# **TB120T Brazed Plate Heat Exchanger**

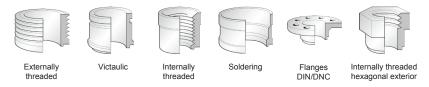
The TB120T has been specially developed to operate in demanding heating and industrial applications, typically water-water applications and oil coolers. The product has contributed to the rapid switch to BPHEs from traditional gasket plate heat exchangers and shell-and-tube solutions. It is widely used as a condenser in air conditioning and refrigeration.





## **TB120T Heat Exchanger**

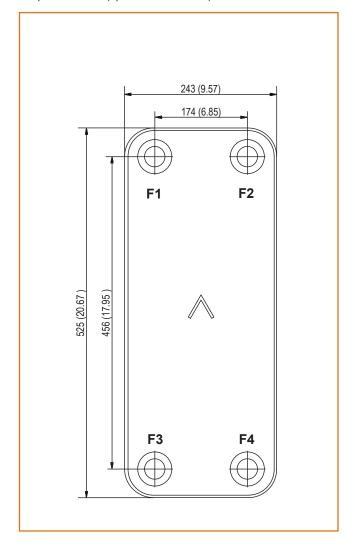
### **Available connections\***



<sup>\*</sup>For specific dimensions, or information about other types of connections, please contact your Taco sales representative.

- Pressure classes S Standard, evaluated per EN 13345 (25-38 bar/ 363-550 PSI).
- Medium, evaluated per EN 13345 (38-48 bar/550-696 PSI).
- F Intermediate, evaluated per EN 13345 (up to 50 bar/725 PSI).
- **H** High, evaluated per EN 13345 (42-56 bar/609-812 PSI).
- Higher, developed for CO<sub>2</sub> applications, evaluated per EN 13445 (up to 56 bar/812 PSI).

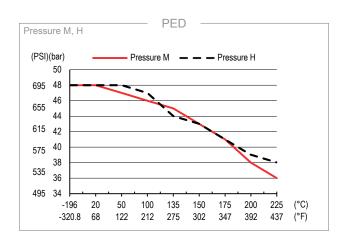
Max number of plates (NoP)	250
Port size F1/P1	42 mm (1.654 in)
Port size F2/P2	42 mm (1.654 in)
Port size F3/P3	42 mm (1.654 in)
Port size F4/P4	42 mm (1.654 in)
Max volume flow	27 m³/h (118.8 gpm)

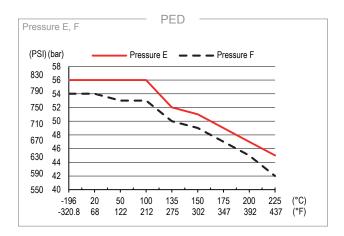


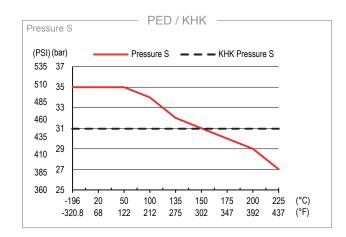
Materials	Channel plate	Brazing
SC	Stainless steel	Copper
NC	Stainless steel	Copper
MC	Mo-steel	Copper

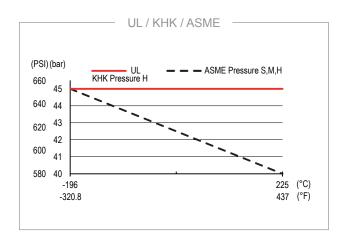
Size	Height of plate pack	Total weight
SC S SC M NC S NC M MC S	10+(2,29×NoP) mm	8,33+(0,404×NoP) kg
	0.394+(0.09×NoP) in	18.36+(0.891×NoP) lb
SC F	14+(2,29×NoP) mm	9,62+(0,404×NoP) lb
	0.551+(0.09×NoP) in	21.21+(0.891×NoP) lb
SC H	14+(2,29×NoP) mm	11,16+(0,404×NoP) lb
	0.551+(0.09×NoP) in	24.60+(0.891×NoP) lb
SC E	18+(2,29×NoP) mm	12,45+(0,404×NoP) kg
	0.709+(0.09×NoP) in	27.45+(0.891×NoP) lb

### **TB120T Performance Curves**









### **Third party approvals**

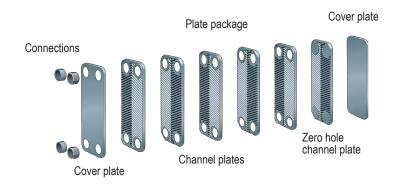
Taco BPHEs are generally approved by listed below certification organizations:

Europe, Pressure Equipment Directive (PED) America, Underwriters Laboratories Inc (UL) Japan, Kouatsu-Gas Hoan Kyoukai (KHK)

Additionally Taco holds approvals from a vast variety of other certification organizations. For approval information regarding a specific product please contact your local Taco representative. Taco reserves the right to make changes without prior notice.

### The BPHE concept

The Brazed Plate Heat Exchanger (BPHE) is constructed as a plate package of corrugated channel plates with a filler material between each plate. During the vacuumbrazing process, the filler material forms a brazed joint at every contact point between the plates, creating complex channels. The BPHE allows media at different temperatures to come into close proximity, separated only by channel plates that enable heat from one media to be transferred to the other with very high efficiency. The concept is similar to other plate and frame technology, but without the gaskets and frame parts.



### **Calculation software**

With Taco's unique Software Package, you can do advanced heat transfer calculations yourself, and choose the product solution that suits your application best. It's also easy to choose connections and generate drawings of the complete product. If you would like advice, or you would like to discuss different product solutions, Taco offers all the service and support your need.

#### **Material disclaimer**

The information and recommendations in regards to the products are presented in good faith, however, Taco makes no representations or warranties as to the completeness or accuracy of the information. Information is supplied upon the condition that the purchasers will make their own determination as to the products' suitability for their purposes prior to use. Purchasers should note that the properties of the products are both application and material selection dependent and that products containing stainless steel are still subject to corrosion if used in unsuitable environments.

