Pumps Condensate Pumps KH 1

Very Lightweight Condensate Pump

Technical Data

Connection DN Nominal Pressure PN Motive Medium Inlet Blow Off Line Lifting Height Driving Pressure Flow Rate Temperature Medium 25 + 50 16 G 3/4A G 3/4A 40 m up to 8 bar 3430 l/h 200 °C gases and steam

Description

Condensate Lifters are driven by motive gas. They are conveying elements for steam or cold condensate systems through which the accumulated condensate is re-conducted to the process on a higher pressure level.

The KH1 is a float-operated condensate lifter. All parts thereof consist of deep drawn stainless steel with outstanding resistance to corrosion. The valve cone is fitted with a metallic seal.

The liquid medium is gravity fed into the inlet side, thus getting to the lowest part of the condensate lifter. Then it is conducted through the outlet side by means of the motive gas overpressure. Steam from the system or gas and/or compressed air are used as motive gas. It is fed on the inlet side at the condensate lifter head via an intermittent pilot valve. During filling, the receiver is vented on the outlet side by a second pilot valve, which opens alternately with the inlet pilot valve.

Opening and closing of both valves is controlled by a float in the condensate lifter interior, which calipers the filling level of the pressure vessel. The float is designed for liquids featuring a density similar to water.

Standard

- » all CrNiMo steel construction
- » quick release body clamp ring
- » two backdraft dampers
- » operated with steam, gases or air

Options

- » for oil or other liquids
- » special versions on request

Product features in brief

- » lightweight and compact for its deep-drawn components
- » stainless steel resistant to corrosion
- » inlet and outlet arranged on an extremely low level

Operating instructions, know how and safety instructions must be observed. All the pressure has always been indicated as overpressure. We reserve the right to alter technical specifications without notice.



Flow Rates [l/h] and Pressure Ranges [bar] DN 25

| motive | back pressure bar | | | | |
|------------|-------------------|-----|-----|-----|-----|
| press. bar | 0.5 | 1 | 1.5 | 2 | 2.5 |
| 3 | 690 | 340 | 270 | 210 | 160 |
| 6 | 1430 | 780 | 470 | 420 | 380 |
| 8 | 1790 | 940 | 540 | 480 | 420 |

Flow Rates [l/h] and Pressure Ranges [bar] DN 50

| motive | back pressure bar | | | | |
|------------|-------------------|------|------|------|------|
| press. bar | 0.5 | 1 | 1.5 | 2 | 2.5 |
| 3 | 1370 | 1070 | 940 | 770 | 470 |
| 6 | 2710 | 1640 | 1230 | 1150 | 1020 |
| 8 | 3430 | 2510 | 2100 | 1700 | 1540 |
| | | | | | |



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| Materials | | | |
|-------------------|-----------------------|--------------|--|
| Body | | CrNiMo-steel | |
| Body Seal | | Silikon | |
| Seat, Cone | at, Cone CrNiMo-steel | | |
| Float | | CrNiMo-steel | |
| Backdraft Dampers | | CrNiMo-steel | |
| | | | |
| Dimensions | simmi | | |
| size | nominal diameter | | |

| nominal diameter | | | |
|------------------|----------------------|--|--|
| DN 25 | DN 50 | | |
| 280* | 285* | | |
| 315 | 315 | | |
| 455 | 455 | | |
| | DN 25 280* 315 | | |

* without backdraft dampers

Weights [kg]

| nominal diameter | |
|------------------|-------|
| DN 25 | DN 50 |
| 17.5 | 21 |

Special designs on request.

The pressure has always been indicated as overpressure. Mankenberg reserves the right to alter or improve the designs or specifications of the products described herein without notice.

