



# Alfa Laval CB110 / CBH110 / CBP110 / CBK110

## 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

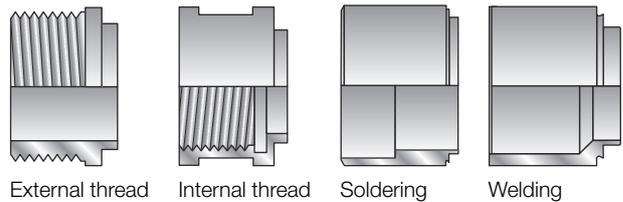
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

Different pressure ratings are available for different needs.

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

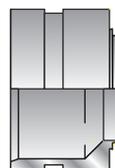


External thread

Internal 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 <sup>1</sup>

A-measurement (mm)	15 + (2.56 * n)
A-measurement (inches)	0.59 + (0.10 * n)
Weight (kg) <sup>2</sup>	4.82 + (0.35 * n)
Weight (lb) <sup>2</sup>	10.63 + (0.77 * n)

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

<sup>2</sup> Excluding connections

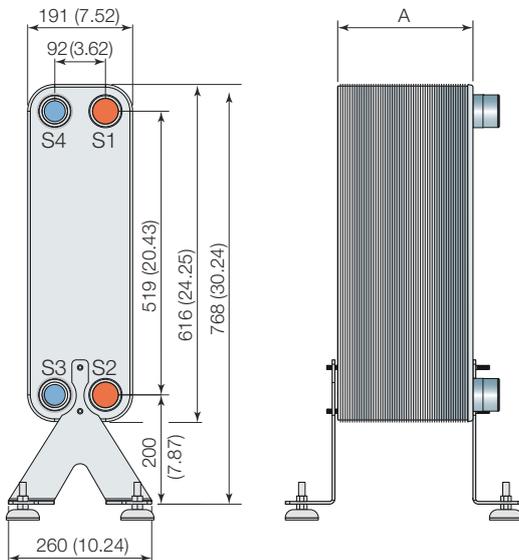
### Standard data

Volume per channel, litres (gal)	0.21 (0.0555)
Max. particle size, mm (inch)	1.2 (0.047)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	51 (224.5)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	240

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

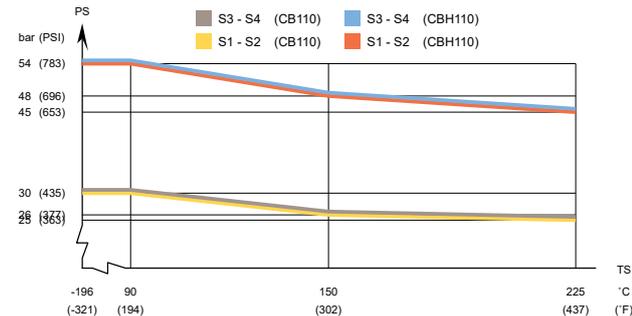
## Dimensional drawing

Measurements in mm (inches)

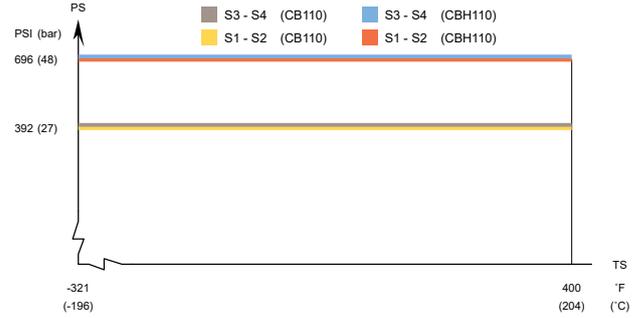


## Design pressure and temperature

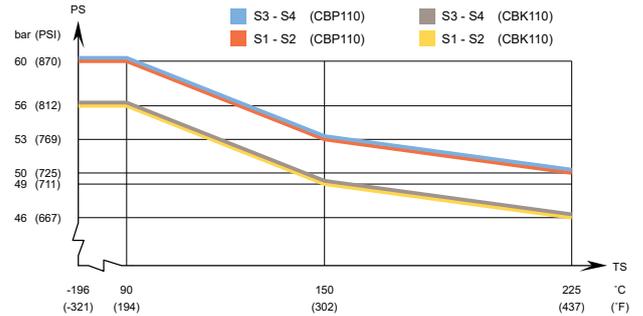
### CB110/CBH110 – PED approval pressure/temperature graph



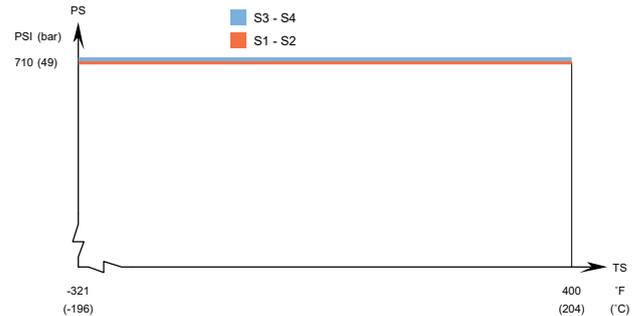
### CB110/CBH110– UL approval pressure/temperature graph



### CB110 / CBP110 – PED approval pressure/temperature graph



### CBK110 – 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

CBM110 can be delivered with marine classification certificate (ABS, BV, CCS, ClassNK, DNV-GL, KR, LR, RINA)

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# 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.

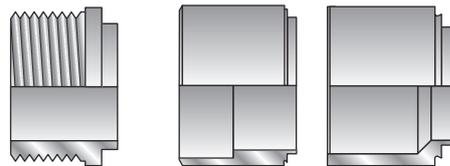
The XP design is particularly suited for CO<sub>2</sub> applications.

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 CO<sub>2</sub> 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.



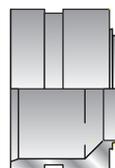
### Examples of connections



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 <sup>1</sup>

A-measurement (mm)	16 + (2.07 * n)
A-measurement (inches)	0.63 + (0.08 * n)
Weight (kg) <sup>2</sup>	4.82 + (0.35 * n)
Weight (lb) <sup>2</sup>	10.63 + (0.77 * n)

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

<sup>2</sup> Excluding connections

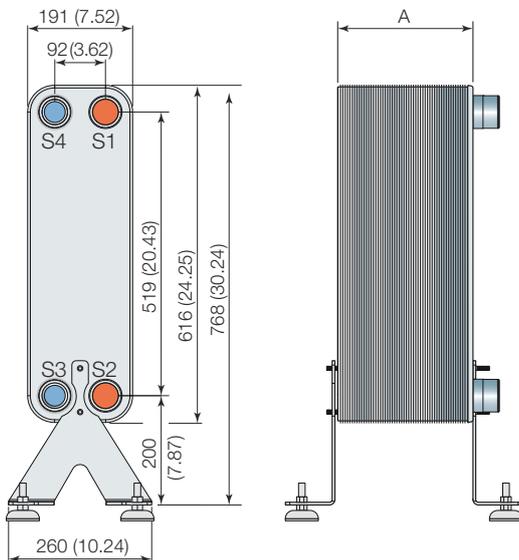
### Standard data

	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 <sup>1</sup> m <sup>3</sup> /h (gpm)	51 (224.5)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	300

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

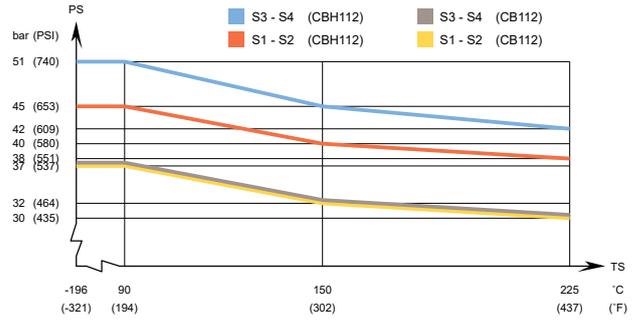
## Dimensional drawing

Measurements in mm (inches)

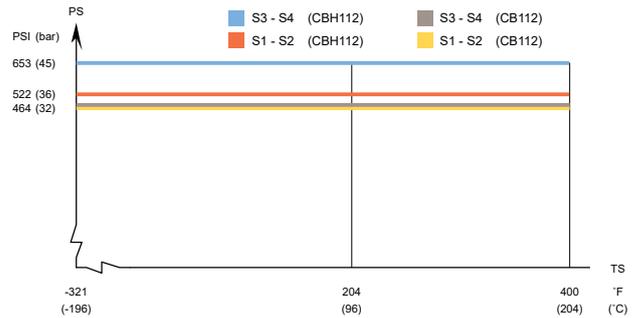


## Design pressure and temperature

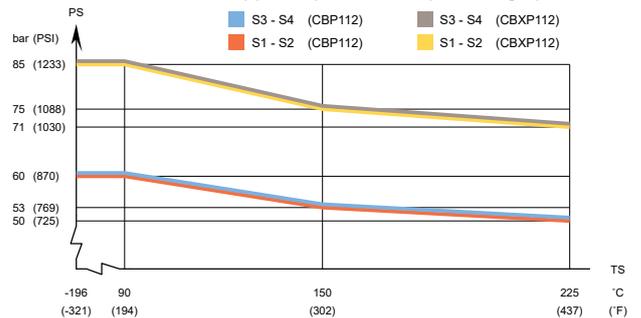
### CB112/CBH112 – PED approval pressure/temperature graph



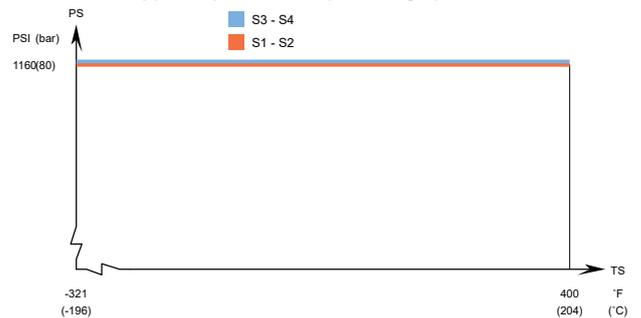
### CB112/CBH112 – UL approval pressure/temperature graph



### CBP112 / CBXP112 – PED approval pressure/temperature graph



### CBXP112 – UL approval pressure/temperature graph



Designed for full vacuum.

