HA Series I

Structural Composition

The HA series I plate heat exchanger is composed of a set of metal corrugated plates with openings, which form a liquid flow channel, and heat will be transferred between the two liquids. This group of corrugated plates is assembled between a fixed fixed plate and a movable compression plate, and is compressed by clamping bolts.
These plates are equipped with sealing gaskets, which seal the channels between the plates and allow liquid to flow alternately into adjacent channels. The plate and the movable plate are fixed between the upper and lower rods, and the guide rod is fixed on the upright column.
By means of counter-flow, the hot side medium transfers thermal to the cold side medium through plates between channels, and the media do not mix with each other. For the one pass solution design, all connections are on the fixed frame side which will easier the plate heat exchanger installation and disassembling. For cleaning and repair, only the heat exchanger needs to be disassembled for repair, not the pipes.

Recommended Applications

HFM plate heat exchanger HA series I can be used for heating or cooling in some specific fields, such as ships, geothermal, power plants, petrochemicals, sugar, dairy and other HA series.

Advantage

The plate design has two corrugated forms: horizontal corrugated and vertical corrugated. The plates can meet different pressure drop requirements and suit for different working conditions media.
The corrugated “herringbone” pattern makes more contact points between plates bearing more uniform pressure and ensures turbulent flow in the whole effective area.
The food-grade heat exchanger has a food-grade frame, which is safer and more hygienic.

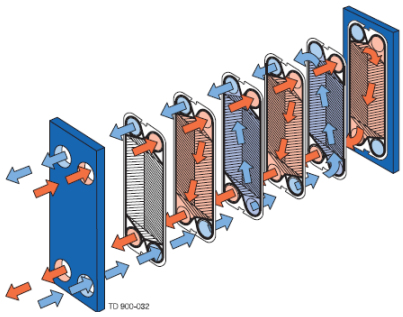
Compared with traditional shell-and-tube heat exchangers, it has higher heat transfer efficiency and occupies less space.

Quality after-sales service.

Data Required for Correct Quotation

- Types of Media
- Working Pressure
- Pressure Loss
- Thermodynamic properties
- Temperatures
- Flow rates

Above data determines the choice of heat exchanger.



Technical Parameters

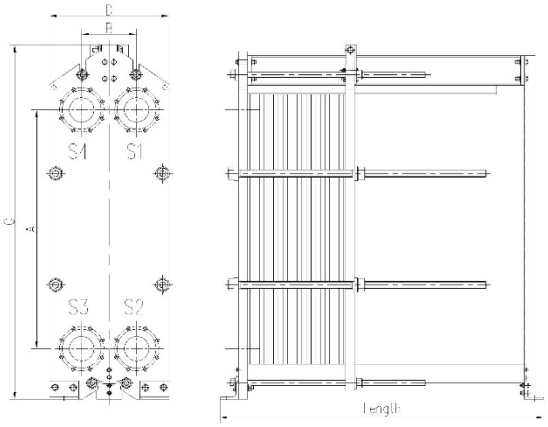
Frame material	design standards	design pressure(barg)	Maximum design temperature ℃
Carbon steel/ stainless steel	PED	10.0/16.0	180
	ASME	10.0/16.0	180

- *Painted frame, color RAL 5002 (available in other colors)*
- *Stainless steel frame, designed for the food and dairy industry.*

Both frames come with clamping bolts placed around the frame edge.

Interface information

Metal bushings (stainless steel, titanium or other materials), welding flanges, threaded pipes, clamps, etc.
Other forms of interfaces can be made according to requirements.



Type	Interface size	A/ mm	B/ mm	C/ mm	D/ mm	Length Max./ mm	Maximum flow / m3/h
HA32A	DN32	357	60	480	180	636	9
HA50A/HA50B	DN50	640	140	920	320	1715	50
HA100A/HA100B	DN100	719	225	1084	470	2655	140
HA150A/HA150B	DN150	1294	298	1923	650	3266	280

Plate	Material	Applicable Mediums	Thickness
	304SS	Pure water/ Edible oil/ Ethanol	0.4/ 0.5/ 0.6
	316SS	Water/ Edible oil/ Ethanol/ Carbonic acid/ 30% Sulphuric acid	0.4/ 0.5/ 0.6
	254SMO	Saline / Inorganic acid	0.6
	Titanium	Sea water/ 130°C Chloride	0.5/ 0.6
	Hastelloy C-276	Organic acid / High temperature HF acid / Hydrochloric acid (< 40%) / Phosphoric acid (< 50%) / Chloride / Fluoride	0.6
	Nickle 200/201	High temperature 50~70% Alkali	0.6

Gasket	Material	Applicable Mediums	Temperature/ ℃
	EPDM Ethylene propylene diene monomer	Water/ Steam/ Edible oil	-25-150
	NBR Nitrile rubber	Water/ Edible oil/ Mineral oil/ Ethanol/ Ethylene glycol	-25-130
	FPM/Viton Fluoro rubber	High concentration inorganic acid (oxidizing acid, etc.) / Hot water and steam / High temperature mineral oil	-20-180
	CR Chloroprene rubber	Ammonia and various fluorine-containing refrigerants	-40-125