



Alfa Laval ACH73

Brazed heat exchanger for air conditioning, refrigeration and heat pump applications

General information

Alfa Laval introduced its first brazed plate heat exchanger (BHE) in 1977 and has since continuously developed and optimized its performance and reliability.

Brazing the stainless steel plates together eliminates the need for gaskets and thick frame plates, which makes the heat exchanger compact and saves material. The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service lifetime.

The AlfaChill (AC) brazed plate heat exchangers are specifically designed for heat transfer in air conditioning, refrigeration and heat pump applications.

DynaStatic refrigerant distribution system is an innovative flexible solution to optimize the performance of the evaporator.

Asymmetric channels provide optimal efficiency in the most compact design. This results in low refrigerant charge or lower pressure drop on the water/brine side, reducing the CO₂ footprint.

Typical applications

Suitable for evaporation, condensation and sub-cooling duties in chillers and heat pumps.

Working principles

The heating surface consists of thin corrugated metal plates stacked on top of each other. Channels are formed between the plates and corner ports are arranged so that the two media flow through alternate channels, usually in countercurrent flow for the most efficient heat transfer process.

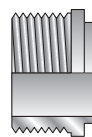
Particulars required for quotation

To enable Alfa Laval's representative to make a specific quotation, specify the following particulars in your enquiry:

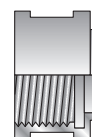
- required flow rates or heat load
- temperature program
- physical properties of liquids in question
- desired working pressure
- maximum permitted pressure drop



Examples of connections



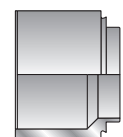
External threaded



Internal threaded



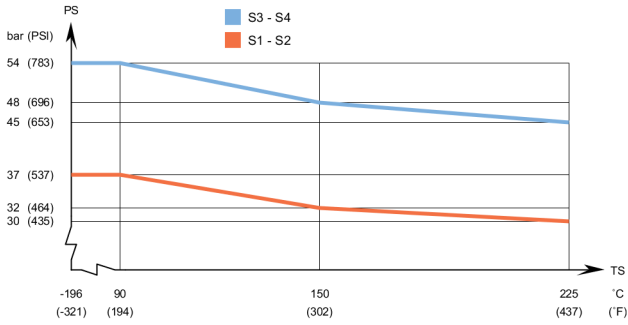
Soldering



Welding

* More connections are available on request.

ACH73 - PED approval pressure/temperature graph



Standard data

Min. working temperature	see graph
Max. working temperature	see graph
Min. working pressure	vacuum
Max. working pressure	see graph
Volume per channel AH, litres (ga)	S1-S2 brine side 0.11(0.029) S3-S4 ref side 0.073 (0.019)
Max. particle size mm (inch)	1 (0.04)
Max. flowrate* m ³ /h (gpm)	14 (61.6)
Min. nbr of plates	10
Max. nbr of plates	100

* Water at 5 m/s (16.40 ft/s) (connection velocity)

Standard materials

Cover plates	Stainless steel
Connections	Stainless steel
Plates	Stainless steel
Brazing filler	Copper

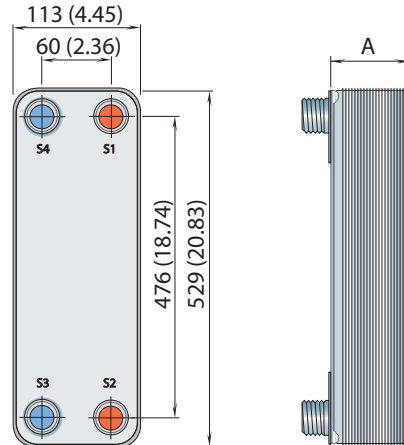
Standard dimensions and weight

A measure mm	=	13 + (1.98 * n) (±2.5 mm or ±1.5 %)
A measure inch	=	0.51 + (0.08 * n) (±0.1 inch or ±1.5 %)
Weight** kg	=	2.1 + (0.18 * n)
Weight** lb	=	4.63 + (0.4 * n)

(n = number of plates)
** Excluding connections

Standard dimensions

mm (inch)



For exact values please contact your local Alfa Laval representative

How to contact Alfa Laval

Up-to-date AlfaLaval contact details for all countries are always available on our website on www.alfalaval.com