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## Marine approvals

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# Alfa Laval CB18 / CBH18

## 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

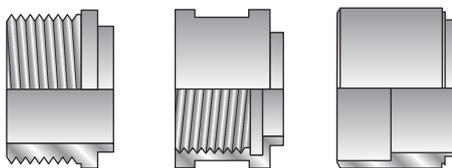
### Design

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 weight

#### Dimensions and weight <sup>1</sup>

A measure (mm)	$7 + (2.16 * n)$
A measure (inches)	$0.28 + (0.09 * n)$
Weight (kg) <sup>2</sup>	$0.217 + (0.07 * n)$
Weight (lb) <sup>2</sup>	$0.48 + (0.15 * n)$

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

<sup>2</sup> Excluding connections

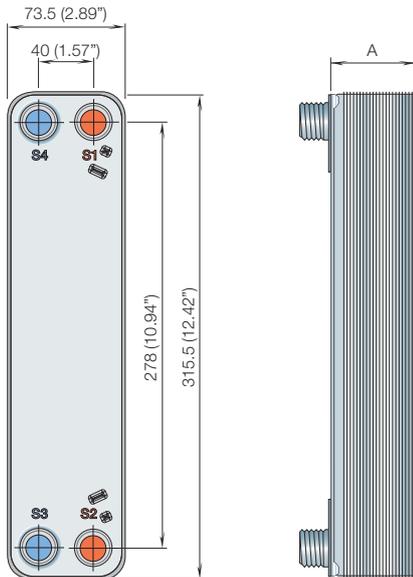
#### Standard data

Volume per channel, litres (gal)	A (S1-S2): 0.042 (0.0111) A (S3-S4): 0.0345 (0.0091) H: 0.0379 (0.0100)
Max. particle size, mm (inch)	1.1 (0.043)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	4.1 (18.1)
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	52

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

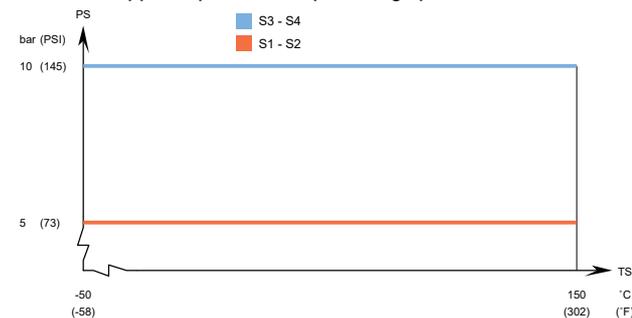
## Dimensional drawing

Measurements in mm (inches)

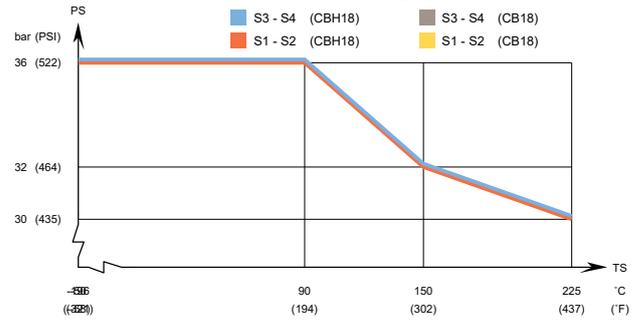


## Design pressure and temperature

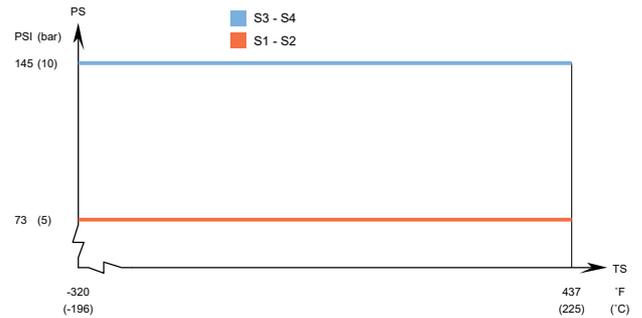
### CB18 – PED approval pressure/temperature graph



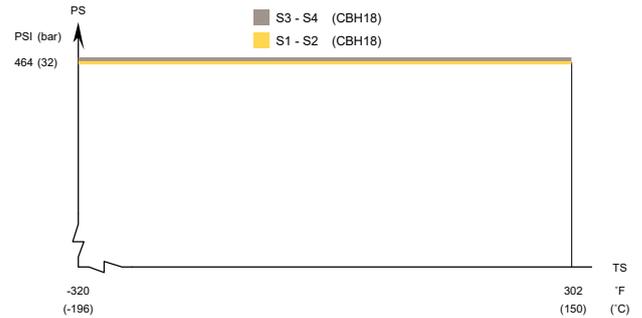
### CBH18 – PED approval pressure/temperature graph



### CB18 – UL/CRN 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.

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# Alfa Laval CBH18DW

## Brazed plate heat exchanger

### Introduction

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

Double wall plates are used as an extra precaution to avoid intermixing of fluids.

### Applications

- HVAC heating and cooling
- Condenser

### Benefits

- Compact
- Easy to install
- Self-cleaning
- Low level of service and maintenance is required
- All units are pressure and leak tested
- Gasket free
- Leak detection
- No fluid contamination

### Branded Features



**ValuePlus**

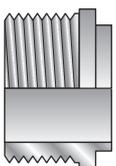
Total support – with value-adding options to fit your needs

### Design

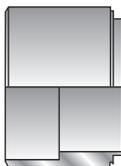
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

The double wall construction provides external leak detection and minimizes the risk of mixing the fluids. The thermal performance is similar to single wall heat exchanger.

### Examples of connections



External thread



Soldering



## 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)	12.2 + (2.27 * n)
A measure (inches)	0.48 + (0.09 * n)
Weight (kg) <sup>2</sup>	0.6 + (0.13 * n)
Weight (lb) <sup>2</sup>	1.32 + (0.29 * n)

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

<sup>2</sup> Excluding connections

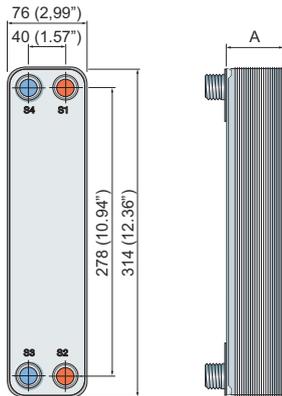
### Standard data

Volume per channel, litres (gal)	0.0335 (0.0088)
Max. particle size, mm (inch)	0.6 (0.024)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	4.1 (18.1)
Flow direction	Parallel
Min. number of plates	10 (DW)
Max. number of plates	52 (DW)

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

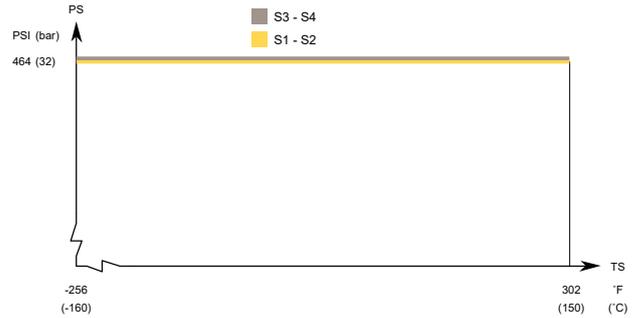
## Dimensional drawing

Measurements in mm (inches)

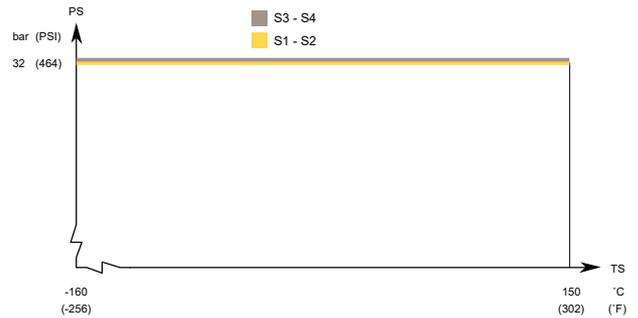


## Design pressure and temperature

### CBH18DW – UL approval pressure/temperature graph



### CBH18DW – 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.

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# Alfa Laval CB20 / CBH20

## 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

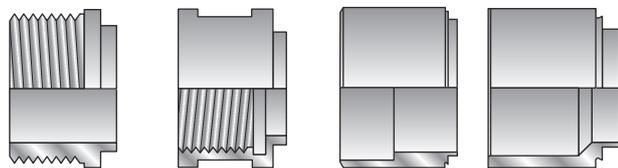
- Compact
- Easy to install
- Self-cleaning
- Low level of service and maintenance is required
- All units are pressure and leak tested
- Gasket free

### 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.

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



External thread

Internal thread

Soldering

Welding



## 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)	CB: $8 + (1.5 * n)$ CBH: $10 + (1.5 * n)$
A measure (inches)	CB: $0.31 + (0.06 * n)$ CBH: $0.39 + (0.06 * n)$
Weight (kg) <sup>2</sup>	CB: $0.6 + (0.08 * n)$ CBH: $0.9 + (0.08 * n)$
Weight (lb) <sup>2</sup>	CB: $1.32 + (0.18 * n)$ CBH: $1.98 + (0.18 * n)$

