

# Alfa Laval AC16 / ACH16 / ACK16

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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.

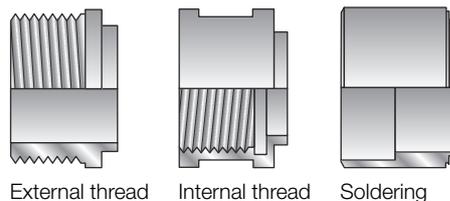
Asymmetric channels provide optimal efficiency in the most compact design. This results in low refrigerant charge or lower pressure drop on the water or brine side, reducing the CO<sub>2</sub> footprint.

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

Internal thread

Soldering

## Technical Data

### Standard materials

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

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

A measure (mm)	$8.8 + (2.16 * n)$
A measure (inches)	$0.35 + (0.09 * n)$
Weight (kg) <sup>2</sup>	$0.267 + (0.04 * n)$
Weight (lb) <sup>2</sup>	$0.59 + (0.09 * n)$

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

<sup>2</sup> Excluding connections

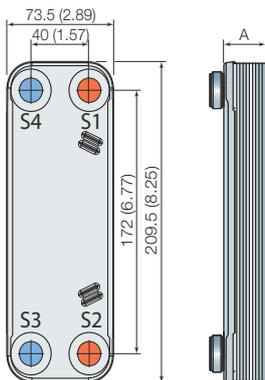
### Standard data

Volume per channel, litres (gal)	A (S1-S2): 0.03004 (0.0079) 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)

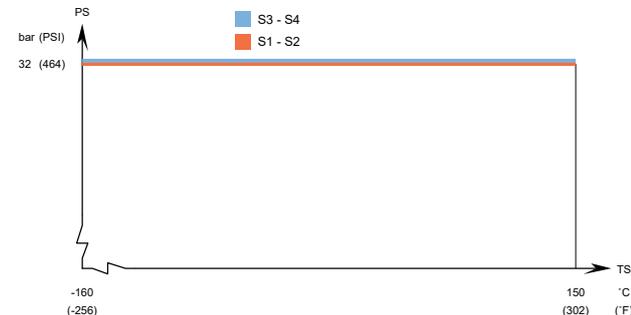
## Dimensional drawing

Measurements in mm (inches)

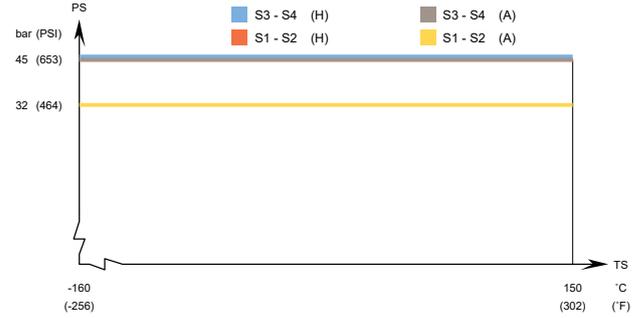


## Design pressure and temperature

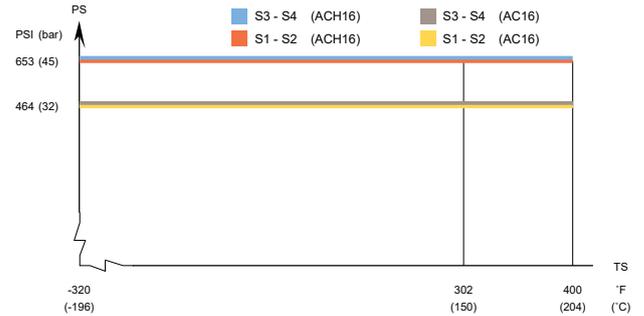
### AC16 – PED approval pressure/temperature graph



