



Alfa Laval CB18 / CBH18

Brazed plate heat exchanger

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

Design

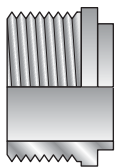
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

Different pressure ratings are available for different needs.

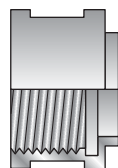
Based on standard components and a modular concept, including symmetric and asymmetric channels, each unit is custom-built to meet the specific requirements of each individual installation.



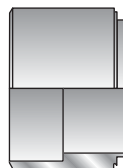
Examples of connections



External thread



Internal thread



Soldering

Technical Data

Standard materials

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

Dimensions and weight¹

| | |
|--------------------------|-------------------|
| A measure (mm) | 7 + (2.16 * n) |
| A measure (inches) | 0.28 + (0.09 * n) |
| Weight (kg) ² | 0.22 + (0.07 * n) |
| Weight (lb) ² | 0.48 + (0.15 * n) |

- n = number of plates
- Excluding connections

Standard data

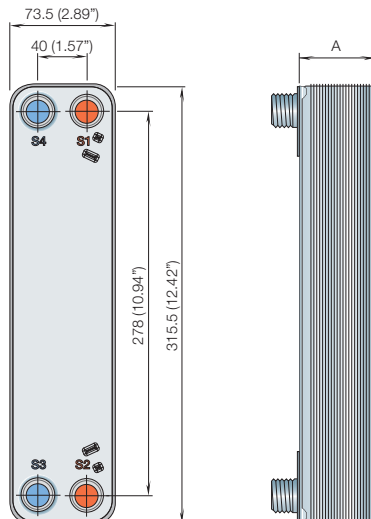
| | |
|----------------------------------|---------------------------|
| Volume per channel, litres (gal) | A (S1-S2): 0.042 (0.011) |
| | A (S3-S4): 0.035 (0.0089) |
| | H: 0.038 (0.010) |

| | |
|--|-------------|
| Max. particle size, mm (inch) | 1.1 (0.043) |
| Max. flowrate ¹ m ³ /h (gpm) | 4.1 (18) |
| Flow direction | Parallel |
| Min. number of plates | 4 |
| Max. number of plates | 60 |

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

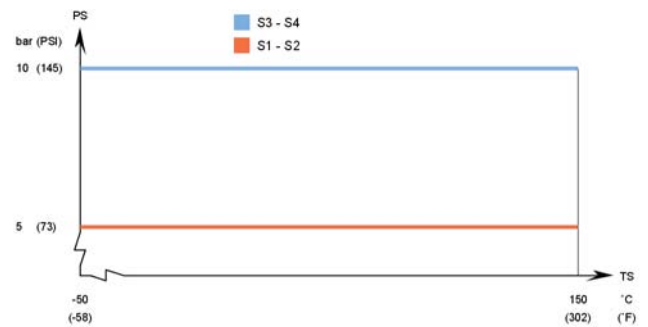
Dimensional drawing

Measurements in mm (inches)

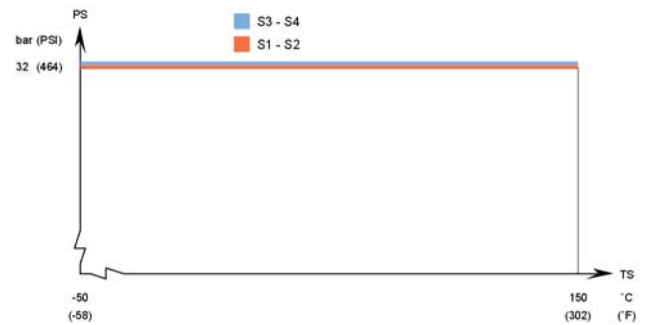


Design pressure and temperature

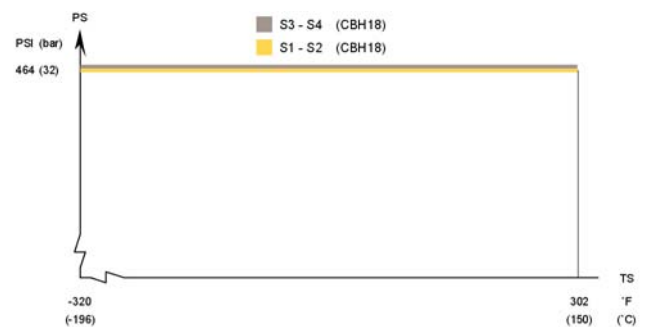
CB18 – PED approval pressure/temperature graph



CBH18 – PED approval pressure/temperature graph



CBH18 – UL/CRN 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.