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

<sup>2</sup> Excluding connections

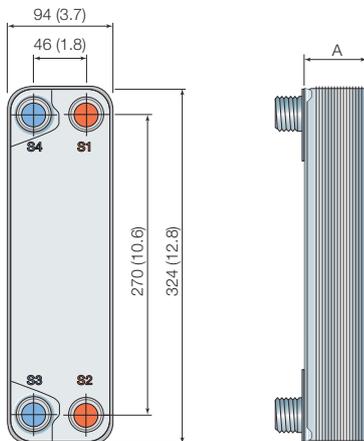
### Standard data

Volume per channel, litres (gal)	0.028 (0.0074)
Max. particle size, mm (inch)	0.6 (0.024)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	8.8 (38.7)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	CB: 110 CBH: 94

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

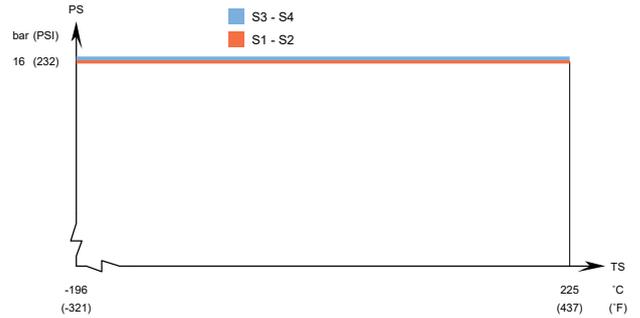
## Dimensional drawing

Measurements in mm (inches)

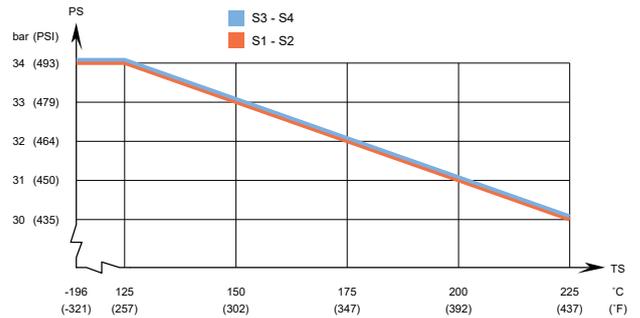


## Design pressure and temperature

### CB20 – PED approval pressure/temperature graph



### CBH20 – PED approval pressure/temperature graph



Designed for full vacuum.

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# Alfa Laval CB200 / CBH200

## 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

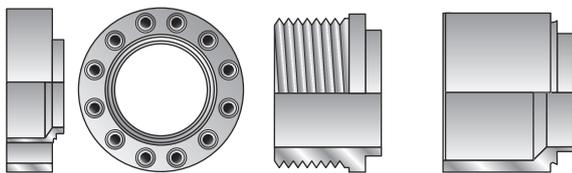
#### Design

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.

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

External thread

Welding



## 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-measurement (mm)	11 + (2.7 * n)
A-measurement (inches)	0.43 + (0.11 * n)
Weight (kg) <sup>2</sup>	12 + (0.60 * n)
Weight (lb) <sup>2</sup>	26.46 + (1.32 * n)

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

<sup>2</sup> Excluding connections

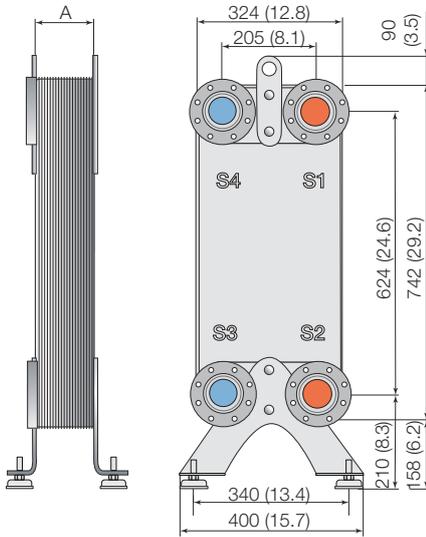
### Standard data

Volume per channel, litres (gal)	0.51 (0.1347)
Max. particle size, mm (inch)	1.8 (0.071)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	128 (563.6)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	230

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

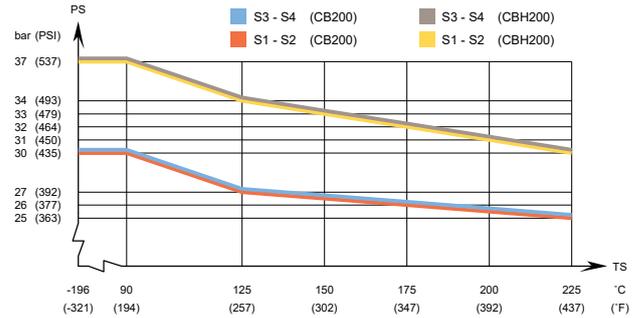
## Dimensional drawing

Measurements in mm (inches)



## Design pressure and temperature

### CB200/CBH200 – 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

CBMH200 can be delivered with marine classification certificate (ABS, BV, CCS, ClassNK, DNV-GL, KR, LR, RINA)

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# Alfa Laval CB210 / CBH210 / CBK210

## 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



**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.

Different pressure ratings are available for different needs.

Asymmetric channels provide optimal efficiency in the most compact design.

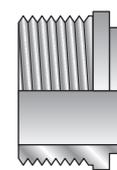
Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.



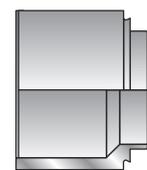
### Examples of connections



Compact flange



External thread



Welding

## 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-measurement (mm)	H, L, M: $11 + (2.18 * n)$ AH, AM: $11 + (2.14 * n)$
A-measurement (inches)	H, L, M: $0.43 + (0.09 * n)$ AH, AM: $0.43 + (0.08 * n)$
Weight (kg) <sup>2</sup>	$12 + (0.61 * n)$
Weight (lb) <sup>2</sup>	$26.46 + (1.34 * n)$

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

<sup>2</sup> Excluding connections

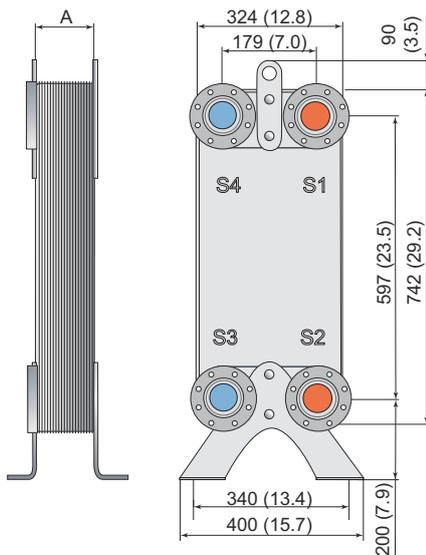
### Standard data

	AH, AM (S1-S2): 0.636 (0.1680)
Volume per channel, litres (gal)	AH, AM (S3-S4): 0.416 (0.1099)
	H, L, M: 0.503 (0.1329)
Max. particle size, mm (inch)	1 (0.039)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	162 (713.3)
Flow direction	Parallel
	CB: 20
Min. number of plates	CBH: 20 CBK: 20
	CB: 360
Max. number of plates	CBH: 300 CBK: 204

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

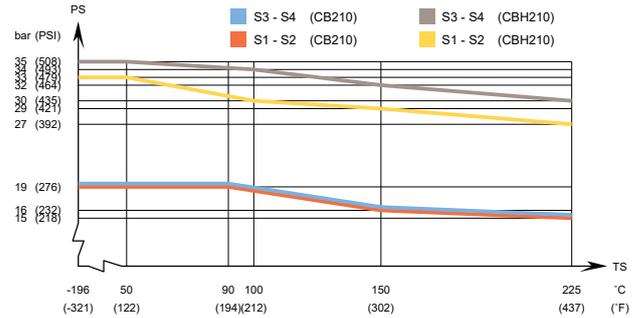
## Dimensional drawing

Measurements in mm (inches)

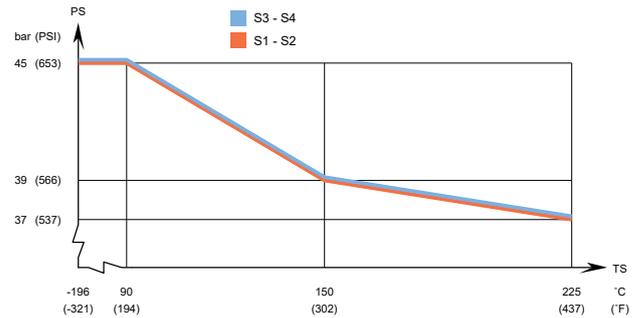


## Design pressure and temperature

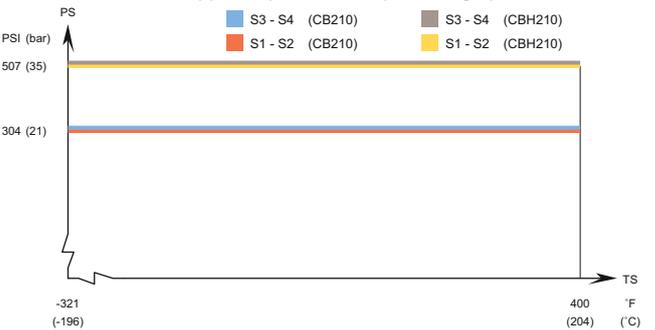
### CB210/CBH210 – PED approval pressure/temperature graph



### CBK210 – PED approval pressure/temperature graph



### CB210/CBH210 – 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

CBMK210 can be delivered with marine classification certificate (ABS, BV, CCS, ClassNK, DNV-GL, KR, LR, RINA)

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# Alfa Laval CB24

## 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
- Evaporator
- Condenser

### 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



**IceSafe**

Controlled, non-destructive freezing



**PressureSecure**

Unparalleled strength for demanding duties



**REFuture**

A future-proof investment for tomorrow's refrigerants



**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.

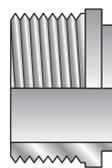
Asymmetric channels provide optimal efficiency in the most compact design. This results in low refrigerant charge or lower pressure drop on the water or brine side, reducing the CO<sub>2</sub> footprint.



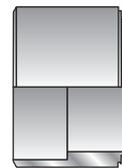
Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.

