

# Alfa Laval CB410 / CBH410

# 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



ValuePlus

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

# Design

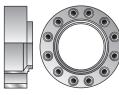
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

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 <sup>1</sup>		
A measure (mm)	H, L, M: 15.2 + (2.15 * n)	
	AH, AM: 15.2 + (2.06 * n)	
A measure (inches)	H, L, M: 0.60 + (0.08 * n)	
	AH, AM: 0.60 + (0.08 * n)	
Weight (kg) <sup>2</sup>	30 + (1.14 * n)	
Weight (lb) <sup>2</sup>	66.14 + (2.51 * n)	

<sup>1</sup> n = number of plates

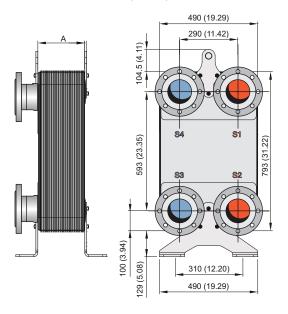
<sup>&</sup>lt;sup>2</sup> Excluding connections

Standard data	
Volume per channel, litres (gal)	H, L, M: 0.69 (0.1823)
	AH, AM (S1-S2): 0.86 (0.2272)
	AH, AM (S3-S4): 0.57 (0.1506)
Max. particle size, mm (inch)	1 (0.039)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	285 (1254.8)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	300

<sup>&</sup>lt;sup>1</sup> Water at 5 m/s (16.4 ft/s) (connection velocity)

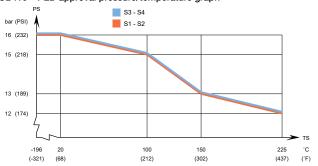
## **Dimensional drawing**

Measurements in mm (inches)

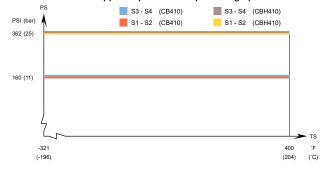


## Design pressure and temperature

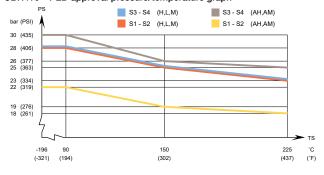
CB410 - PED approval pressure/temperature graph



#### CB410/CBH410 - UL approval pressure/temperature graph



CBH410 - PED 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)

