With pressure requirements for trans critical CO₂ applications touching 140 bar, the B18 is the natural choice. The B18 is optimized for high heat pump capacities (up to 150kW as a gas cooler and up to 60 kW as an evaporator). The compact yet lightweight B18 is an excellent choice for cold chain applications (supermarkets, transport cooling, heat recovery, economizers), and for heat pumps (evaporator and gas cooler).

**Connections**

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

**Pressure classes**

U  Ultra High, evaluated per EN 13345.

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**Materials**

<table>
<thead>
<tr>
<th>Channel plate</th>
<th>Brazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>Stainless steel</td>
</tr>
</tbody>
</table>

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**Size**

<table>
<thead>
<tr>
<th>Height of plate pack</th>
<th>Total weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>12+(2×NoP) mm</td>
<td>4.05+(0.25×NoP) kg</td>
</tr>
<tr>
<td>0.472+(0.079×NoP) in</td>
<td>8.92+(0.552×NoP) lb</td>
</tr>
</tbody>
</table>

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**Pressure**

Circuit 1 (red) and Circuit 2 (black) pressure curves are shown for different temperature ranges (°C and °F).

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**Dimensions**

[Dimensions diagram]

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**Soldering Combo Size**

Height of plate pack | Total weight
-------- | ------------
12+(2×NoP) mm | 4.05+(0.25×NoP) kg
0.472+(0.079×NoP) in | 8.92+(0.552×NoP) lb
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 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.

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.