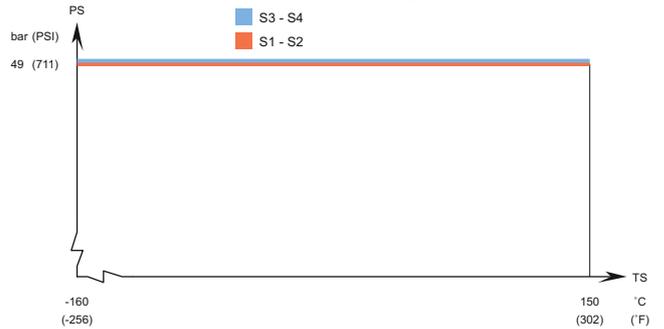
### ACH16 – PED approval pressure/temperature graph



### AC16/ACH16 – UL approval pressure/temperature graph



### ACK16 – 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.

# Alfa Laval AC18 / ACH18 / ACK18

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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.

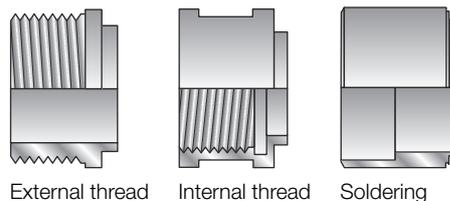
Asymmetric channels provide optimal efficiency in the most compact design. This results in low refrigerant charge or lower pressure drop on the water or brine side, reducing the CO<sub>2</sub> footprint.

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

Internal thread

Soldering

## Technical Data

### Standard materials

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

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

A measure (mm)	$8.8 + (2.16 * n)$
A measure (inches)	$0.35 + (0.09 * n)$
Weight (kg) <sup>2</sup>	$0.4 + (0.07 * n)$
Weight (lb) <sup>2</sup>	$0.88 + (0.15 * n)$

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

<sup>2</sup> Excluding connections

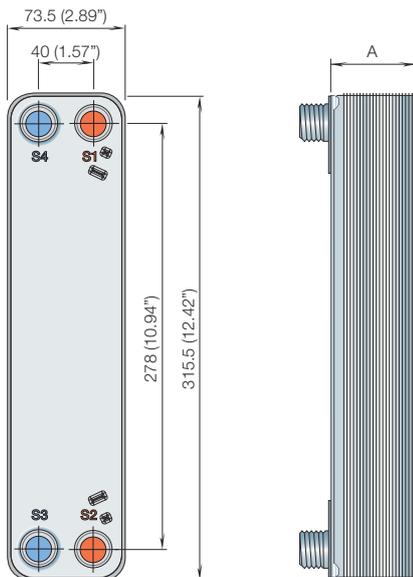
### Standard data

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)

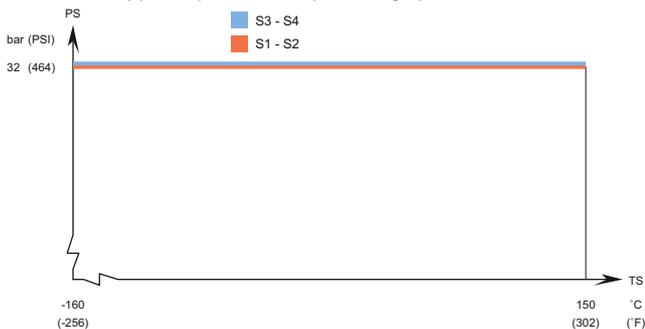
## Dimensional drawing

Measurements in mm (inches)

