# HG0124B

## **Design Principle**

**F**an

HG0124B plate range with length 1.5m, will cover many duties up to 280m3/h in a single pass solution, satisfying many applications requirement.

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**

The plate heat exchangers of the HG0124B series are designed for high pressure. They can be used for heating and cooling operations in multiple areas, steam condensation, industrial circulating water cooling and other clear media's heating and cooling. HG0124B plate heat exchanger can change the heat transfer area by adding or deducting the plate numbers.

#### **Flow Plate**

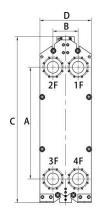
The plate design has two corrugated forms: horizontal corrugated and vertical corrugated. The plates can meet different pressure drop requirements and suit for different working conditions media. The corrugated "herringbone" pattern makes more contact points between plates bearing more uniform pressure and ensures turbulent flow in the whole effective area.

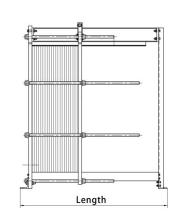


# Data Required for Correct Quotation

- 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 |
|-------|-------|-------|-------|-----------------|
| 1294  | 298   | 1923  | 610   | 3256            |

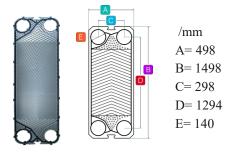


## HG0124B



| Connection | Construction Standard                     |                     |  |
|------------|---|---------------------|--|
| DN150      | Carbon Steel/Stainless<br>Steel/ Titanium | Weld neck flange    |  |
|            |   | Pipe/ Threaded pipe |  |

■ Other connections available on request.



| Frame | Construction<br>Standard           |      | Design<br>Pressure (barg) | Max. Design<br>Temperature °C |  |
|-------|------------------------------------|------|---------------------------|-------------------------------|--|
|       | Carbon<br>Steel/Stainless<br>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.

| 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 | Organic acid / High temperature HF acid / Hydrochloric acid (< 40%) / | 0.6           |
|       | C-276     | C-276 Phosphoric acid (< 50%) / Chloride / Fluoride                   |               |
|       | Nickle    | High temperature 50~70% Alkali  | 0.6           |
|       | 200/201   | Tingii temperature 30~70% Alkali                                      | 0.0           |

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