Suitable with most HFC, HFO and natural refrigerants.

### Examples of connections



External thread



Soldering

## 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)	$6.2 + (1.17 * n)$
A measure (inches)	$0.24 + (0.05 * n)$
Weight (kg) <sup>2</sup>	$0.515 + (0.07 * n)$
Weight (lb) <sup>2</sup>	$1.14 + (0.15 * n)$

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

<sup>2</sup> Excluding connections

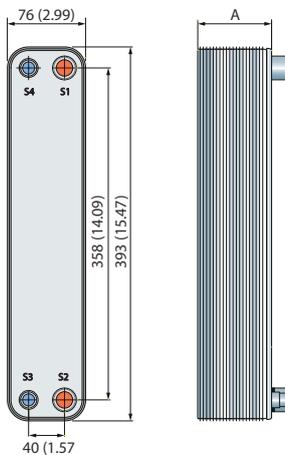
### Standard data

Volume per channel, litres	S1-S2: 0.0347 (0.0092)
(gal)	S3-S4: 0.0184 (0.0049)
Max. particle size, mm	0.5 (0.020)
(inch)	
Max. flowrate <sup>1</sup> m <sup>3</sup> /h	4.1 (18.1)
(gpm)	
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	56

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

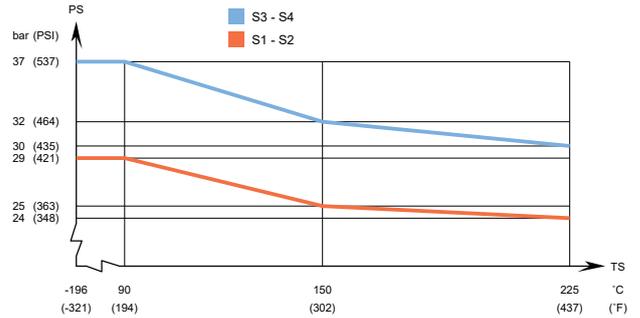
## Dimensional drawing

Measurements in mm (inches)



## Design pressure and temperature

### CB24 – 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.

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# Alfa Laval CB30 /CBH30 / CBP30

## 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

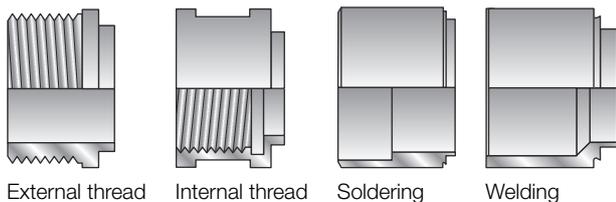
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

Different pressure ratings are available for different needs.

The unit can be supplied with a refrigerant distribution system for optimal evaporator performance.

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



## 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-measurement (mm)	13 + (2.31 * n)
A-measurement (inches)	0.51 + (0.09 * n)
Weight (kg) <sup>2</sup>	1.2 + (0.11 * n)
Weight (lb) <sup>2</sup>	2.65 + (0.24 * n)

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

<sup>2</sup> Excluding connections

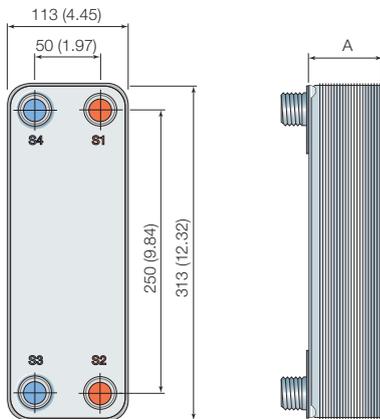
### Standard data

Volume per channel, litres (gal)	0.054 (0.0143)
Max. particle size, mm (inch)	1 (0.039)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	14 (61.6)
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	150

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

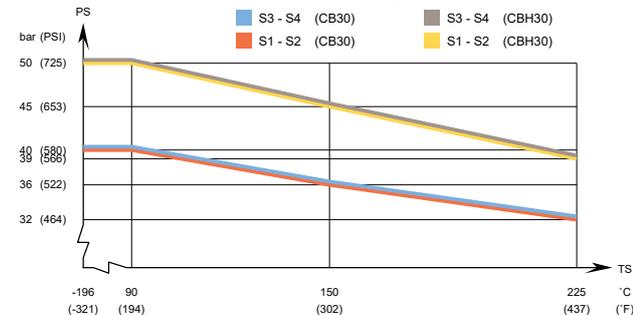
## Dimensional drawing

Measurements in mm (inches)

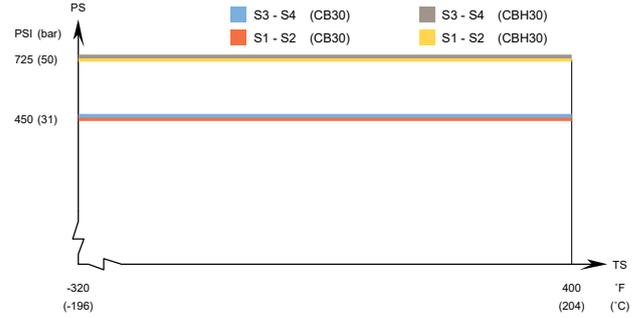


## Design pressure and temperature

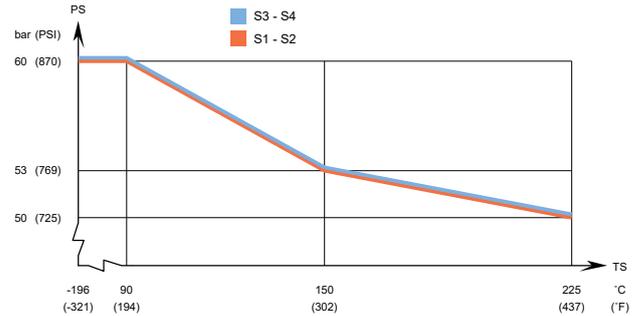
### CBP30 – PED approval pressure/temperature graph



### CB30 – UL approval pressure/temperature graph



### CBP30 – 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

CBM30 can be delivered with marine classification certificate (ABS, BV, CCS, ClassNK, DNV-GL, KR, LR, RINA)

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# Alfa Laval CB300 / CBH300

## 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

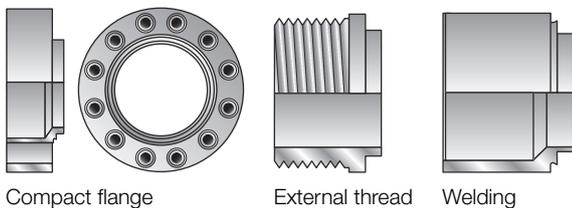
### Design

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, each unit is custom-built to meet the specific requirements of each individual installation.

### Examples of connections



## 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)	$11 + (2.62 * n)$
A measure (inches)	$0.43 + (0.10 * n)$
Weight (kg) <sup>2</sup>	$21 + (1.26 * n)$
Weight (lb) <sup>2</sup>	$46.30 + (2.78 * n)$

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

<sup>2</sup> Excluding connections

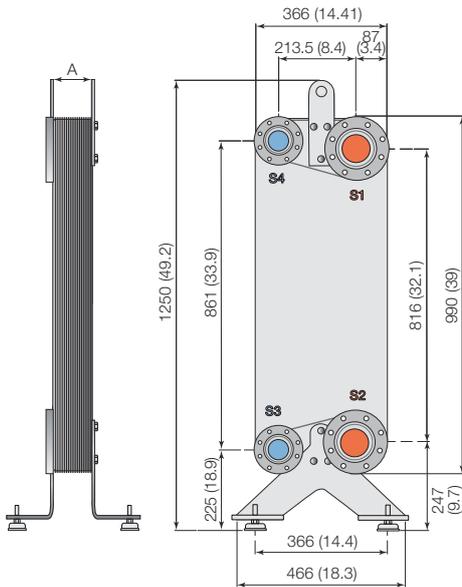
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.69 (0.1823)
	(S3-S4): 0.58 (0.1532)
Max. particle size, mm (inch)	1.8 (0.071)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	200 (880.6)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	250

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

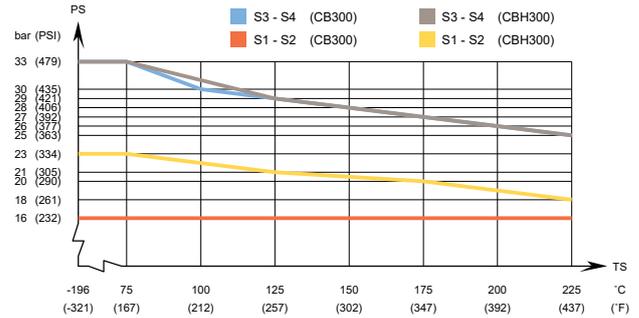
## Dimensional drawing

Measurements in mm (inches)

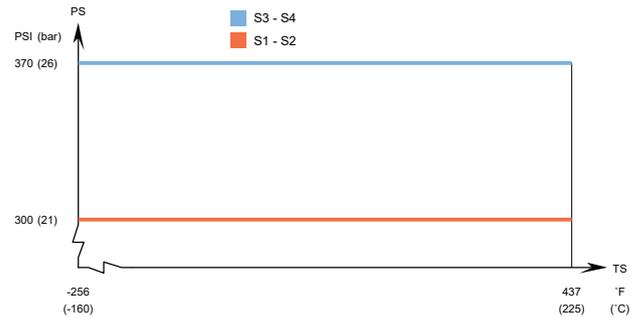


## Design pressure and temperature

### CB300/CBH300 – PED approval pressure/temperature graph



### CB300/CBH300 – 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.

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# Alfa Laval CB40

## 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
- Data center 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



**IceSafe**

Controlled, non-destructive freezing



**PressureSecure**

Unparalleled strength for demanding duties



**ValuePlus**

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

### Design

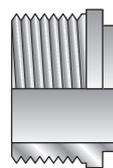
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

Different pressure ratings are available for different needs.

