AC18 / ACH18
Brazed plate heat exchanger

General information
Alfa Laval introduced its first brazed plate heat exchanger 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.

Innovative features for this single circuit heat exchanger include a patented asymmetric plate design. The plate design provides the flexibility to select the best configuration for optimized evaporation temperature and/or condensation temperature in order to keep the brine/water pressure drop at the desired level.

Typical applications
- Economizer for injection compressors
- Small heat pumps and chiller systems
- Oil cooling

The standard design supports a wide variety of HFC refrigerants such as R407C, R404A, R507, R134a. The high-pressure version is suitable for R410A, R32 and natural refrigerants (CO2 - propane).

Capacity range
AC18/ACH18 cover capacities from 2 kW up to 10 kW. Based on standard components and a modular concept, each unit is custom-designed for each specific installation.

Request for quotation
To receive a quotation for brazed plate heat exchangers that meet your requirements, please provide Alfa Laval representatives with:
- Required flow rates or heat load
- Temperature program (inlet and outlet)
- Brine and refrigerant type
- Desired working pressure
- Maximum permitted water/brine pressure drop
- Connection types

Examples of connections*

* More connections are available on request.
AC18 - PED approval pressure/temperature graph AH

ACH18 - PED approval pressure/temperature graph AH

AC18 / ACH18 - UL approval pressure/temperature graph AH

AC18 / ACH18 - CRN approval pressure/temperature graph AH

Standard dimensions and weight

AC18 / ACH18

A measure mm = 8.5 + (2.16 * n) (± 2 mm or ±2.5 %)
A measure inch = 0.33 + (0.09 * n) (±0.08 inch or ±2.5 %)
Weight** kg = 0.4 + (0.07 * n)
Weight** lb = 0.88 + (0.15 * n)
(n = number of plates)
** Excluding connections

Standard data

Max. working temperature
Min. working temperature
Max. working pressure
Min. working pressure
Volume per channel H, litres (ga)
Volume per channel A, litres (ga)
Max. particle size mm (inch)
Max. flowrate* m³/h (gpm)
Min. nbr of plates
Max. nbr of plates
(n = number of plates)
* Water at 5 m/s (16.4 ft/s) (connection velocity)

Standard materials

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

Standard dimensions

mm (inch)

For exact values please contact your local Alfa Laval representative

PCT00158EN 1212

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

How to contact Alfa Laval

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