

# ▶ SF53

# Free Flow Plate Heat Exchangers

## **Recommended Applications:**

The SF53 Sondex Free Flow plate heat exchanger is specially developed for fruit juice, sugar and the general industrial markets handling fluids which contain fibre and solids.

#### **Design Principle**

With a plate length of 1,6 m (5,2 ft) the plate makes it possible to cover many duties up to 150 m<sup>3</sup>/h (661 gpm) in a single pass solution, meaning that all the connections will be on the head of the heat exchanger, which is of big advantage during service work. The plate pattern and inlet area are also designed for CIP cleaning, which makes the service of the PHE easy.

#### Flow plates

The plate pattern is designed without metal contact between the plates in the liquid area. The plate gab for this plate range is 5,0 mm (0,2") between the plates. The corner hole inlets of the channels are without any metallic contact points. This ensures no places where fibres etc. might "hang" or collect. In addition the inlet area is designed for optimal turbulent flow, resulting in high thermal efficiency and therefore a low number of heat transfer plates will be required in the solution.

#### **Data Required for Correct Quotation:**

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

Above data determines the choice of heat exchanger.



# **SF53** 257 mm (10,1")

## **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.

#### Working pressure:

• Painted frames: 1.0 MPa (145 PSI)

# **Construction Standard:**

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

#### **Connections:**

- DN100 flange in carbon steel or rubberlined.
- DN80/DN100 dairy pipe or union. According to all known standards.

#### **Plate Material:**

AISI 316 and titanium. Other materials available on request.

## **Gaskets:**

The gasket is the unique "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: Nitrile, EPDM and Viton.

#### **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