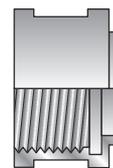
Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.



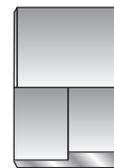
### Examples of connections



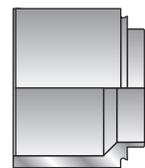
External thread



Internal thread



Soldering



Welding

## 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-measurement (mm)	12.5 + (1.55 * n)
A-measurement (inches)	0.49 + (0.06 * n)
Weight (kg) <sup>2</sup>	1.4 + (0.11 * n)
Weight (lb) <sup>2</sup>	3.09 + (0.24 * n)

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

<sup>2</sup> Excluding connections

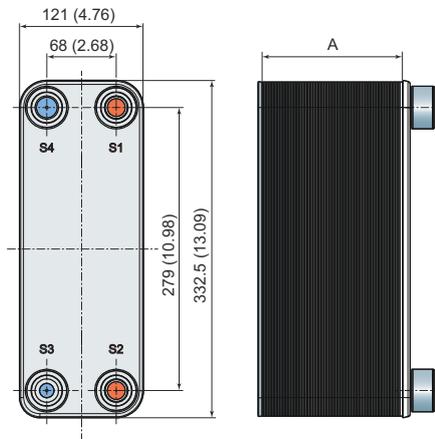
### Standard data

Volume per channel, litres (S1-S2)	0.048 (0.0127)
(gal)	(S3-S4) 0.041 (0.0108)
Max. particle size, mm (inch)	0.6 (0.024)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	8.8 (38.7)
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	150

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

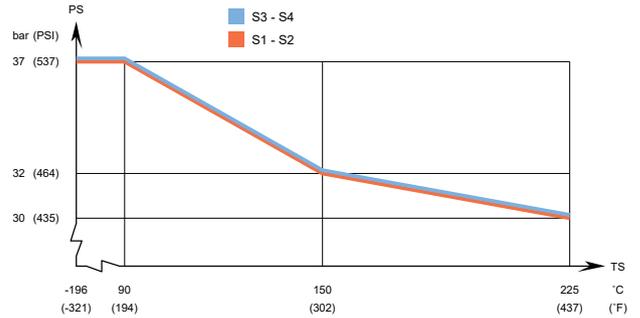
## Dimensional drawing

Measurements in mm (inches)



## Design pressure and temperature

### CB40 – 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.

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# Alfa Laval CB400

## 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

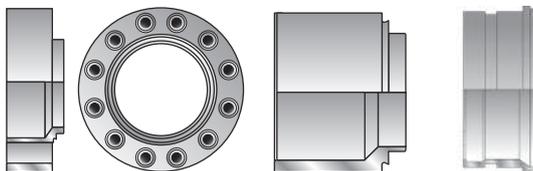
### Branded Features

#### 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.

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-measurement (mm)	14 + (2.56 * n)
A-measurement (inches)	0.55 + (0.10 * n)
Weight (kg) <sup>2</sup>	24 + (1.35 * n)
Weight (lb) <sup>2</sup>	52.91 + (2.98 * n)

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

<sup>2</sup> Excluding connections

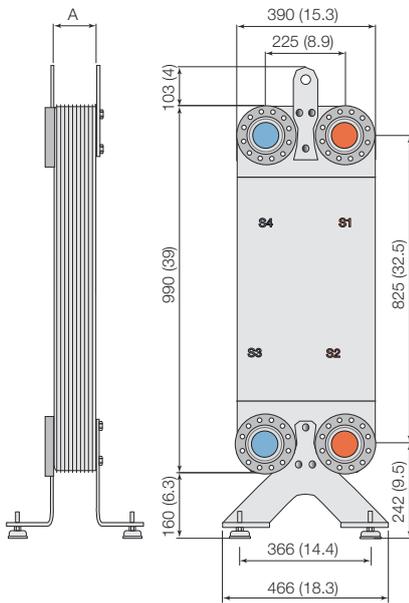
### Standard data

Volume per channel, litres (gal)	0.74 (0.1955)
Max. particle size, mm (inch)	1.8 (0.071)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	200 (880.6)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	270

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

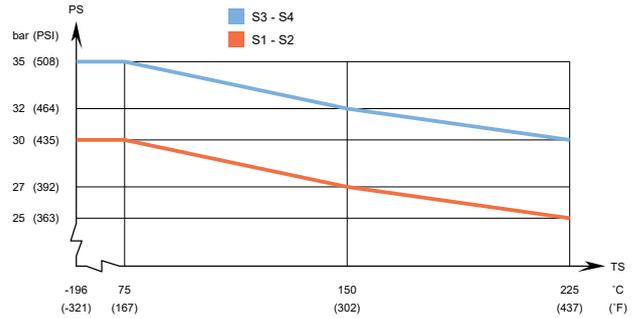
## Dimensional drawing

Measurements in mm (inches)

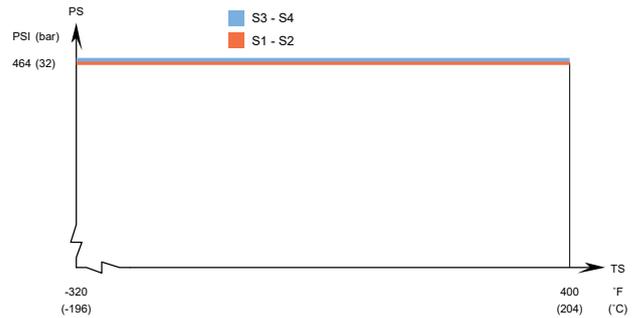


## Design pressure and temperature

### CB400 – PED approval pressure/temperature graph



### CB400 – 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.

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## Marine approvals

CBM400 can be delivered with marine classification certificate (ABS, BV, CCS, ClassNK, DNV-GL, KR, LR, RINA)

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# 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



**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.

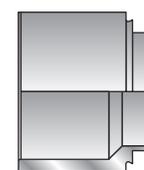
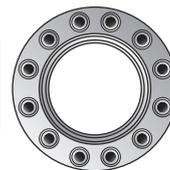
Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.



### 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-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) <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>2</sup> Excluding connections

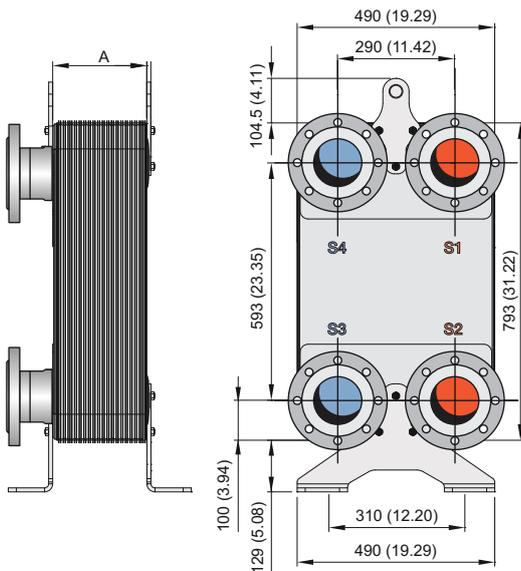
### Standard data

	H, L, M: 0.69 (0.1823)
Volume per channel, litres (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
	CB: 10
Min. number of plates	CBH: 10 CBK: 20
	CB: 330
Max. number of plates	CBH: 300 CBK: 174

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

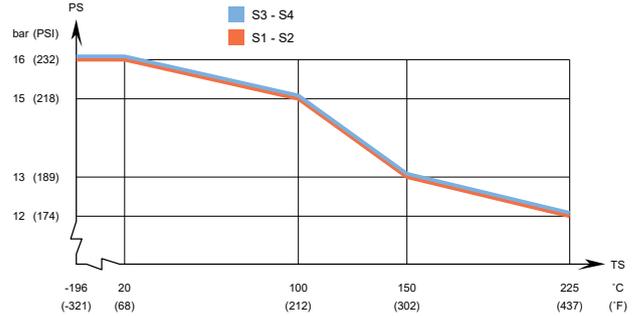
## Dimensional drawing

Measurements in mm (inches)

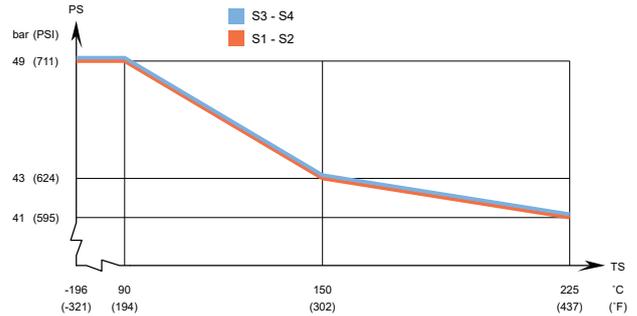


## Design pressure and temperature

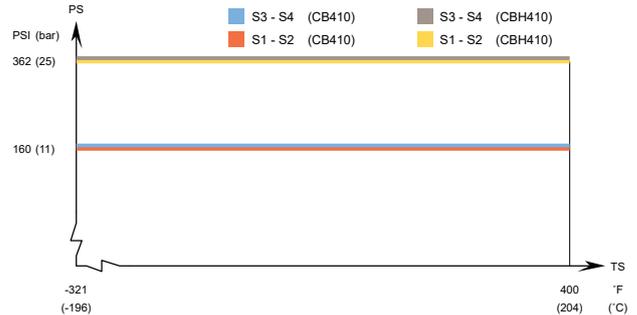
### CBH410 – PED approval pressure/temperature graph



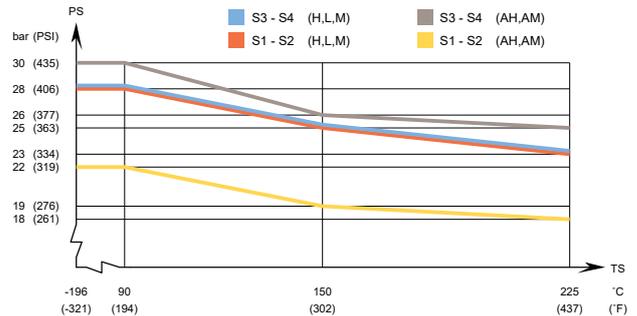
### CBK410 – PED approval pressure/temperature graph



### CBH410/CBH410 – UL approval pressure/temperature graph



### CBH410 – PED approval pressure/temperature graph



Designed for full vacuum.

