

# Compressor

LOHE

LOH K 25003/25007/25309

|  |                                    |  |
|--|------------------------------------|--|
| <b>Capacity</b><br>17-22 m <sup>3</sup> /h | <b>Pressure range</b><br>0,2-2 bar | <b>Material</b><br>Cast iron & Stainless steel |
|--|------------------------------------|--|

## Description

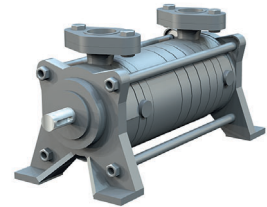
A two stage liquid ring compressor with a simple robust design. With a free shaft end all options of shaft coupling, motor and DIN seals are available to adapt the pump to your industry.

## Range 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 applications are

- within the plastic industry, for recycling of processing gases such as vinyl chloride
- the petrochemical industry, for compressing combustible gases such as gasoline fumes or hydrogen
- transport of gases in general, for example to a reactor



AT 6300-25003

## Design

The pump 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.

## Product key (example LOHE 05501 AN 001 01 0)

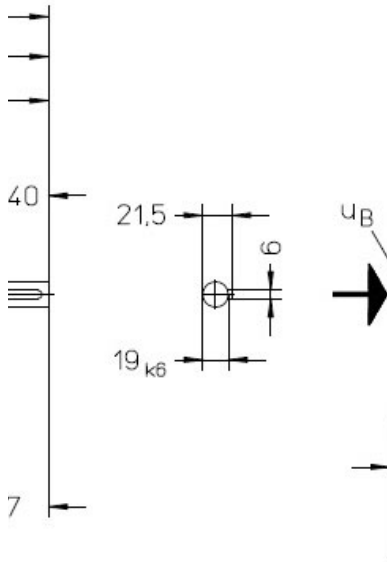
| Pos   | Description  | Code        | Explanation                        |
|-------|--------------|-------------|------------------------------------|
| 1-3   | Pump model   | LOH         | Liquid ring compressor             |
| 4     | Construction | E           |                                    |
| 5-10  | Pump size    | 20103-20107 | One stage pump                     |
|       |              | 05501-25309 | Two stage pump                     |
| 11-12 | Hydraulics   | A, B        |                                    |
|       | Bearings     | N           | 2 lubricated antifriction bearings |
| 13-15 | Sealing      | 131         | Mechanical sealing SIHI FK EBPGG   |
| 16-17 | Material     | 01          | See table below                    |
|       |              | 02          | See table below                    |
|       |              | 42          | See table below                    |
| 18    | Gasket       | 0           | O-ring                             |

## Material combination

| Pos          | 01                     | 02                        | 42                      |
|--------------|------------------------|---------------------------|-------------------------|
| Casing       | 0.6025 Cast iron       | 0.6025 Cast iron          | 1.4408 Acid-proof steel |
| Central body | 0.6025 Cast iron       | 1.0570 Steel              | 1.4408 Acid-proof steel |
| Guide disc   | 0.6025 Cast iron       | 0.6025 Cast iron          | 1.4408 Acid-proof steel |
| Shaft        | 1.4021 Stainless steel | 1.4021 Stainless steel    | 1.4401 Acid-proof steel |
| Impeller     | Rg9                    | 1.4027.05 Stainless steel | 1.4517 Acid-proof steel |

## Connections

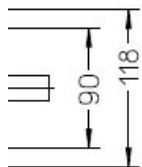
| Description | Designation 25003           |
|-------------|-----------------------------|
| N1          | Inlet G 1 1/4               |
| N2          | Outlet G 1 1/4              |
| UB          | Service fluid G 3/8         |
| Uc          | Cavitation protection G 1/8 |
| Ue          | Drainage G 1/4              |



## Service fluid in m<sup>3</sup>/h

| Pressure in bar | 0,4  | 0,8 | 1,2 | 2,0 |
|-----------------|------|-----|-----|-----|
| 25003           | 0,18 | 0,3 | 0,4 | 0,6 |

Total service fluid for installation where the fluid is directed straight in to the drain.  
By other installations ask Armatec



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