

# Compressor

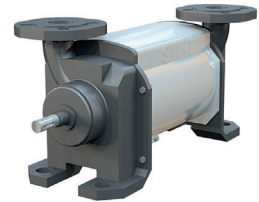
LPHX

LPH K 50523/60527

<b>Capacity</b> 55-95 m <sup>3</sup> /h	<b>Pressure range</b> 0,2-1,2 bar	<b>Material</b> Cast iron & Stainless steel
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## Description

A one stage liquid ring compressor with a simple robust design. With a free shaft end all options of shaft coupling, motor and DIN seals are available to adapt the pump to your industry.



AT 6300

## Range application

Pumping and compressing of dry gases and saturated vapours; the compressors can also handle liquids. The compressors are applied in all fields where a compression over pressure of up to 2 bar has to be created by robust compressors and only a small increase in temperature is admissible during compression.

Typical industries are chemical, pharmaceutical, food, plastic and rubber industry.

Vacuum is used for distillation, drying, degassing, filling and boiling.

## Design

The compressor works according to the liquid ring principle. Fluid pumps are in some regards related with displacement pumps since the pump wheel is eccentrically located in the round pump body. When the wheel is rotating a fluid ring is created along the pump body's inner wall. In the cells (the space between the pump body's wings) inside the fluid ring rising part volumes (intake) and then decreasing volumes (outlet) will be created under one rotation. Because of the intensive contact between the gas that is transported and the operating fluid, there is only a very little increase of temperature of the gas that is transported, so that it can be described as a isothermal compression. The fluid ring compression is used especially with high intake pressure, and has a double acting construction. The pump body makes intake and compression possible two times per rotation.

## Material combinations

Pos	OK*	OB**	4B
Casing	0.6025 cast iron	0.6025 cast iron	1.4408 Acid-proof steel
Central body	0.6025 cast iron	0.6025 cast iron	1.4408 Acid-proof steel
Guide disc	0.6025 cast iron	0.6025 cast iron	1.4404 Acid-proof steel
Shaft	1.4021 stainless steel	1.4021 stainless steel	1.4404 Acid-proof steel
Impeller	1.4308 stainless steel	1.0553 steel	1.4408 Acid-proof steel

\* only LPH 50523\*\* only LPH 60527