TS6-FMC

Plate heat exchanger in all stainless steel



TS6-MFMC

Applications

Heating of water or CIP (cleaning in place) solutions by means of steam. General heating and cooling duties.

Standard design

The plate heat exchanger consists of a pack of corrugated metal plates with portholes for the passage of the two fluids between which heat transfer will take place.

The plate pack is assembled between a fix frame plate and a movable pressure plate and compressed by tightening bolts. The plates are fitted with a gasket which seals the interplate channel and directs the fluids into alternate channels. The number of plates is determined by the flow rate, physical properties of the fluids, pressure drop and temperature program. The plate corrugations promote fluid turbulence and support the plates against differential pressure.

The plate and the pressure plate are suspended from an upper carrying bar and located by a lower guiding bar, both of which are fixed to a support column.

Connections are located in the frame plate or, if either or both fluids make more than a single pass within the unit, in the frame and pressure plates.

Typical capacities

Liquid flow rate
Up to 20 kg/s (300 gpm), depending on media, permitted pressure drop and temperature program.

Water heating by steam
200-1800 kW

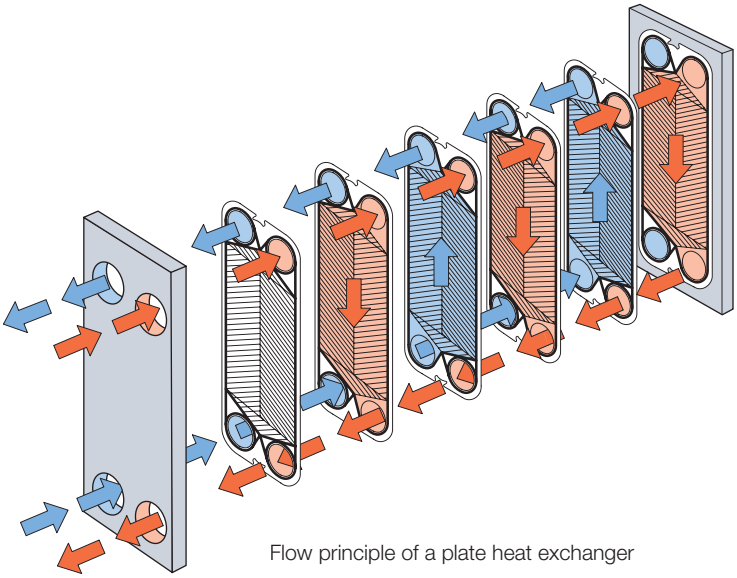
Plate types
TS6M

Frame type
FMC

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Working principle

Channels are formed between the plates and the corner ports are arranged so that the two media flow through alternate channels. The heat is transferred through the plate between the channels, and complete counter-current flow is created for highest possible efficiency. The corrugation of the plates provides the passage between the plates, supports each plate against the adjacent one and enhances the turbulence, resulting in efficient heat transfer.



Flow principle of a plate heat exchanger

STANDARD MATERIALS

Frame plate
Stainless steel AISI 316L

Nozzles
Stainless steel AISI 316L

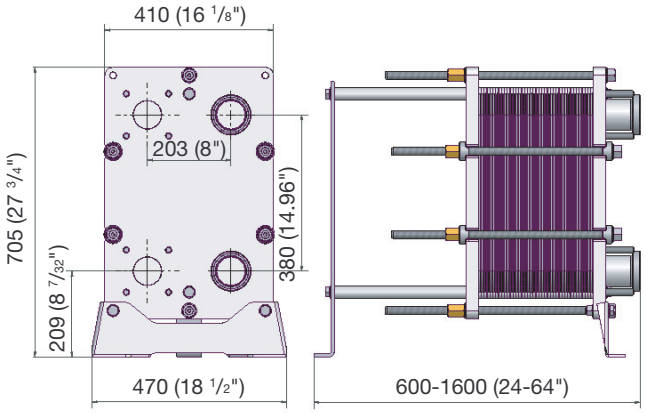
Plates
Stainless steel AISI 316

Gaskets
Nitrile, EPDM, EPDMF or HeatSeal F™

TECHNICAL DATA

Mechanical design pressure (g) / temperature
FMC 1.0 MPa / 175°C

Dimensions
Measurements in mm (inch)



CONNECTIONS

Flange 65 mm DIN 2501 PN10
Sanitary connections 76 mm, DIN, SMS,
Tri-Clamp, B.S./RJT and IDF/ISO male parts.

Maximum heat transfer surface
13 m² (140 sq. ft)

Particulars required for quotation
– Flow rates or heat load
– Temperature program
– Physical properties of liquids in question (if not water)
– Desired working pressure
– Maximum permitted pressure drop
– Available steam pressure

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