

## Design Principle

HF0223A is wide gap type, plate range with length 1.4m, will reach up to Max. 200m<sup>3</sup>/h in a single pass solution. The plate design has a deeper corrugation and a wider fluid flow path to prevent slurry and effluent from blocking the flow path.

By means of countercurrent 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 to achieve optimal heat exchange efficiency.

For the one pass solution design, all connections are on the fixed frame side which will easier the plate heat exchanger installation and disassembling. When do cleaning and maintenance jobs, no need to remove the pipes.

## Recommended Applications

HF0223A plate heat exchanger is designed in wide gap type for medium high pressure. It is suitable for cooling and heating applications of products containing granules or viscous products, for example sugars, high concentration dairy products, paper and other high viscosity media.

## Flow Plate

The plate thickness of HF0223A is 0.8mm, can be applied in higher pressure operation conditions. A corrugation depth of more than 0.4mm is more conducive to the operation of media containing suspended particles, and better heat transfer effect obtained.

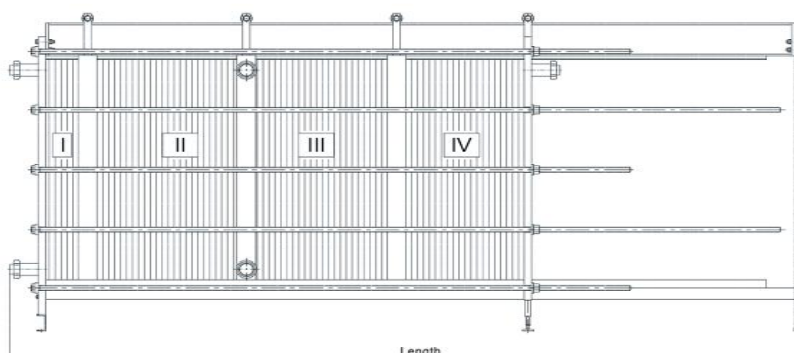
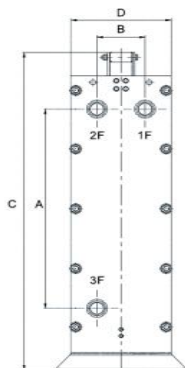
In addition, the entrance area is designed for optimal turbulence flow, which can achieve high thermal efficiency and thus in the design solution with less heat transfer flow plates.



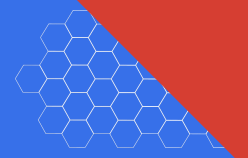
## Data Required for Correct Quotation

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

*Above data determines the choice of heat exchanger.*



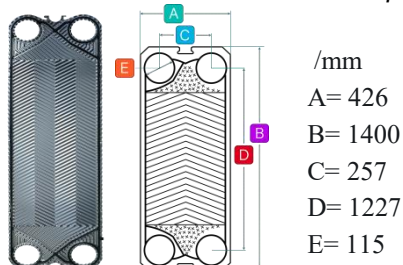
A/ mm	B/ mm	C/ mm	D/ mm	Length Max./ mm
1227	257	1585	535	2833



Connection	Construction Standard	
DN125	Carbon Steel/Stainless Steel/ Titanium	Weld neck flange
		Pipe/ Threaded pipe

Frame	Construction Standard		Design Pressure (barg)	Max. Design Temperature °C
	Carbon Steel/Stainless Steel	PED	10.0/16.0	180
		ASME	10.0/16.0	180

■ Other connections available on request.



- 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.

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/ °C
	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