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## Marine approvals

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# Alfa Laval CBP540

## 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
- 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



**IceSafe** Controlled, non-destructive freezing



**PressureSecure** Unparalleled strength for demanding duties



**REFuture** A future-proof investment for tomorrow's refrigerants



**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.

Different pressure ratings are available for different needs.

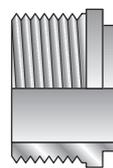
The P design is particularly suited for CO<sub>2</sub> applications.

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 CO<sub>2</sub> footprint.

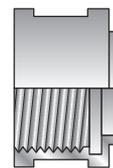


Based on standard components and a modular concept, including symmetric and asymmetric channels, each unit is custom-built to meet the specific requirements of each individual installation.

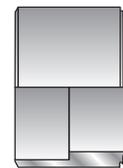
### Examples of connections



External thread



Internal thread



Soldering

## 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)	$16 + (2.64 * n)$
A measure (inches)	$0.63 + (0.10 * n)$
Weight (kg) <sup>2</sup>	$16.6 + (0.99 * n)$
Weight (lb) <sup>2</sup>	$36.60 + (2.18 * n)$

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

<sup>2</sup> Excluding connections

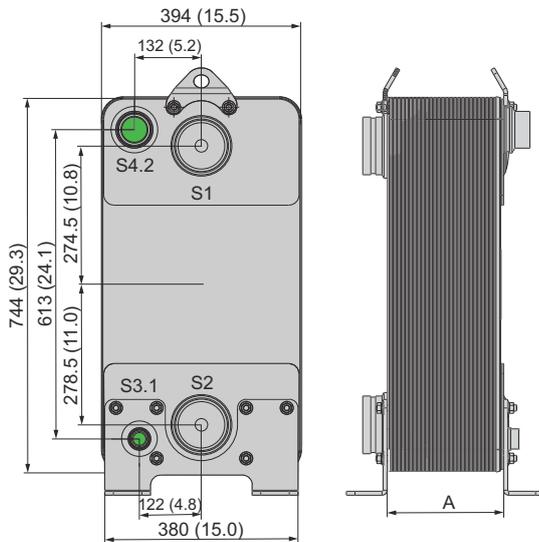
### Standard data

Volume per channel, litres (gal)	S1-S2: 0.73 (0.1928)
	S3-S4: 0.56 (0.02481)
Max. particle size, mm (inch)	1 (0.039)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	280 (1232.8)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	330

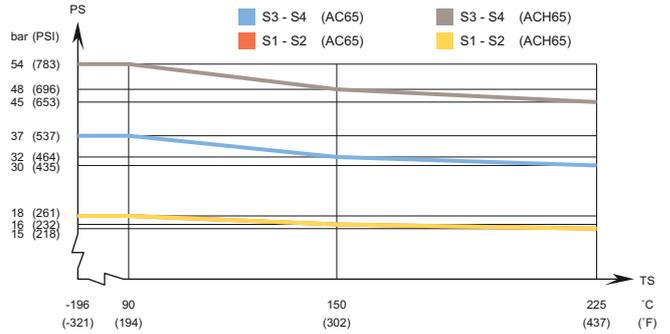
<sup>1</sup> Water at 7 m/s (23.0 ft/s) (connection velocity)

## Dimensional drawing

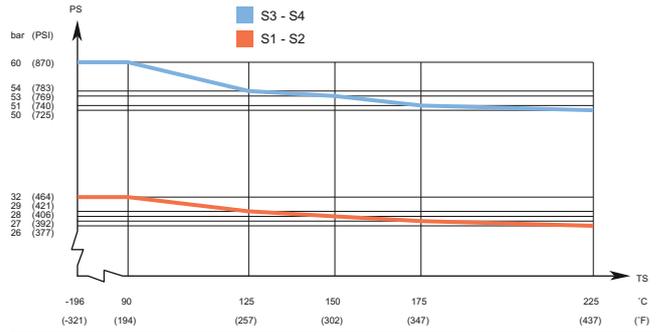
Measurements in mm (inches)



## Design pressure and temperature



### CBP540 – 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.

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# Alfa Laval CB60 / CBH60 / CBP60

## 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

### Design

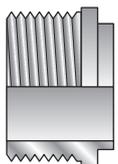
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

Different pressure ratings are available for different needs.

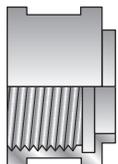
The unit can be supplied with a refrigerant distribution system for optimal evaporator performance.

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



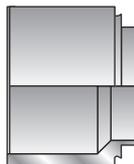
External thread



Internal thread



Soldering



Welding



## 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)	CB, CBH: $13 + (2.32 * n)$ CBP: $15 + (2.32 * n)$
A measure (inches)	CB, CBH: $0.51 + (0.09 * n)$ $n)^2$ CBP: $0.59 + (0.09 * n)$
Weight (kg) <sup>3</sup>	CB, CBH: $2.1 + (0.18 * n)^2$ CBP: $2.26 + (0.18 * n)$
Weight (lb) <sup>3</sup>	CB, CBH: $4.63 + (0.40 * n)$ CBP: $4.98 + (0.40 * n)$

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

<sup>2</sup> Excluding reinforcement

<sup>3</sup> Excluding connections

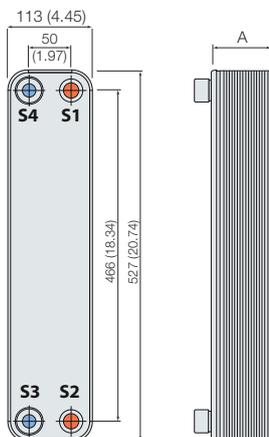
### Standard data

Volume per channel, litres (gal)	0.103 (0.0272)
Max. particle size, mm (inch)	1 (0.039)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	14 (61.6)
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	150

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

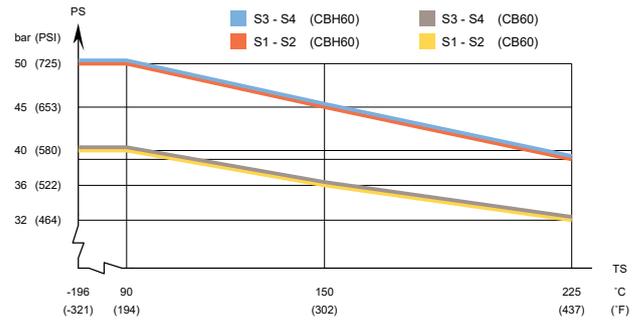
## Dimensional drawing

Measurements in mm (inches)

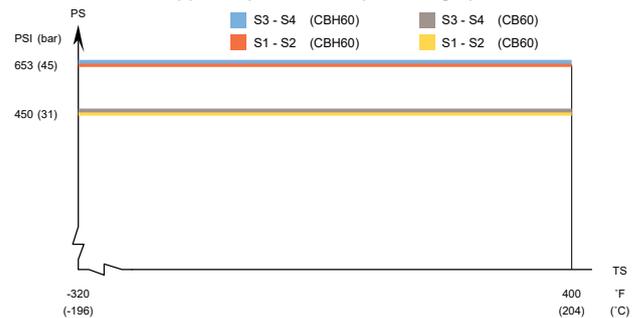


## Design pressure and temperature

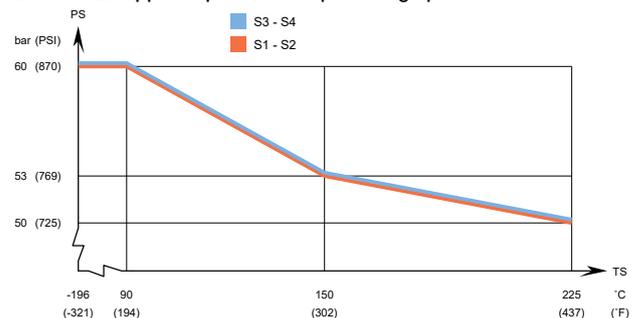
### CB60/CBH60 – PED approval pressure/temperature graph



### CB60/CBH60 – UL approval pressure/temperature graph



### CBP60 – 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.

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# Alfa Laval CB62 / CBH62 / CBK62

## 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



**FlexFlow™**

Superior thermal performance



**IceSafe**

Controlled, non-destructive freezing



**PressureSecure**

Unparalleled strength for demanding duties



**REFuture**

A future-proof investment for tomorrow's refrigerants



**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.

Different pressure ratings are available for different needs.

The unit can be supplied with a refrigerant distribution system for optimal evaporator performance.

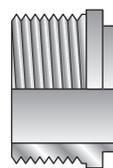
Asymmetric channels provide optimal efficiency in the most compact design. This results in low refrigerant charge or lower



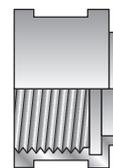
pressure drop on the water or brine side, reducing the CO<sub>2</sub> footprint.