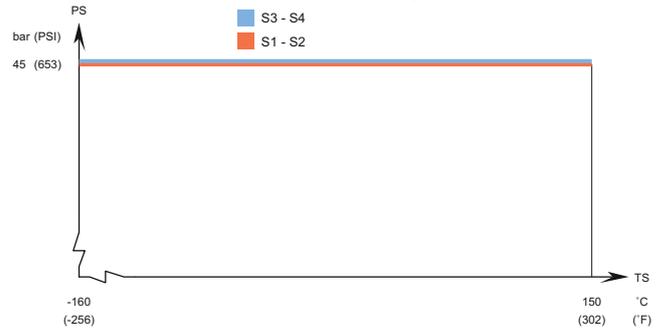


## Design pressure and temperature

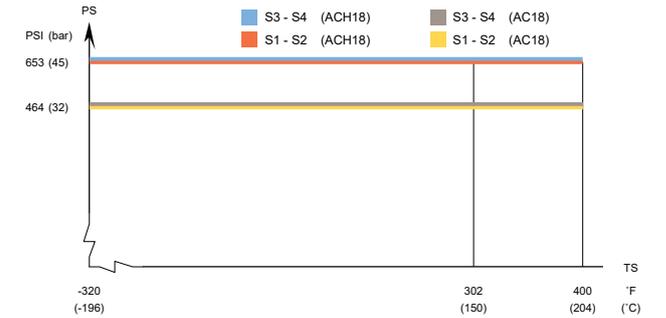
### AC18 – PED approval pressure/temperature graph



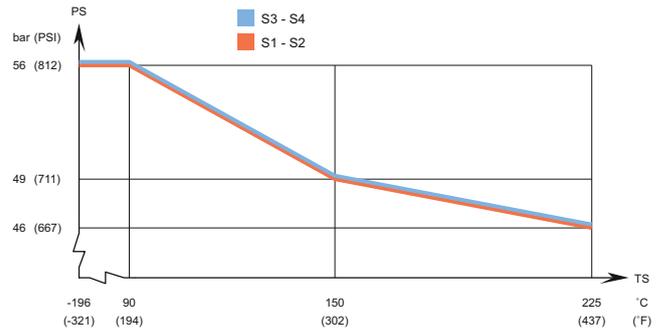
### ACH18 – PED approval pressure/temperature graph



### AC18/ACH18 – UL approval pressure/temperature graph



### ACK18 – 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.

# Alfa Laval AC30EQ / ACH30EQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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.

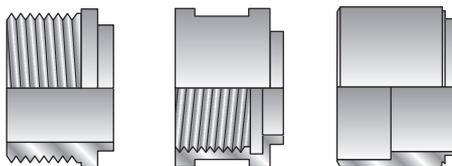
Different pressure ratings are available for different needs.

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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

Internal thread

Soldering



## Technical Data

### Standard materials

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

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

A measure (mm)	$9 + (1.52 * n)$
A measure (inches)	$0.35 + (0.06 * n)$
Weight (kg) <sup>2</sup>	$1 + (0.09 * n)$
Weight (lb) <sup>2</sup>	$2.20 + (0.20 * n)$

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

<sup>2</sup> Excluding connections

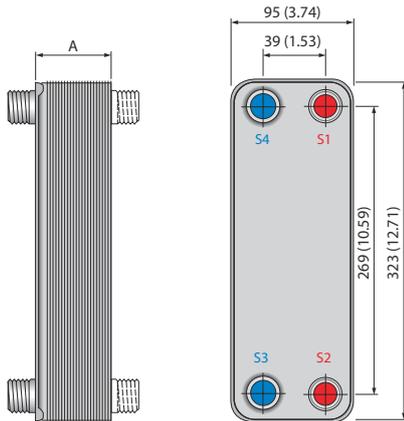
### Standard data

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	4
Max. number of plates	120

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

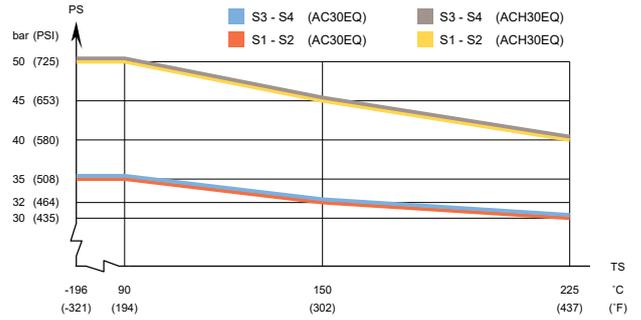
## Dimensional drawing

Measurements in mm (inches)

