# ...froztec.



# Alfa Laval CB410 / CBH410

# Brazed plate heat exchanger

#### Introduction

Alfa Laval CB brazed plate heat exchangers pr ovide ef ficient 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 r equired
- All units are pressur e and leak tested
- Gasket fr ee

#### **Branded Features**



FlexFlow™

Superior thermal performance



PressureSecure

Unparalleled str ength for demanding duties



ValuePlus

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

#### Design

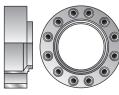
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer ef ficiency and pressur e resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

Asymmetric channels pr ovide optimal ef ficiency in the most compact design.

Based on standar d components and a modular concept, each unit is custom-built to meet the specific r equirements 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 measur e (mm)	H, L, M: 15.2 + (2.15 * n)	
	AH, AM: 15.2 + (2.06 * n)	
A measur e (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

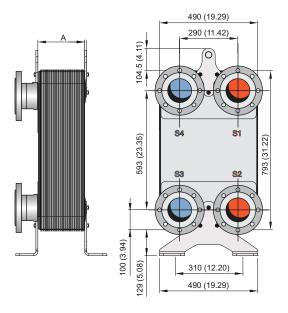
# Standard data

Standard data	
	H, L, M: 0.69 (0.1823)
Volume per channel, litr es (gal)	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)

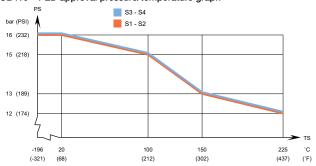
#### **Dimensional drawing**

Measur ements in mm (inches)

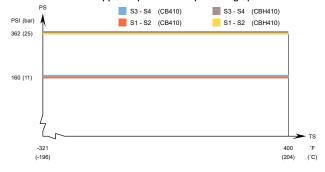


# Design pressure and temperature

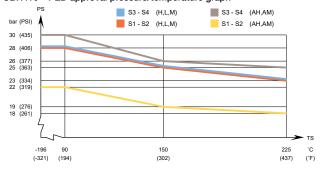
CB410 - PED approval pressure/temperature graph



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



CBH410 - PED approval pressure/temperature graph



Designed for full vacuum.

Alfa Laval plate heat exchangers ar e available with a wide range of pr essur e vessel appr ovals. Please contact your Alfa Laval representative for mor e information.

**NOTE:** Values above ar e 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 deliver ed with marine classification certificate (ABS, BV , CCS, ClassNK, DNV -GL, KR, LR, RINA, RMRS)

 $<sup>^2</sup>$  Excluding connections



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