



**SONDEX®**

## ▶ SC85 Condenser Plate Heat Exchanger

### Recommended Applications:

The SC85 Sondex condenser is specially developed for condensing of low pressure vapour and handling of duties where there is a big difference between the hot and cold side.

### Design Principle:

The Sondex SC85 plate with lengths from 1,7 m (5,6 ft) and a special designed thermal pattern will cover duties up to 700 m<sup>3</sup>/h (3.082 gpm), on the DN200 side and 3.000 m<sup>3</sup>/h (13.209 gpm) on the DN400 side in a single pass solution, meaning that all the connections are on the head side. This will ensure easy pipe- and service work, and by dismantling the exchanger for service, no pipes need to be removed.

The heat transfer is obtained, when the warm medium transfers energy through the thin, strong flow plates between the channels and delivers it to the cold opposing medium without mixing the two media.

Counter-current flow creates the optimal efficiency. The plate- and inlet design allows effective, easy CIP (Cleaning in Place) of all "flow" surfaces.

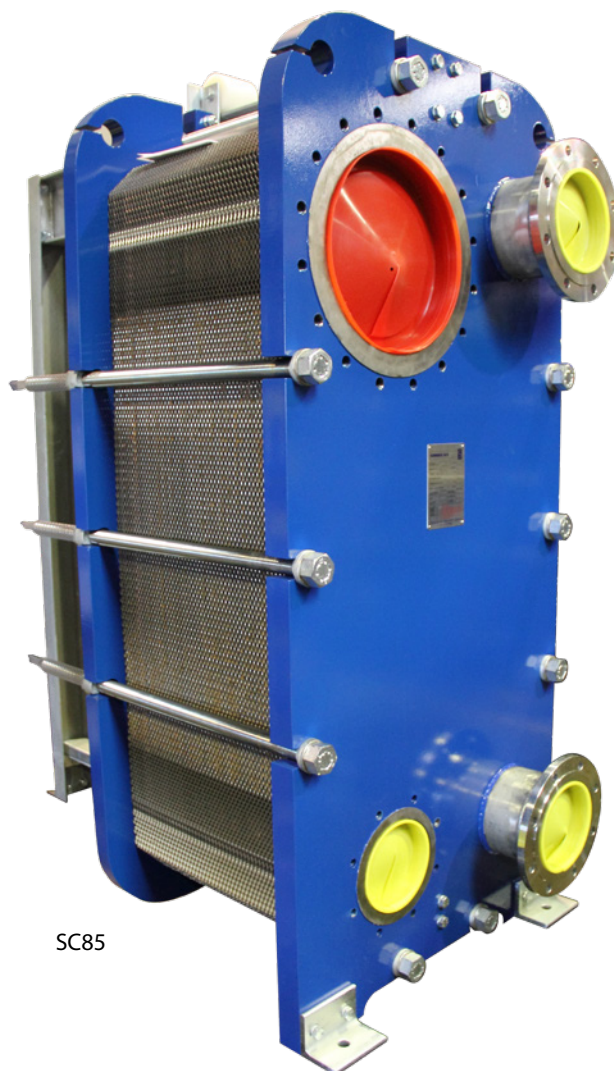
### Flow Plates

The corrugated "herringbone" pattern ensures turbulent flow in the whole effective area. Furthermore, this pattern brings "metallic" contact between the plates. The plates are strongly guided by the gasket during the assembly of the plate heat exchanger. The plate pack is held firm and safely between the fixed head and movable follower of the frame.

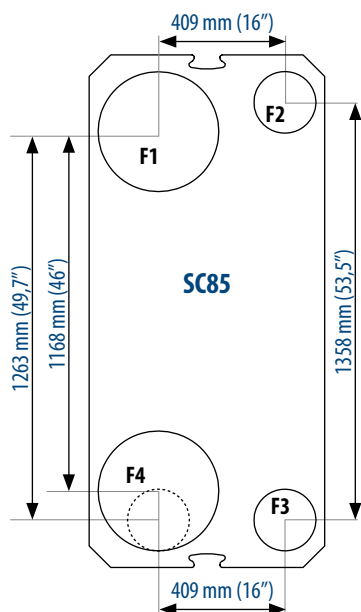
### Data Required for Correct Quotation:

- |                 |                            |   |
|-----------------|----------------------------|---|
| • Duty          | • Flow rate                | • Temperature                               |
| • Type of media | • Working pressure         | • Working Temperature                       |
| • Pressure loss | • Thermodynamic properties | • Product concentration by inlet and outlet |

Above data determines the choice of heat exchanger.



SC85



### Frame:

- Painted frame, colour RAL 5010 (available in other colours)
- Both frames comes with clamping bolts placed around the frame edge.

### Design Pressure:

- Painted frames: 0.6/1.0 MPa. (87/145 PSI)

### Construction Standard:

- EN13445 (PED 2014/68/EU)
- ASME sec VIII, Div. 1

### Connections:

- Inlet product side (F1): DN400/16" flange.
  - Outlet product side (F4): DN200/8" or DN400/16" flange.
  - Outlet medium side (F2): DN200/8" flange on pipe.
  - Inlet medium side (F3): DN200/8" flange on pipe.
- Flanges in carbon- or stainless steel. According to all known standards.

### Plate Material:

- AISI 304 and AISI 316.
- Also 2 x 0.4 mm "Sonder Safe" plates, for food and industry.
- Other materials available on request.

### Gaskets:

The gasket is placed in the closed gasket groove, that is formed by the plates. This design makes the plate suitable for high working pressures. The plates are strongly guided by the gasket during the assembly of the plate heat exchanger. Materials: NBR and EPDM. Other materials available on request.

### Extra Equipment:

- Safety cover in stainless steel
- Insulating jacket
- Assembling spanner
- Foundation feet for frame

For exact dimensions of the PHE please refer to the dimension drawing