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



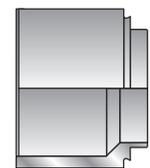
External thread



Internal thread



Soldering



Welding

## 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)	13 + (1.98 * n)
A measure (inches)	0.51 + (0.08 * n)
Weight (kg) <sup>2</sup>	2.1 + (0.18 * n)
Weight (lb) <sup>2</sup>	4.63 + (0.40 * n)

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

<sup>2</sup> Excluding connections

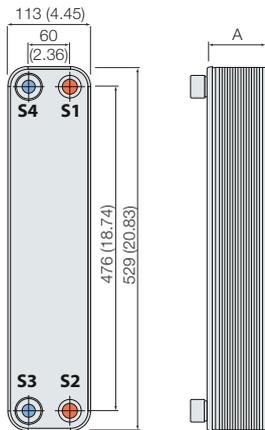
### Standard data

Volume per channel, litres (gal)	AH (S1-S2): 0.104 (0.0275) AH (S3-S4): 0.084 (0.0222) H: 0.094 (0.0248)
Max. particle size, mm (inch)	1 (0.039)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	8.8 (38.7)
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	150

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

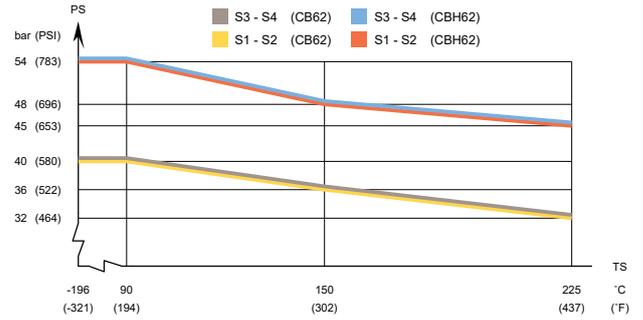
## Dimensional drawing

Measurements in mm (inches)

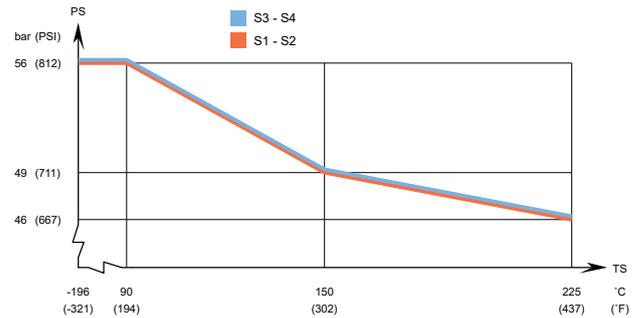


## Design pressure and temperature

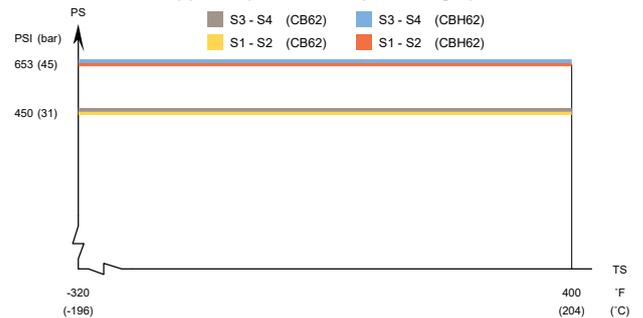
### CB62/CBH62 – PED approval pressure/temperature graph



### CBK62 – PED approval pressure/temperature graph



### CB62/CBH62 – UL approval pressure/temperature graph



Designed for full vacuum.

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# Alfa Laval CB65 / CBH65

## 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



**FlexFlow™**

Superior thermal performance



**IceSafe**

Controlled, non-destructive freezing



**PressureSecure**

Unparalleled strength for demanding duties



**REFuture**

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### 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 unit can be supplied with a refrigerant distribution system for optimal evaporator performance.

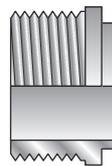
Asymmetric channels provide optimal efficiency in the most compact design. This results in low refrigerant charge or lower



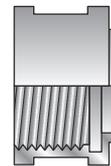
pressure drop on the water or brine side, reducing the CO<sub>2</sub> footprint.

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

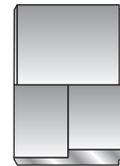
### Examples of connections



External thread



Internal thread



Soldering

## 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)	$11.5 + (1.4 * n)$
A measure (inches)	$0.45 + (0.06 * n)$
Weight (kg) <sup>2</sup>	$2.1 + (0.14 * n)$
Weight (lb) <sup>2</sup>	$4.63 + (0.31 * n)$

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

<sup>2</sup> Excluding connections

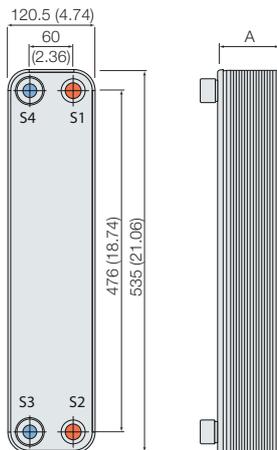
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.088 (0.0232) (S3-S4): 0.046 (0.0122)
Max. particle size, mm (inch)	0.7 (0.028)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	8.8 (38.7)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	150

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

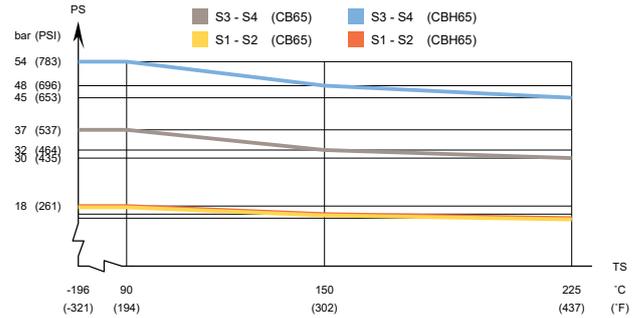
## Dimensional drawing

Measurements in mm (inches)



## Design pressure and temperature

### CB65/CBH65 – 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.

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# Alfa Laval CBXP27

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

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

### Applications

- Refrigeration
- 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

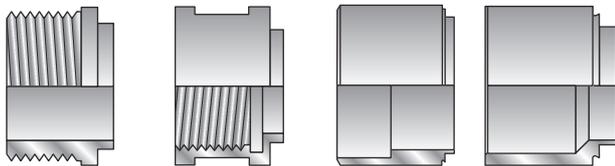
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

The XP design is particularly suited for CO<sub>2</sub> applications.

The unit can be supplied with a refrigerant distribution system for optimal evaporator performance.

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



External thread

Internal thread

Soldering

Welding



## 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)	13 + (2.4 * n)
A measure (inches)	0.51 + (0.09 * n)
Weight (kg) <sup>2</sup>	2 + (0.13 * n)
Weight (lb) <sup>2</sup>	4.41 + (0.29 * n)

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

<sup>2</sup> Excluding connections

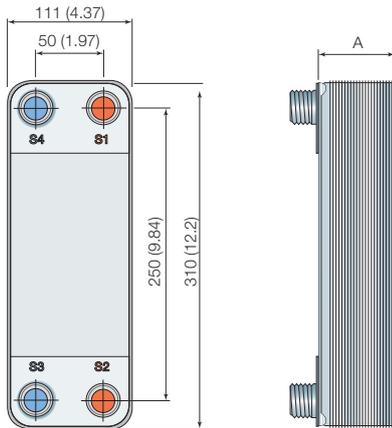
### Standard data

Volume per channel, litres (gal)	0.05 (0.0132)
Max. particle size, mm (inch)	1.2 (0.047)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	14 (61.6)
Flow direction	Parallel
Min. number of plates	6
Max. number of plates	150

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

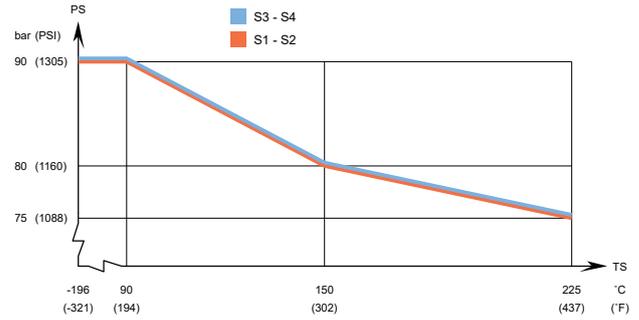
## Dimensional drawing

Measurements in mm (inches)

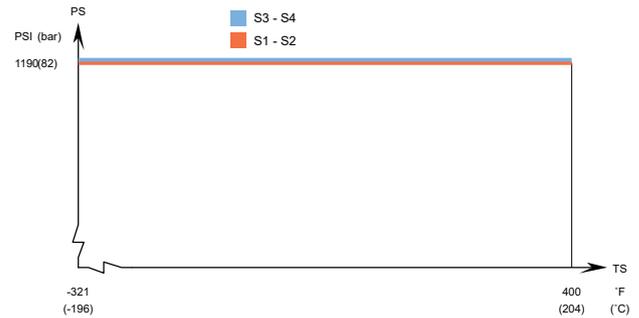


## Design pressure and temperature

### CBXP27 – PED approval pressure/temperature graph



### CBXP27 – 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.

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# Alfa Laval CBXP52

## Brazed plate heat exchanger for extra high-pressure requirements

### Introduction

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

### Applications

- Refrigeration
- 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

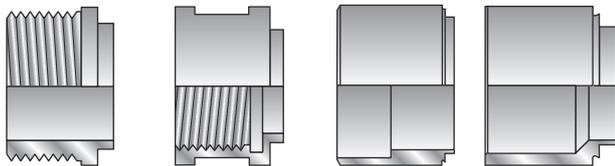
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

The XP design is particularly suited for CO<sub>2</sub> applications.

The unit can be supplied with a refrigerant distribution system for optimal evaporator performance.

