

# Liquid Ring Vacuum Pumps

two-stage

**LOH 05501**



**Operating pressure:** 80 to 1013 mbar  
**Suction volume flow :** 2,7 to 6,1 m<sup>3</sup>/h

## CONSTRUCTION TYPE

Sterling SIHI liquid ring vacuum pumps are displacement pumps of uncomplicated and robust construction with the following particular features:

- handling of nearly all gases and vapours
- non-polluting due to nearly isothermal compression
- oil-free, as no lubrication in the working chamber
- easy maintenance and reliable operation
- low noise and nearly free from vibration
- wide choice of material, therefore applicable nearly everywhere
- no metallic contact of the rotating parts

The LOH 05501 operates acc. to side channel principle and therefore the pump has the advantage, besides the above-mentioned features to handle large quantities of entrained liquid.

The Sterling SIHI liquid ring vacuum pumps LOH 05501 are two-stage pumps. They can be applied with an insignificant modification as compressors (see catalogue section liquid ring compressors).



## APPLICATION

Handling and exhausting of dry and humid gases; entrained liquid can be handled during normal duty. The pumps are applied in all fields where a pressure of 33 to 900 mbar must be created by robust vacuum pumps.

Fields of application are for example:

- chemistry and pharmacy for distilling and degassing
- electric industry for impregnation and drying
- plastics industry for degassing etc.

## NOTE

During operation the pump must continuously be supplied with service liquid, normally water, in order to eliminate the heat resulting from the gas compression and to replenish the liquid ring, because part of the liquid is leaving the pump together with the gas. The liquid can be separated from the gas in a liquid separator (see catalogue part accessories).

It is possible to reuse the service liquid.

The direction of rotation is clockwise, when looking from the drive on the pump.

## GENERAL TECHNICAL DATA

Pump type	unit	LOH 05501		
Speed	rpm	1150	1450	1700
Max. compression over pressure	bar		2	
Max. admissible pressure difference	bar		3	
Hydraulic test (over pressure)	bar		4	
Moment of inertial of the rotating pump parts and of the water filling	kg · m <sup>2</sup>		0,0033	
Sound pressure level at a suction pressure of 80 mbar	dB (A)	64	65	66
Min. Pulley diameter permissible in case of V-belt drive	mm		100	
Max. gas temperature	dry °C saturated °C		200 100	
Service liquid				
max. Admissible temperature	°C		100	
max. viscosity	mm <sup>2</sup> /s		90	
max. density	kg/m <sup>3</sup>		1200	
volume up to shaft level	liter		1	
Max. flow resistance of the heat exchanger	bar		0,2	

The combination of several limiting values is not admissible.