

Alfa Laval CB112 / CBH112 / CBP112 / CBXP112

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
- Refrigeration
- 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

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.

Different pressure ratings are available for different needs.

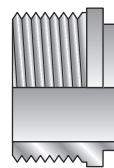
The XP design is particularly suited for CO₂ applications.

Asymmetric channels provide optimal efficiency in the most compact design. This results in low refrigerant charge or lower pressure drop on the water or brine side, reducing the CO₂ footprint.

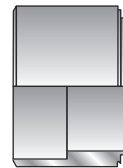
Based on standard components and a modular concept, including symmetric and asymmetric channels, each unit is custom-built to meet the specific requirements of each individual installation.



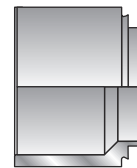
Examples of connections



External thread



Soldering



Welding



Grooved connection

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) | $16 + (2.07 * n)$ |
| A-measurement (inches) | $0.63 + (0.08 * n)$ |
| Weight (kg) ² | $4.82 + (0.35 * n)$ |
| Weight (lb) ² | $10.63 + (0.77 * n)$ |

¹ n = number of plates

² Excluding connections

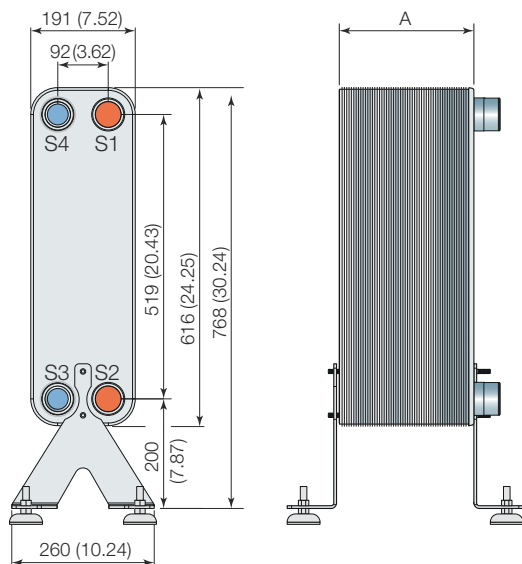
Standard data

| | |
|--|---|
| | H, L, M: 0.18 (0.0476) |
| Volume per channel, litres (gal) | CB/CBH/CBP AH (S1-S2): 0.2 (0.0528) CB/CBH/CBP AH (S3-S4): 0.16 (0.0423) |
| Max. particle size, mm (inch) | 1 (0.039) |
| Max. flowrate ¹ m ³ /h (gpm) | 51 (224.5) |
| Flow direction | Parallel |
| Min. number of plates | 10 |
| Max. number of plates | 300 |

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

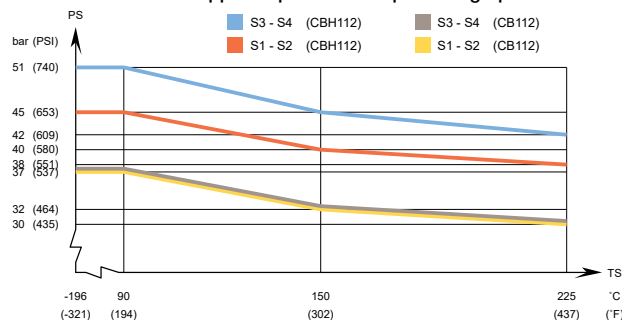
Dimensional drawing

Measurements in mm (inches)

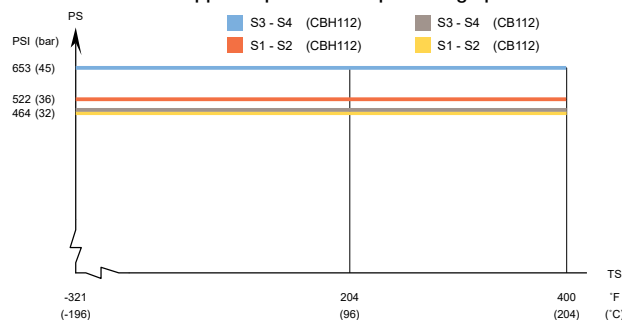


Design pressure and temperature

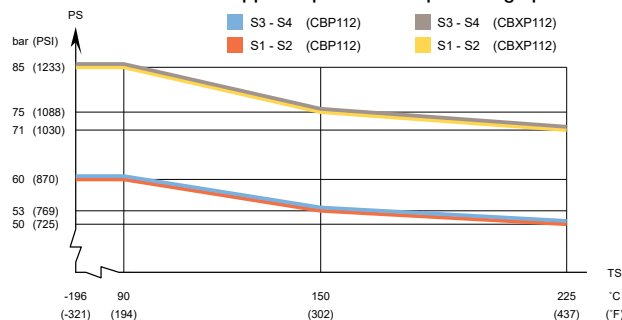
CBH112/CBH112 – PED approval pressure/temperature graph



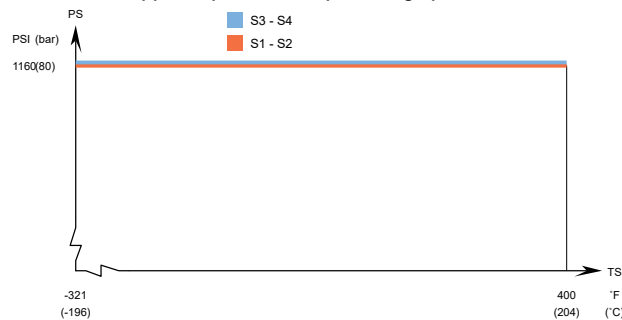
CBH112/CBH112 – UL approval pressure/temperature graph



CBP112 / CBXP112 – PED approval pressure/temperature graph



CBXP112 – 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

CBMH112 and CBMXP112 can be delivered with marine classification certificate (ABS, BV, CCS, ClassNK, DNV-GL, KR, LR, RINA)

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.

CHE00030-6-EN-GB

© Alfa Laval AB

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com