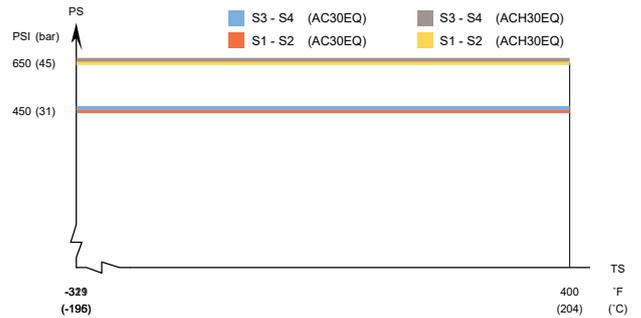


## Design pressure and temperature

### AC30EQ/ACH30EQ – PED approval pressure/temperature graph



### AC30EQ/ACH30EQ – 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 AC40 / ACH40 / ACP40

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### Benefits

- Compact
- Easy to install
- Self-cleaning
- 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.

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.

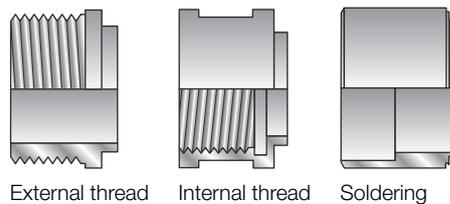
The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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



## Technical Data

### Standard materials

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

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

A measure (mm)	$12.5 + (1.55 * n)$
A measure (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

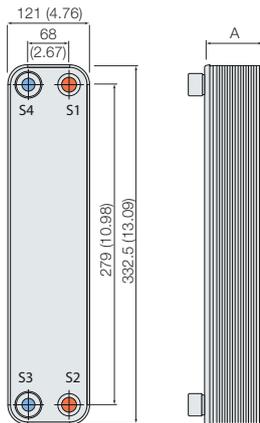
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.048 (0.0127) (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	120

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

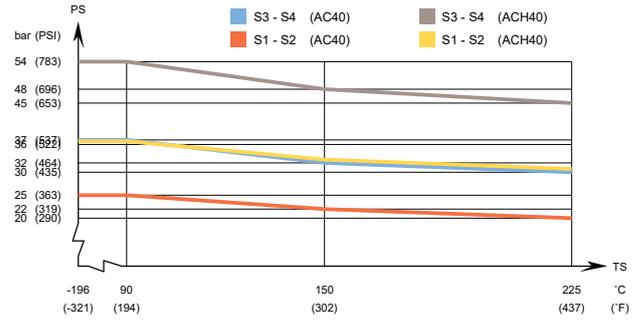
## Dimensional drawing

Measurements in mm (inches)



## Design pressure and temperature

### AC40/ACH40 – PED approval pressure/temperature graph



### ACP40 – 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 AC43/ACH43/ACP43

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### Benefits

- Compact
- Easy to install
- Self-cleaning
- All units are pressure and leak tested
- Gasket free

### Branded Features



**DynaStatic™** Flexible refrigerant distribution



**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.



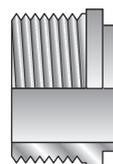
Asymmetric channels provide optimal efficiency in the most compact design. This results in low refrigerant charge or lower pressure drop on the water or brine side, reducing the CO<sub>2</sub> footprint.

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

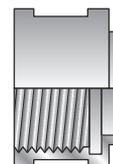
Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.

Suitable with most HFC, HFO and natural refrigerants.

