TB80 Brazed Plate Heat Exchanger

The TB80 is our medium-size high-capacity model. It is the perfect choice for most types of low-capacity chiller applications and high-performance heat pumps. It covers a wide capacity range in district heating substations and is a proven oil cooler for compressors and hydraulics.





TB80 Heat Exchanger

Available connections*

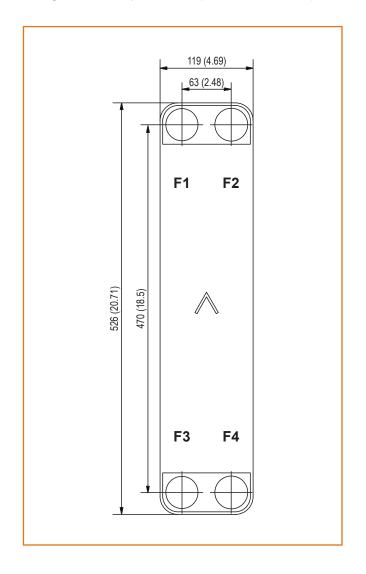


^{*}For specific dimensions, or information about other types of connections, please contact your Taco sales representative.

Pressure classes

- **S** Standard, evaluated per EN 13345 (25-38 bar/ 363-550 PSI).
- **M** 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 at per EN 13345 (42-56 bar/609-812 PSI).

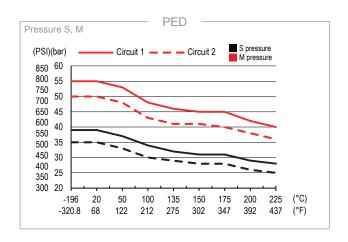
Max number of plates (NoP)	140
Port size F1/P1	33 mm (1.3 in)
Port size F2/P2	33 mm (1.3 in)
Port size F3/P3	33 mm (1.3 in)
Port size F4/P4	33 mm (1.3 in)
Max volume flow	17 m³/h (74.8 gpm)

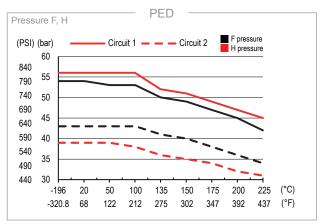


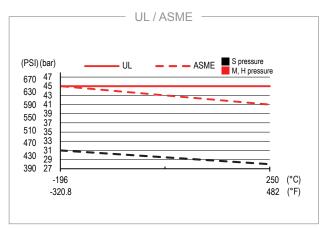
Materials	Channel plate	Brazing
SC	Stainless steel	Copper
NC	Stainless steel	Copper
NSC	Stainless steel	Copper

Size	Height of plate pack	Total weight
SC M SC S NC M NC S	4+(2,24×NoP) mm	2,09+(0,164×NoP) kg
	0.157+(0.088×NoP) in	4.61+(0.362×NoP) lb
NC F SC F	12+(2,24×NoP) mm	2,62+(0,164×NoP) kg
	0.472+(0.088×NoP) in	5.78+(0.362×NoP) lb
SC H NSC H	12+(2,24×NoP) mm	5,57+(0,164×NoP) kg
	0.472+(0.088×NoP) in	12.29+(0.362×NoP) lb

TB80 Performance Curves







Third party approvals

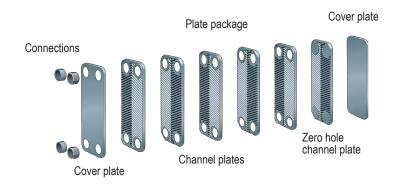
Taco BPHEs are generally approved by listed below certification organizations:

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.

