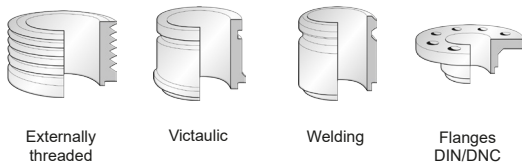


The B649 is ideal for district heating and cooling networks, HVAC, and industrial projects that need an efficient compact BPHE with close temperature approaches at high operating pressures. The big, one-phase B649 delivers PHE-like capacities without the wear and tear of parts. Most of the material (95%) in BPHEs is used to transfer heat, compared with other technologies that use a lot of material for supports, frames, etc. This high-capacity BPHE saves money on spare parts, space, energy consumption, transportation, and installation.

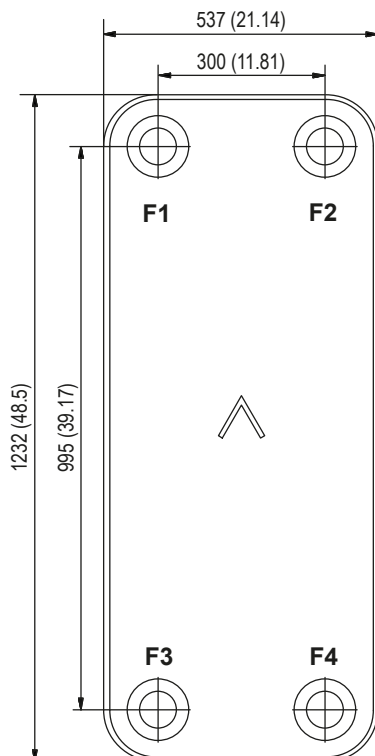
Connections*



*For specific dimensions, or information about other types of connections, please contact your SWEP sales representative.

Pressure classes

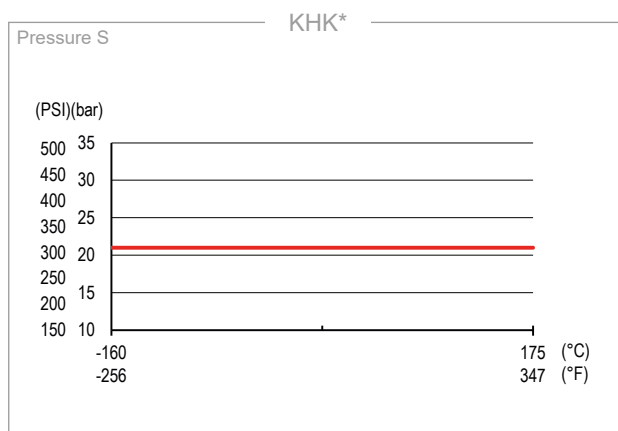
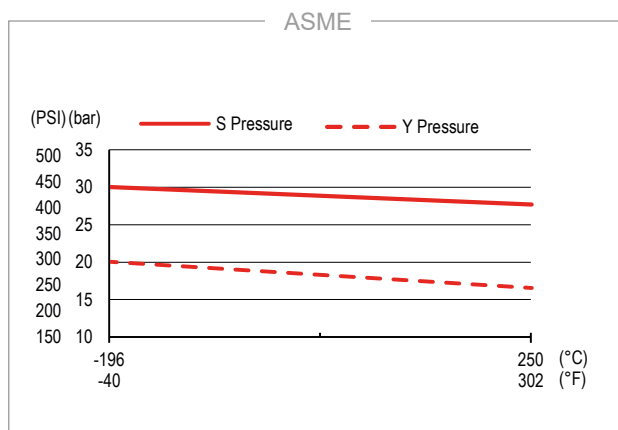
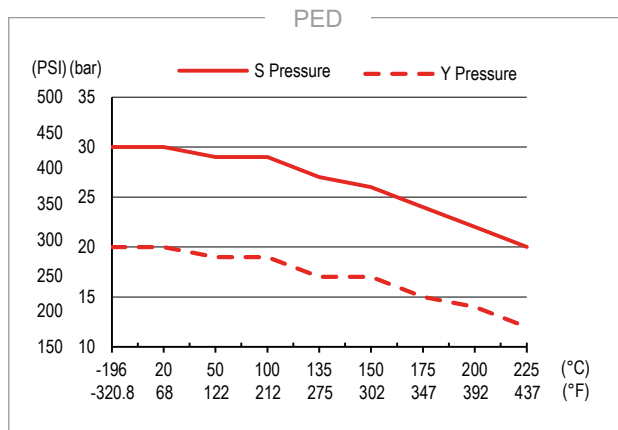
- Y** Intermediate, evaluated per EN 13345.
- S** Standard, evaluated per EN 13345.



Max number of plates (NoP)	420
Port size F1/P1	150 mm (5.906 in)
Port size F2/P2	150 mm (5.906 in)
Port size F3/P3	150 mm (5.906 in)
Port size F4/P4	150 mm (5.906 in)
Max volume flow	349,9 m³/h (1539.6 gpm)
Channel volume (SI)	0,918 - 1,18 dm³
Channel volume (US)	0,03242 - 0,04167 ft³

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

Size	Height of plate pack	Total weight
B649 SC-S	45,08+(2,09×NoP) mm	79,4+(1,941×NoP) kg
NC-S	1.775+(0.082×NoP) in	175.2+(4.4279×NoP) lb
B649 SC-Y	32,72+(2,09×NoP) mm	61,6+(1,941×NoP) kg
NC-Y	1.288+(0.082×NoP) in	135.8+(4.279×NoP) lb
649HT SC-S	26,78+(1,7×NoP) mm	56,2+(1,941×NoP) kg
	1.054+(0.067×NoP) in	123.9+(4.279×NoP) lb



* Not available for B649HT

Third party approvals

SWEP BPHEs are generally approved by listed below certification organizations:

Europe, Pressure Equipment Directive (PED)

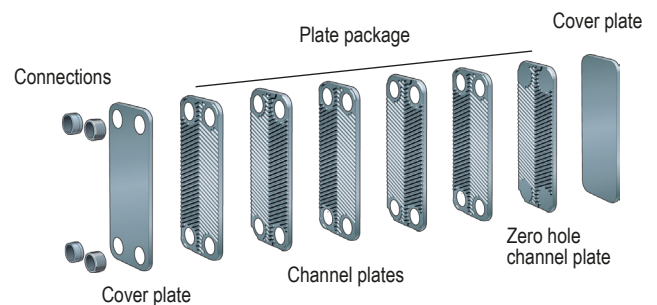
America, Underwriters Laboratories Inc (UL)

Japan, Kouatsu-Gas Hoan Kyoukai (KHK)

Additionally SWEP holds approvals from a vast variety of other certification organizations. For approval information regarding a specific product please contact your local SWEP representative. SWEP 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 vacuum brazing 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.



SSP calculation software

With SWEP's unique SSP, the SWEP 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, SWEP 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, SWEP 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.