

Alfa Laval CB410 / CBH410 / CBK410

Brazed plate heat exchanger

Introduction

Alfa Laval CB brazed plate heat exchangers provide efficient heat transfer with a small footprint.

Applications

- HVAC heating and cooling
- Oil cooling
- Industrial heating and cooling

Benefits

- Compact
- Easy to install
- Self-cleaning
- Low level of service and maintenance is required
- All units are pressure and leak tested
- Gasket free

Branded Features



FlexFlow[™] Superior thermal performance



PressureSecure Unparalleled strength for demanding duties



Total support – with value-adding options to fit your needs

Design

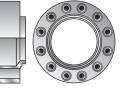
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

Asymmetric channels provide optimal efficiency in the most compact design.

Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.



Examples of connections





Compact flange

Welding

Clamp

Technical data

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

Dimensions and weight

Dimensions and weight ¹

A-measurement (mm)	H, L, M: 15.2 + (2.15 * n)
	AH, AM: 15.2 + (2.06 * n)
A-measurement (inches)	H, L, M: 0.60 + (0.08 * n)
	AH, AM: 0.60 + (0.08 * n)
Weight (kg) ²	30 + (1.14 * n)
Weight (lb) ²	66.14 + (2.51 * n)

¹ n = number of plates

² Excluding connections

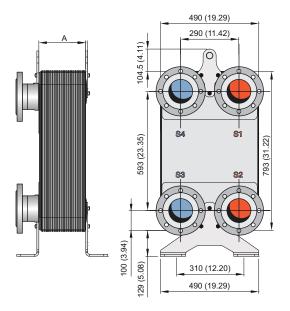
Standard data

otandara data	
Volume per channel, litre (gal)	H, L, M: 0.69 (0.1823)
	AH, AM (S1–S2): 0.86
	(0.2272)
(gai)	AH, AM (S3–S4): 0.57
	(0.1506)
Max. particle size, mm (inch)	1 (0.039)
Max. flowrate ¹ m ³ /h (gpm)	285 (1254.8)
Flow direction	Parallel
	CB: 10
Min. number of plates	CBH: 10
	CBK: 20
	CB: 330
Max. number of plates	CBH: 300
	CBK: 174

¹ Water at 5 m/s (16.4 ft/s) (connection velocity)

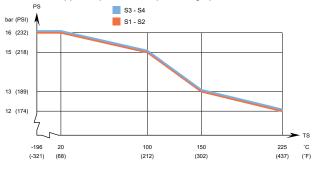
Dimensional drawing

Measurements in mm (inches)

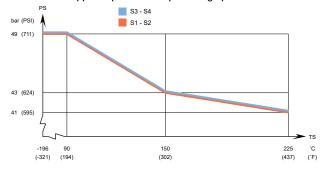


Design pressure and temperature

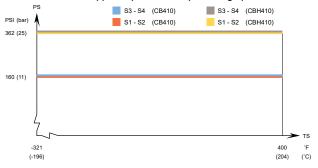
CB410 - PED approval pressure/temperature graph

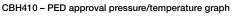


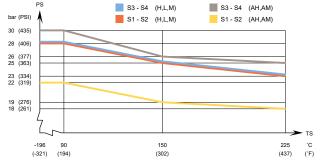




CB410/CBH410 - UL approval pressure/temperature graph







Designed for full vacuum.

Alfa Laval plate heat exchangers are available with a wide range of pressure vessel approvals. Please contact your Alfa Laval representative for more information.

NOTE: Values above are to be used as an indication. For exact values, please use the drawing generated by the Alfa Laval configurator or contact your local Alfa Laval representative.

Marine approvals

CBMK410 can be delivered with marine classification certificate (ABS, BV, CCS, ClassNK, DNV-GL, KR, LR, RINA, RMRS)

This document and its contents are subject to copyrights and other intellectual property rights owned by Alfa Laval AB (publ) or any of its affiliates (jointly "Alfa Laval"). No part of this document may be copied, re-produced or transmitted in any form or by any means, or for any purpose, without Alfa Laval's prior express written permission. Information and services provided in this document are made as a benefit and service to the user, and no representations or warranties are made about the accuracy or suitability of this information and these services for any purpose. All rights are reserved.

200000485-12-EN-GB