AC16 / ACH16
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
- Container refrigeration
- 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
AC16/ACH16 cover capacities from 1 kW up to 5 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.
Standard dimensions and weight

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A measure mm = \(8.5 + (2.16 \times \text{n}) + (\pm 2\text{ mm or} \pm 2.5\% )\)

A measure inch = \(0.33 + (0.09 \times \text{n}) + (\pm 0.08\text{ inch} \text{ or} \pm 2.5\% )\)

Weight** kg = \(0.27 + (0.04 \times \text{n})\)

Weight** lb = \(0.59 + (0.09 \times \text{n})\)

(\(\text{n}\) = number of plates)

** Excluding connections

Standard data

Min. working temperature see graph

Max. working pressure see graph

Max. working pressure see graph

Volume per channel H, litres (ga) 0.027 - 0.007

Volume per channel A, litres (ga) 0.030 - 0.008

Max. flowrate* m³/h (gpm) 4.1 (18)

Min. nbr of plates 4

Max. nbr of plates 60

* Water at 5 m/s (16.4 ft/s) (connection velocity)

Standard materials

Cover plates Stainless steel

Connections Stainless steel

Plates Stainless steel

Brazing filler Copper

Standard dimensions

mm (inch)

For exact values please contact your local Alfa Laval representative.

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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