AC70X / ACH70X

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 distributor integrated in the plate design.

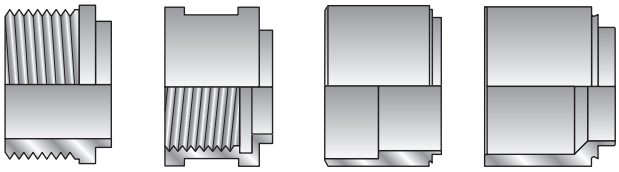
Applications
- Evaporator and condenser in chillers and heat pumps
- Economizer in chillers and heat pumps

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

Capacity range
AC70X/ACH70X cover capacities from 10 up to 80 kW for chillers and 5 kW to 40 kW for heat pumps. Based on standard components and a modular concept, each unit is custom-designed for each specific installation.

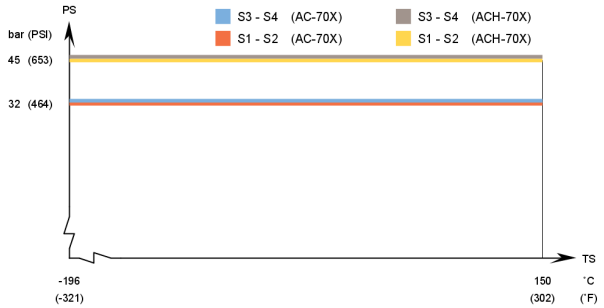
Request for quotation
To receive a quotation for brazed plate heat exchangers that meet your requirements, please provide Alfa Laval representatives with:
- Required flow rates or heat load
- Temperature program (inlet and outlet
- Brine and refrigerant type
- Desired working pressure
- Maximum permitted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

Examples of connections

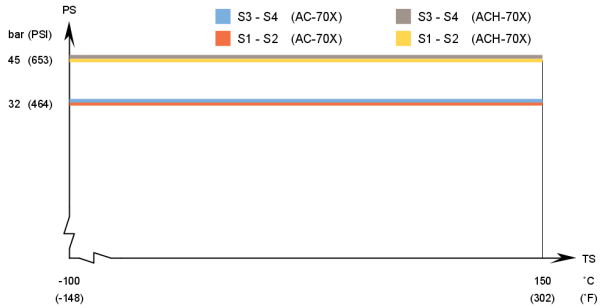


* More connections are available on request.

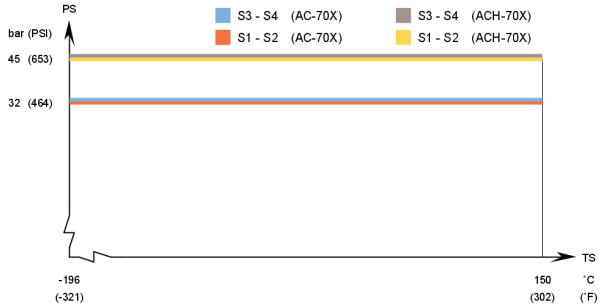
AC70X / ACH70X – PED approval pressure/temperature graph*



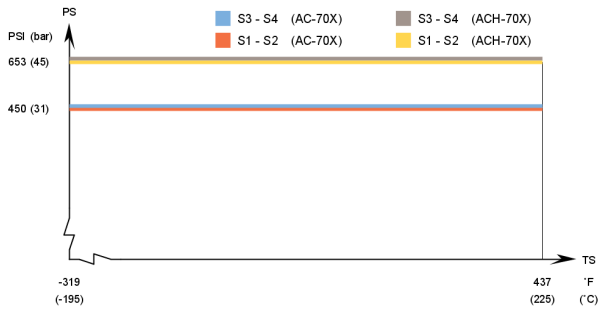
AC70X / ACH70X – KHK and KRA approval pressure/temperature graph*



AC70X / ACH70X – CRN approval pressure/temperature graph*



AC70X / ACH70X – UL approval pressure/temperature graph*



Standard materials

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

Standard data

Min. working temperature	see graph
Max. working temperature	see graph
Min. working pressure	vacuum
Max. working pressure	see graph
Volume per channel, litres (ga)	0.095 (0.025)
Max. flowrate* m^3/h (gpm)	14.5 (63.7)
Min. nbr of plates	4
Max. nbr of plates	150

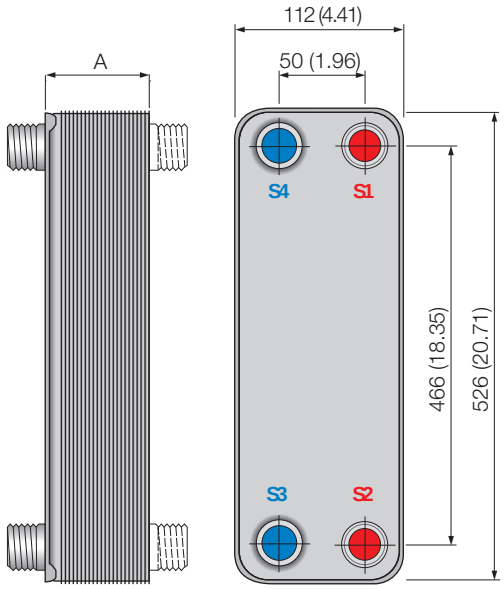
*) Water at 5 m/s (16.4 ft/s) (connection velocity)

Standard dimensions

A measure mm	=	11 + (2.3 * n) (+/-4 %)
A measure inch	=	0.43 + (0.09 * n) (+/-4 %)
Weight kg	=	1.9 + (0.18 * n)
Weight lb	=	4.19 + (0.4 * n)

(n = number of plates)

Standard dimensions
mm (inch)



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