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



External thread

Internal thread

Soldering

Welding



## 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)	$14 + (2.37 * n)$
A measure (inches)	$0.55 + (0.09 * n)$
Weight (kg) <sup>2</sup>	$2.5 + (0.22 * n)$
Weight (lb) <sup>2</sup>	$5.51 + (0.49 * n)$

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

<sup>2</sup> Excluding connections

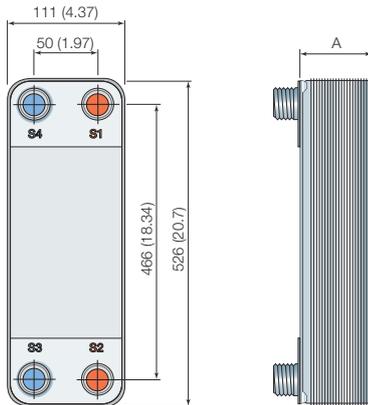
### Standard data

Volume per channel, litres (gal)	0.095 (0.0251)
Max. particle size, mm (inch)	1.2 (0.047)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	14 (61.6)
Flow direction	Parallel
Min. number of plates	6
Max. number of plates	150

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

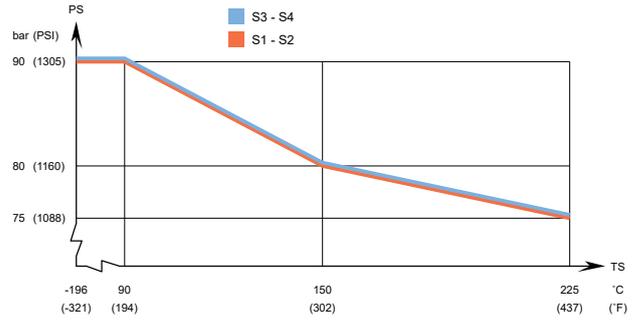
## Dimensional drawing

Measurements in mm (inches)

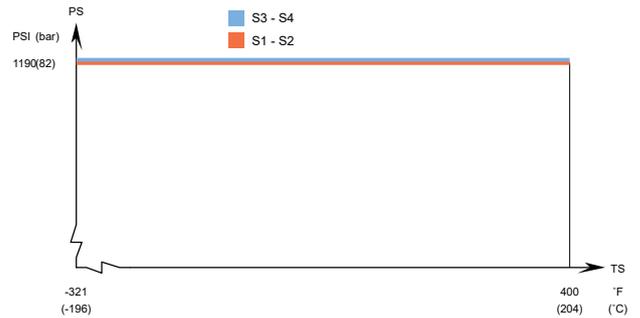


## Design pressure and temperature

### CBXP52 – PED approval pressure/temperature graph



### CBXP52 – 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.

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# Alfa Laval CB10 / CBH10

## 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

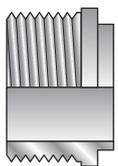
### Design

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.

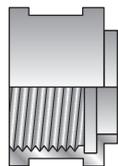
Different pressure ratings are available for different needs.

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 weight

### Dimensions and weight <sup>1</sup>

A measure (mm)	$7 + (2.16 * n)$
A measure (inches)	$0.28 + (0.09 * n)$
Weight (kg) <sup>2</sup>	$0.132 + (0.04 * n)$
Weight (lb) <sup>2</sup>	$0.29 + (0.09 * n)$

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

<sup>2</sup> Excluding connections

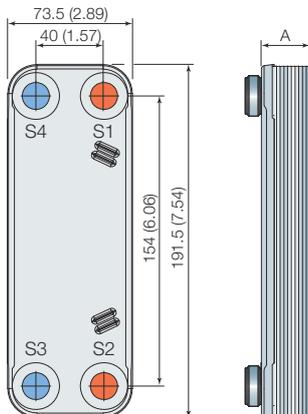
### Standard data

	A (S1-S2): 0.02734 (0.0072)
Volume per channel, litres (gal)	A (S3-S4): 0.02734 (0.0072) H: 0.02481 (0.0066)
Max. particle size, mm (inch)	1.1 (0.043)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	4.1 (18.1)
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	60

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

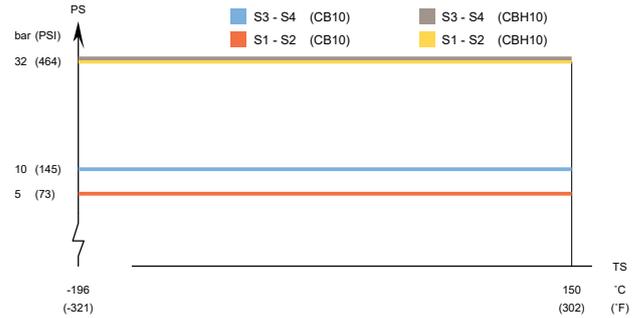
## Dimensional drawing

Measurements in mm (inches)

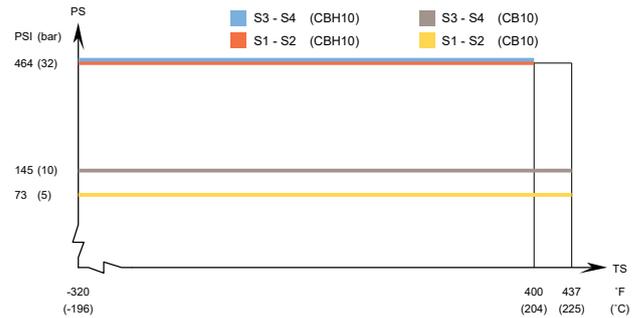


## Design pressure and temperature

### CB10/CBH10 – PED approval pressure/temperature graph



### CB10/CBH10 – 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.

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# Alfa Laval CB11 / CBH11

## 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

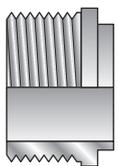
### Design

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.

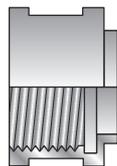
Different pressure ratings are available for different needs.

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 weight

### Dimensions and weight <sup>1</sup>

A measure (mm)	$7.4 + (2.14 * n)$
A measure (inches)	$0.29 + (0.08 * n)$
Weight (kg) <sup>2</sup>	$0.132 + (0.04 * n)$
Weight (lb) <sup>2</sup>	$0.29 + (0.09 * n)$

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

<sup>2</sup> Excluding connections

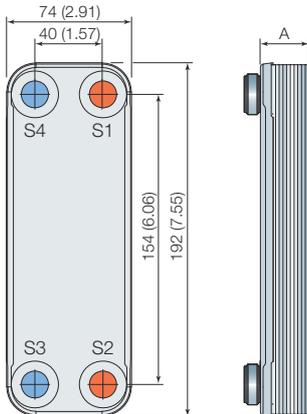
### Standard data

Volume per channel, litres (gal)	A (S1-S2): 0.02531 (0.02531) A (S3-S4): 0.02431 (0.0064)
Max. particle size, mm (inch)	1.2 (0.047)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	2.8 (12.3)
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	60

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

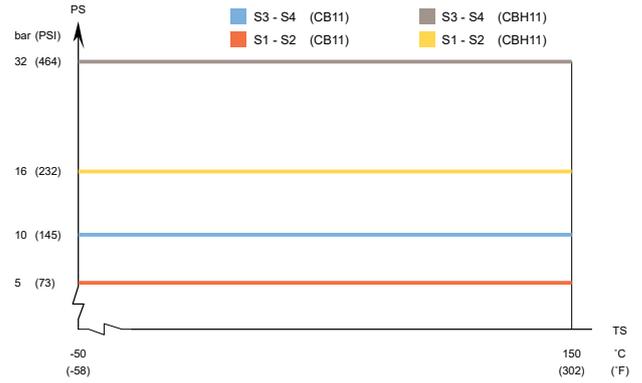
## Dimensional drawing

Measurements in mm (inches)



## Design pressure and temperature

### CB11/CBH11 – 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.

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# Alfa Laval CB16 / CBH16

## 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

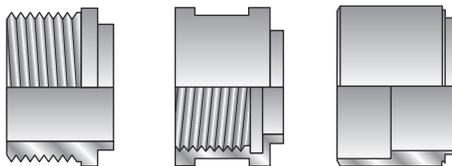
### Design

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 weight

### Dimensions and weight <sup>1</sup>

A measure (mm)	$7 + (2.16 * n)$
A measure (inches)	$0.28 + (0.09 * n)$
Weight (kg) <sup>2</sup>	$0.138 + (0.04 * n)$
Weight (lb) <sup>2</sup>	$0.30 + (0.09 * n)$

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

<sup>2</sup> Excluding connections

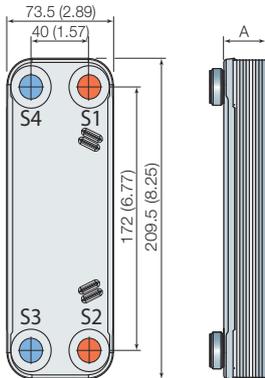
### Standard data

	A (S1-S2): 0.03004 (0.0079)
Volume per channel, litres (gal)	A (S3-S4): 0.02425 (0.0064)
	H: 0.02716 (0.0072)
Max. particle size, mm (inch)	1.1 (0.043)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	4.1 (18.1)
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	60

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

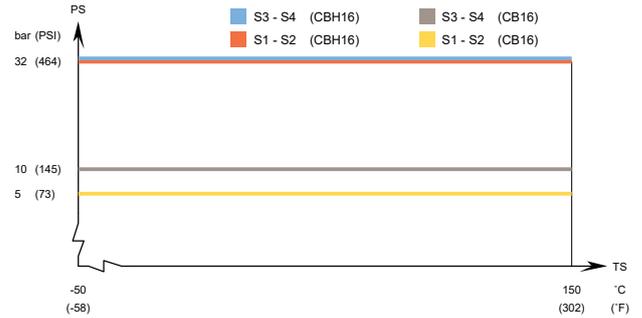
## Dimensional drawing

Measurements in mm (inches)

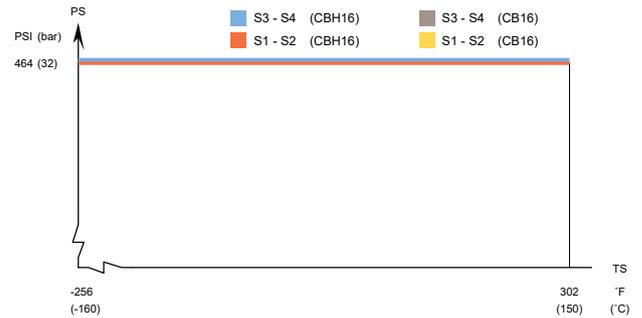


## Design pressure and temperature

### CB16/CBH16 – PED approval pressure/temperature graph



### CB16 – 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.

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