



SONDEX®

▶ S37 - SN51 Plate Heat Exchangers

Recommended Applications:

The S37 and SN51 plate heat exchangers is specially designed for the HVAC area, heat recovery well as for the food-, industrial- and chemical market.

Design Principle:

The Sondex plate range with lengths up to 1.6 m (5,2 ft) and up to extra "long" thermal pattern, will cover many duties up to 120 m³/h (528 gpm) in a single pass solution, which means that all 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:

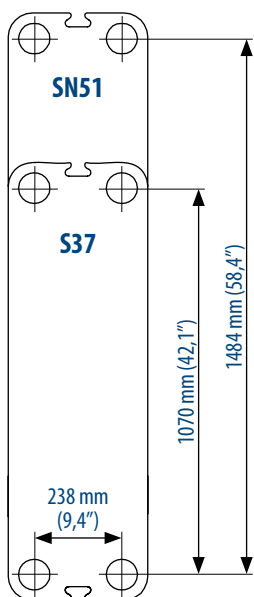
The corrugated "herringbone" pattern ensures turbulent flow in the whole effective area. Furthermore, this pattern brings "metallic" contact between the plates, and together with "Sonder Lock" lock devices on the gaskets, the plate pack is easily assembled.

The plate pack is held firm and safely between the fixed head and movable follower of the frames.

Data Required for Correct Quotation:

- Duty
- Flow rate
- Temperature
- Type of media
- Working pressure
- Working Temperature
- Pressure loss
- Thermodynamic properties

Above data determines the choice of heat exchanger.



Technical Information

Frame:

- Painted frame, colour RAL 5010 (available in other colours)
- Stainless steel frame, designed for the food and dairy industry. Both frames comes with clamping bolts placed around the frame edge.

Design Pressure:

- Painted frames: 1.0/1.6 MPa. (145/232 PSI)
- Stainless steel frame: 1.0/1.6 MPa. (145/232 PSI)

Intermediate Frames:

Intermediate frames and corner blocks for IS and FS frames in stainless steel.

Construction Standard:

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

Connections:

- DN100/4" flange in carbon steel or rubberlined.
 - DN80/3" dairy unions
- According to all known standards.

Plate Material:

AISI 316, 254 SMO and titanium.
Also 2 x 0.4 mm "Sonder Safe" plates, for food and industry.
Other materials available on request.

Gaskets:

For S37 it is the the unique non-glued "Sonder Lock" gasket which locks the plates together with strong rubber buttons, so that the plates are strongly guided during the assembly of the plate heat exchanger.
For SN51 it is a glued type.
Materials: NBR, EPDM and Viton.
Other materials available on request.

Extra Equipment:

- Safety cover in stainless steel
- Insulating jacket
- Assembling spanner
- Foundation feet for IS frame
- Instrument flange
- Thermometer and manometer

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