



## Brazed plate heat exchangers

The product range of the world's leading supplier



# Technical specifications

## Brazed plate heat exchanger (BHE) data and dimensions

	CBH16	CBH18	CB20	CB30
Channel type	H, A	H, A	H	H, M, L
Max./min. design temperature (°C)	225/-160	150/-50	225/-196	225/-196
Max. design pressure at 150° C (S3-S4/S1-S2) (bar) *	32/32	32/32	16/16	36/36
Volume/channel (S3-S4/S1-S2) (litres)	0.027 (H) <sup>1)</sup>	0.038 (H) <sup>2)</sup>	0.028	0.054
Max. flowrate (S3-S4/S1-S2) (m <sup>3</sup> /h) **	3.6	3.6	8.9	14.5
Height, a (mm)	211	316	324	313
Width, b (mm)	74	74	94	113
Vertical connection distance, c (mm)	172	278	270	250
Horizontal connection distance, d (mm)	40	40	46	50
Plate pack length, A (mm)	(n x 2.16) + 8	(n x 2.16) + 8	(n x 1.5) + 8	(n x 2.31) + 13
Weight empty (kg) ***	(n x 0.04) + 0.27	(n x 0.07) + 0.4	(n x 0.08) + 0.6	(n x 0.1) + 1.2
Standard connection, external thread (in)	3/4"	3/4"	1"	1¼" / 1"
Plate material	AISI 316	AISI 316	AISI 316	AISI 316
Connection material	AISI 316	AISI 316	AISI 316	AISI 316
Brazing material	Copper	Copper	Copper	Copper
Max. number of plates	60	60	110	150

\*) According to PED    \*\*) Water at 5 m/s (connection velocity)    \*\*\*) excluding connections    n = number of plates  
 1) A channel (0.030/0.024)    2) A channel (0.042/0.035)    3) L and M channels 0.13    4) AH and AM channels 0.20/0.16

### An identical message, globally

By intense listening to market demands, Alfa Laval has reached a position of global leadership within the segment brazed plate heat exchangers (BHEs). Our experience is longstanding and worldwide, and it is reflected in the function of our products. Alfa Laval technology brings customers all over the world an identical message: second best should never be an alternative!

### A wide range of applications

BHEs offer multiple benefits. The brazing technology eliminates the need for seals and thick frame plates. A copper film covering

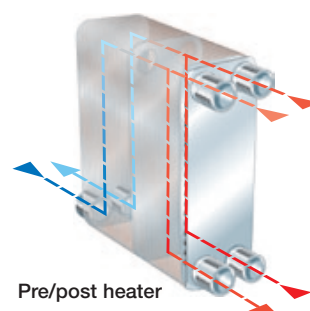
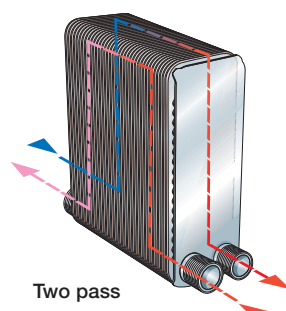
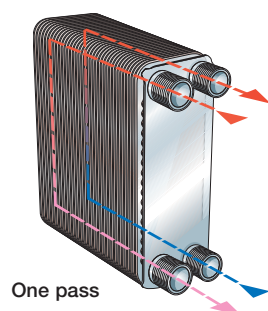
the contact surface melts and connects the stainless steel plates while the heat will be transferred via the melting points. The basic BHE design – refined over the years by Alfa Laval – offers excellent resistance to pressure and thermal fatigue in a wide range of heating and cooling applications. For reasons of reliability and cost-efficiency, BHEs from Alfa Laval are frequently a natural first alternative all over the world.

### A variety of design options

For every application there is an optimal solution. This brochure shows heat ex-

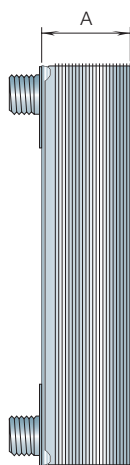
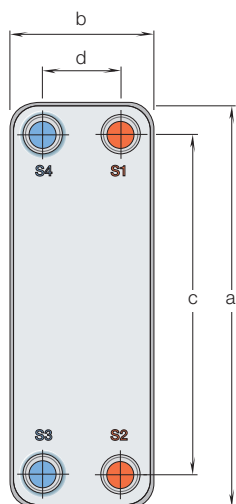
changers suitable for HVAC applications. The design options are multiple. A number of plate patterns for each plate size means optimal function for any application. The brazed plate heat exchangers can be configured as one-, two- or multi-pass versions with a wide range of connection designs and locations.

The products are offered pre-configured available from stock for swift delivery. If these units do not meet the demand specification, you have the option to have a heat exchanger designed to meet your exact requirement.



BHE's can be designed in many different ways to optimize our customers needs.

CB60	CB110	CB112	CB200 (CBH200)	CB300	CB400
H, M, L	H, M, L	H, M, L, AM, AH	H, M, L	H, M, L	H, L
175/-196	225/-196	225/-196	225/-196	225/-196	225/-196
36/36	27/27	32/32	26/26	27/16	32/27
0.103 (H) <sup>3)</sup>	0.21	0.18 <sup>4)</sup>	0.51	0.58/0.69	0.74
14.5	51	34/63	128	200	200
527	616	618	740	990	990
113	191	191	323	365	390
466	378	519	622	816/861	825
50	138	92	205	213.5	225
$(n \times 2.35) + 13$	$(n \times 2.2) + 12$	$(n \times 2.05) + 15$	$(n \times 2.7) + 11 / (n \times 2.7) + 14$	$(n \times 2.62) + 11$	$(n \times 2.56) + 14$
$(n \times 0.18) + 2.1$	$(n \times 0.38) + 13$	$(n \times 0.35) + 4.8$	$(n \times 0.6) + 12 / (n \times 0.6) + 14$	$(n \times 1.26) + 21$	$(n \times 1.35) + 24$
1¼" / 1"	2" / 2½"	2" / 2½"	3½"	3" / 4½"	4½"
AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Copper	Copper	Copper	Copper	Copper	Copper
150	300	300	230	250	270



The BHEs are individually leak and pressure tested to ensure first-class quality, and Alfa Laval has approvals from all major certification bodies.

#### Approvals

- PED
- KHK
- UL
- KIWA
- ASME



Insulation



Feet and mounting brackets

## Alfa Laval in brief

Alfa Laval is a leading global provider of specialized products and engineered solutions.

Our equipment, systems and services are dedicated to helping customers to optimize the performance of their processes. Time and time again.

We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuffs, starch and pharmaceuticals.

Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

## How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at [www.alfalaval.com](http://www.alfalaval.com)

Alfa Laval reserves the right to change specifications without prior notification.

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