 Liquid Ring Vacuum Pump

Cool, robust, cost-effective, two-stage
liquid ring vacuum pump



Experience In Motion

Cool, robust and cost-effective

SIHI LPH 85 and 95 Series two-stage liquid ring vacuum pumps are designed for reliability and long service life in a variety of severe applications. These displacement pumps are engineered to handle nearly any gas and vapor, making them ideal for the most demanding vacuum applications, including thermally sensitive and explosive media.

SIHI LPH 85 and 95 Series liquid ring vacuum pumps are two-stage displacement pumps featuring an uncomplicated yet robust design. They are capable of handling and exhausting dry and humid gases. Entrained liquid can be handled during normal duty. These pumps are applied in all fields where a pressure range of 33 to 900 mbar (25 to 675 torr) is required.

Features and benefits

- Near isothermal compression enables the safe handling of thermally sensitive and explosive media.
- Lower maintenance and more reliable operation, thanks to the oil-free design with no lubrication in the working chamber
- Longer service life and minimized wear made possible by non-contacting parts, plus incorporated dirt and central drains.
- Maintenance-free bearings contribute to an extended mean time between failure (MTBF) of 40,000 hours.
- Broad application versatility from a wide range of available materials, including use as a compressor with little or no modification
- Low-noise and almost vibration-free operation extend pump life.
- ATEX-compliant for Category 1 (does not use flame arrestors) and Category 2 applications



Product family

- LPH 85340
- LPH 85353
- LPH 95354
- LPH 95367

Operating parameters

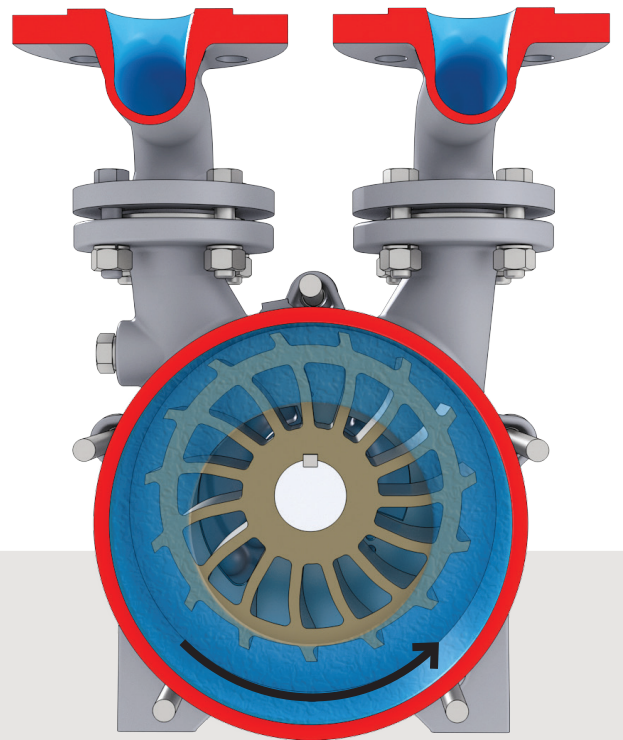
- Suction volume flows to 5,000 m³/h (2,943 cfm)
- Suction pressures from 33 to 900 mbar (25 to 675 torr)
- Gas temperatures to 160°C (320°F)
- Service liquid temperature to 60°C (140°F)

Industries

- Chemical
- Pharmaceutical
- Textile
- Pulp and paper
- And many more

Typical applications

- Distillation
- Drying
- De-gassing
- Filtration
- De-odorization
- De-oxygenation
- Product transfer
- Vapor recovery
- Central vacuum systems



Working principle

A rotating element (impeller) is eccentrically mounted within a round center body. Service liquid is centrifuged into a uniform liquid ring around the circumference of the center body. Volume between each of the impeller blade sections varies, relative to the liquid ring, as the impeller rotates. This creates a reciprocating piston action on the volume of gas contained within each of the blade sections. As volume increases, a vacuum is created; as volume reduces, compression occurs.



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PUFLY000129 (EN/AQ) March 2020

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