# Compressor KPHX

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

### **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.

ypical 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 is 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**

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Casing	0.6025 Cast iron	1.4408 Acid-proof steel
Central body	0.6025 Cast iron	1.4408 Acid-proof steell
Guide disc	0.6025 Cast iron	1.4408 Acid-proof steel
Shaft	1.0503 Steel	1.0503 Steel
Impeller	1.4027.05 Stainless steel	1.4517 Acid-proof steel