

# Side Channel Pumps

CEH 1201 ... 6108  
CEH 1202/7 ... 6107/7



## TECHNICAL DATA

|                     |   |
|---------------------|---|
| Output:             | max. 35 m <sup>3</sup> /h                           |
| Delivery head:      | max. 354 m  |
| Speed:              | max. 1800 rpm                                       |
| Temperature:        | max. 180 °C   |
| Casing pressure:    | PN 40   |
| Shaft sealing:      | stuffing box or<br>standard mechanical seal         |
| Flange connections: | DIN 2501 PN 40                                      |
| Sense of rotation:  | anti-cloc kwise,<br>seen from the drive on the pump |

## APPLICATION

Sterling SIHI-side channel pumps in combination system:  
self-priming - handling gas along with the liquid - low  
noise pumps of the series CEH with **NPSH inducer stage**  
are used for problem-free pumping of liquids at unfavourable  
suction side pumping conditions. They are also applicable for  
positive suction heads below 0,5 m.

The possibility to employ pumps of this series  
of different materials  
with uniform dimensions  
exchangeable SIHI standard components  
and of the same performance characteristics  
in particular for liquids at the boiling point has led to broad  
application in pumping of  
condensate  
distillate  
refrigerant  
LPG and  
boiler feed water.

Especially in  
chemical plants, as well as  
distillation columns in the beverage industry  
the pumps of this series have been frequently used.

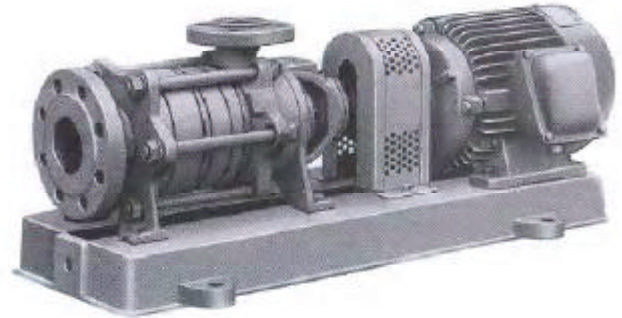
Pumps of the CEH .... / 7 series with retaining stage for level  
control of the liquid in the pump (protection against dry running)  
are specially applied for handling liquids under vapour pressure,  
also from underground tanks.

## DESIGN

Pumps of the series CEH are horizontal, self-priming side  
channel pumps of handling gas along with the liquid, in  
segmental type construction with open vane wheel impellers. To  
obtain favourable NPSH values the CEH pump combines one or  
more side channel stages with a specially designed centrifugal  
suction stage impeller.

The programme comprises 6 sizes each with 1-8 stages. The  
existing material designs allow optimum rating for the  
respectively desired performance range and the pumping  
medium.

Pumps of the series CEH .... / 7 are equal to the CEH series,  
but equipped with retaining stage.  
The programme comprises 6 sizes with 2-7 stages. The  
hydraulic components used in both series origin from our side  
channel pump assembly of prefabricated parts.



## CONSTRUCTION

### Casing pressure

Max. 40 bar from - 40 °C to + 120 °C  
pressure rating for higher temperatures as per DIN 2401

### Please observe:

Technical rules and safety regulations.  
Casing pressure = inlet pressure + delivery head at  
minimum flow.

### Position of branches:

Suction branch axial, discharge branch pointing radially  
upwards.

### Flanges:

The flanges correspond to DIN 2535 PN 40. Flange design  
to DIN 2512 with groove and drilled to ANSI 150 as well as  
BS. Table F, is possible.

### Hydraulic:

First hydraulic. Designation of this construction type: A

### Bearing:

One grease-lubricated grooved ball bearing to DIN 625 and  
one liquid surrounded sleeve bearing. Designation of this  
construction type: A

### Sense of rotation:

Anti-clockwise, seen from the drive on the pump.

### Shaft sealing:

The shaft can be sealed either by stuffing box standard  
mechanical seal.  
Dependent on the application conditions, the pump  
construction material and the number of stages, the shaft  
seals indicated on the back page can be used.