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

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Gillain & Co

HYGIENIC EQUIPMENT FOR FOOD & LIFE SCIENCES

Brazed plate heat exchangers

The product range of the world's leading supplier



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Technical specifications

Brazed plate heat exchanger (BHE) data and dimensions

	CB14	CBH18	CB20	CB27	CB52	CB76	CB77	CB100 (CBH100)	CB200 (CBH200)	CB300
Channel type	H	H	H	H, L, M	H, L, M	H, E, A, M, L	H, L, M	M	H, L, M	H, L, M
Max./min. design temperature (ºC)	175/-160	225/-50	175/-160	175/-160	175/-160	175/-160	175/-160	175/-160	175/-160	175/-160
Max. design pressure (S3-S4/S1-S2) (bar) *)	32/32	25/25	16/16	32/32	32/32	32/32 [1]	27/16	20/20 (25/25)	16/16 (25/25)	27/16
Volume/channel (S3-S4/S1-S2) (litres)	0.02	0.039	0.028	0.05	0.095	0.25 [2]/ 0.25	0.25	0.2	0.51	0.58/0.69
Max. flowrate (S3-S4/S1-S2) (m^3/h) **)	3.6	3.6	7.6	7.6/12.7	7.6/12.7	34	34/63	63	97	70/160
Height, a (mm)	207	316	324	310	526	618	618	491	742	990
Width, b (mm)	77	75	94	111	111	191	191	250	324	366
Vertical connection distance, c (mm)	172	278	270	250	466	519	519	378	622	816/861
Horizontal connection distance, d (mm)	42	40	46	50	50	92	92	138	205	213.5
Plate pack length, A (mm)	(n x 2.35) + 8	(n x 2.2) + 6.5	(n x 1.5) + 8	(n x 2.4) + 9	(n x 2.4) + 10	(n x 2.85) + 10 [3]	(n x 2.85) + 10	(n x 2.2) + 12	(n x 2.7) + 11 ((n x 2.7) + 14)	(n x 2.65) + 11
Weight empty (kg)	(n x 0.06) + 0.7	(n x 0.065) + 0.4	(n x 0.08) + 0.9	(n x 0.13) + 1.2	(n x 0.23) + 1.9	(n x 0.44) + 7	(n x 0.44) + 7	(n x 0.38) + 13	(n x 0.6) + 29 ((n x 0.6) + 32)	(n x 1.26) + 40
Standard connection, external thread (in)	3/4”	3/4”	1”	1 1/4”/1”	1 1/4”/1”	2”	3” weld/2”	ISOG2”/2 1/2”	3”	4”/2 1/2”
Plate material	AISI 316	AISI 316	AISI 316	AISI 316, AISI 254	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Connection material	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Brazing material	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper
Max. number of plates	50	50	110	150	150	190	190	270	230	250
Radiator heating, capacity (kW) [4]	90	130	170	400	500	1200	1800	2000	2900	3200
Tap water heating, capacity (kW) [4]	60	80	140	180	380	700	900	1300	2100	2900

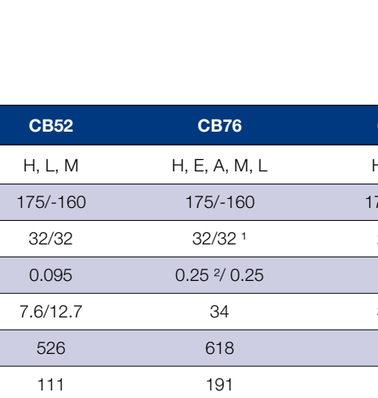
*) According to PED **) Water at 5 m/s (connection velocity) n = number of plates 1) M and L channels 28/27 bar 2) E channel 0.18/0.18; A channel 0.18/0.25 3) A channels (n x 2.5) + 10, E channels (n x 2.2) + 10 4) Varies from country to country depending on temperature duty. Given values for typical district heating installations.

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.

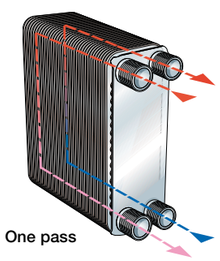
A variety of design options
For every application there is an optimal solution. This brochure shows heat exchangers suitable for HVAC applications. The design options are multiple. A number of plate patterns for each plate size means optimal function for any application. The brazed plate heat exchangers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

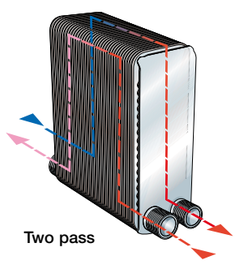
The products are offered pre-configured available from stock for swift delivery.
If these units do not meet the demand specification, you have the option to have a heat exchanger designed to meet your exact requirement.

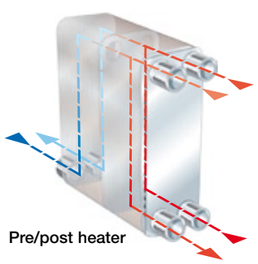


Testing
The BHEs are individually leak and pressure tested to ensure first-class quality, and Alfa Laval has approvals from all major certification bodies.

Approvals
- PED
- KHK
- UL
- KIWA
- ASME


One pass


Two pass


Pre/post heater

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


Insulation


Feet and mounting brackets

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