WideGap 200

Wide-gap Plate heat exchanger

WideGap 200

Applications

Wide-gap plate heat exchanger for general heating, cooling and heat recovery of media containing fibres and coarse particles. In addition the wide-gap channels are suitable for highly viscous fluids.

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 fixed 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 number of plates is determined by the flow rate, the physical properties of the fluids, the pressure drop and the temperature program. The plate corrugations promote fluid turbulence and support the plates against differential pressure.

The Wide-gap plates feature coarse corrugations with a cross-section width of approximately 11 mm (5/12”) between the plates, and have flat non-corrugated portholes for the product channels. The Wide-gap plate heat exchanger can be used in two configurations, Wide-gap/Narrow-gap and Medium-gap/Medium-gap.

The frame 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 150kg/s (2368 gmp), depending on media, permitted pressure drop and temperature program.

Plate types

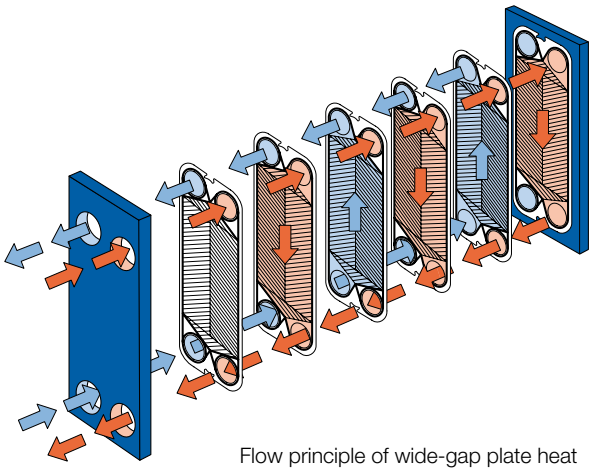
Wide-gap plates

Frame types

FG

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 wide-gap plate heat exchanger

STANDARD MATERIALS

Frame plate

Mild steel, Epoxy painted

Nozzles

Carbon steel
Metal lined: Stainless steel, Titanium

Plates

Stainless steel Alloy 316 or Titanium

Gaskets

Nitrile, EPDM

Connections

FG PED	Size 200 mm	DIN 2501 PN16
FG ASME	Size 8”	Cl. 150

TECHNICAL DATA

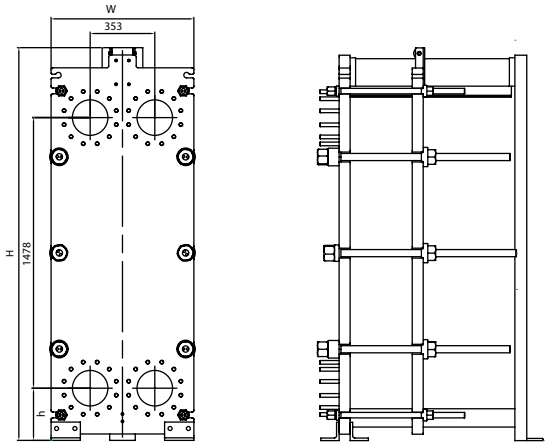
Mechanical design pressure (g) / temperature

FG PED	1.6 MPa / 180 °C
FG ASME	150 psig / 350 °F

Maximum heat transfer surface

425 m² (4.550 sq. ft)

Dimensions



Measurements (mm)

Type	H	W	h
T20S-FG	2145	780	285

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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Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com