



SONDEX®

► S43 - S65 - S100 - S130 - S152 - S221 Plate Heat Exchangers

Recommended Applications:

The S43, S65, S100, S130, S152 and S221 range of Sondex plate heat exchangers is specially designed for the HVAC area, the geothermal-, marine-, and heat recovery area as well as the industrial and chemical market.

Design Principle:

The Sondex plate range with lengths from 3,3 m (10,8 ft) and a "long" thermal pattern will cover many duties up to 700 m³/h (3.082 gpm) 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:

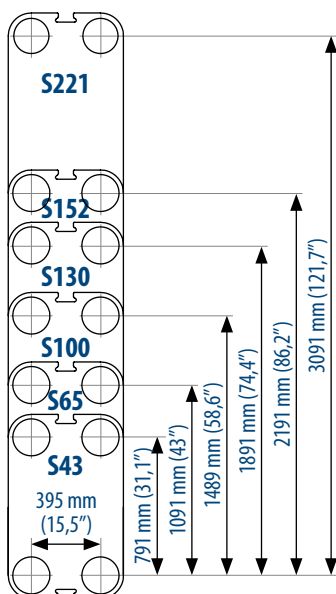
The corrugated "herringbone" pattern ensures turbulent flow in the whole effective area. Furthermore, this pattern brings "metallic" contact between the plates, and together with "Sonder Lock" locking devices on the gaskets, the plate pack is easily assembled.

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

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)
- The frame comes with clamping bolts placed around the frame edge.

Design Pressure:

- Type S43, S65, S100, S130: 0.6/1.0/1.6/2.5 MPa. (87/145/232/362 PSI)
- Type S152, S220: 1.0/1.6/2.5 MPa. (145/232/362 PSI)

Construction Standard:

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

Connections:

- DN200/8" and DN250/10" flange in carbon steel, rubberlined or clad with AISI 316 or titanium
- According to all known standards.

Plate Material:

- AISI 304/316, 254 SMO and titanium.
- Also 2 x 0.4 mm "Sonder Safe" plates.
- Other materials available on request.

Gaskets:

- The gasket is 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.
- Materials: NBR, EPDM and Viton.
- Other materials available on request.

Extra Equipment:

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

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