

Design Principle

HFM compact plate pack of brazed plate heat exchanger is vacuum brazed together with copper or nickel. Compared with gasketed plate heat exchanger, brazed plate heat exchanger can endure high temperature of 225°C, pressure up to 45bar.

HFM brazed plate heat exchanger consists of a number of 0.4mm thin plates which transfer heat high efficiently.

In the one pass solution design, medium flow rate can be up to 100m³/h. All 4 connections are on the front side, which means easy pipe and service work.

The plate pack, assembled with two end plates and connections, is vacuum brazed at extremely high temperatures providing a permanently sealed heat exchanger. The final result is a strong and compact plate heat exchanger with extremely high heat transmissions. The high heat transmission comes from the main pattern which is designed to create a turbulent flow.

Recommended Applications

HB18A brazed plate heat exchanger covers refrigeration capacity ranging from 150 to 400KW. It can be used as both condenser/ evaporator and sub-cooler/ superheater. It is specially made for central air-conditioning, industrial water chiller, large scale heat pump center and lithium bromide absorption systems. It is capable for steam-liquid or liquid-liquid heat transfer. Under some circumstances, it is far more efficient in heat transfer than the plate heat exchanger.

Technical Information

Thickness(mm)	Weight(kg)
13+2.7N	13+0.75N

Standard Materials

- Flow plates and connections: AISI 316/ AISI304
- End plates: AISI 304
- Connection: AISI 304/ AISI316
- Brazing material:
Copper, Nickel or Stainless steel

Design Temperature:

- Copper brazed: -160~225°C
- Nickel brazed: -160~250°C
- Stainless steel brazed: -196~225°C

Design Pressure:

- Copper brazed: 45 Bar
- Nickel brazed: 15 Bar
- Stainless steel brazed: 16 Bar

Connections:

- 4" thread BSP/ NPT
- 4" female thread BSP/ NPT
- 4" pipe

Other connections available on request.



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.

