

Compressor

KPHX

KLH 47005/47105

Capacity 375-660m ³ /h	Pressure range 2-7bar	Material Cast iron & Stainless steel
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Description

A two 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.

Liquid ring compressor compresses medias in gas or steam form, and mixes of these, from a lower pressure to a higher pressure.

Range of application

Liquid ring compressors compresses medias in gas or steam media, as well as mixes of these, from a lower pressure to a higher pressure.

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

Typical applications are water aeration in aeration tanks on treatment plants, filtration in chemical and pharmaceutical industry and chlorine gas compressing.



AT 6300-05501

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 an 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

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Casing	0.6025 Cast iron	1.4408 Acid-proof steel
Central body	0.6025 Cast iron	1.4408 Acid-proof steel
Guide disc	0.6025 Cast iron	1.4408 Acid-proof steel
Shaft	1.4021 Stainless steel	1.4401 Acid-proof steel
Impeller	2.1096.01 Bronze	1.4517 Acid-proof steel