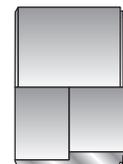
### Examples of connections



External thread



Internal thread



Soldering

## Technical Data

### Standard materials

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

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

A measure (mm)	$12.5 + (1.55 * n)$
A measure (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

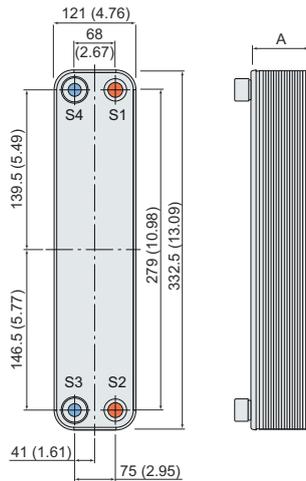
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.048 (0.0127) (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	120

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

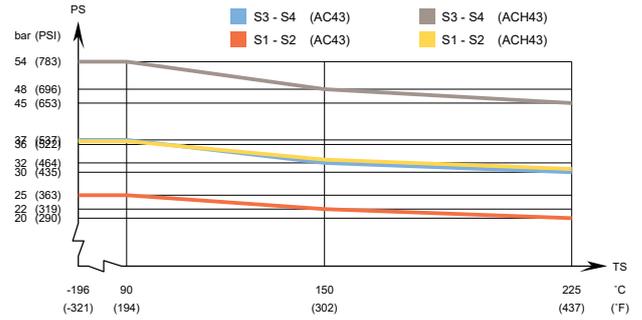
## Dimensional drawing

Measurements in mm (inches)

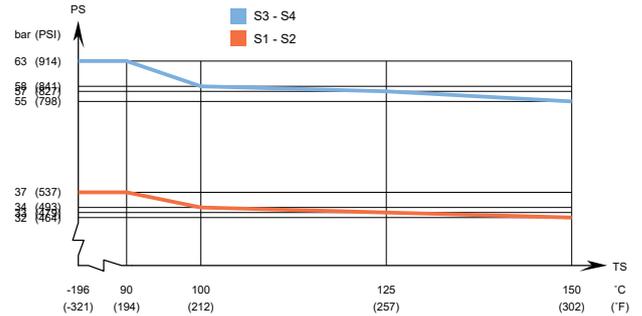


## Design pressure and temperature

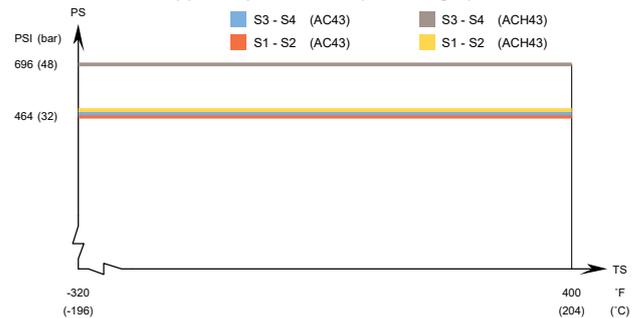
### AC43/ACH43 – PED approval pressure/temperature graph



### ACP43 – PED approval pressure/temperature graph



### AC43/ACH43 – 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 AC65 /ACH65

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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



**DynaStatic™** Flexible refrigerant distribution



**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.

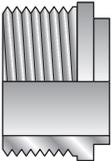
Designed for high-efficiency applications, such as those applications with high evaporation temperature and low water/brine pressure drop. This results in reduced environmental impact and lower costs.

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

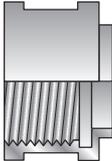
Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.

Suitable with most HFC, HFO and natural refrigerants.

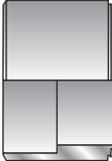
Examples of connections



External thread



Internal thread



Soldering

## Technical Data

### Standard materials

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

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

A measure (mm)	$11.5 + (1.38 * n)$
A measure (inches)	$0.45 + (0.05 * n)$
Weight (kg) <sup>2</sup>	$2.1 + (0.14 * n)$
Weight (lb) <sup>2</sup>	$69.44 + (3.00 * n)$

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

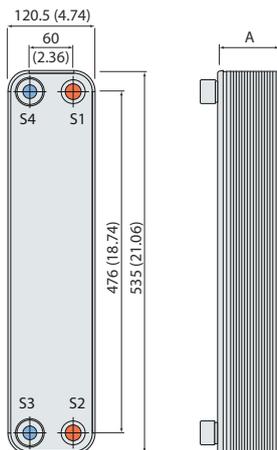
<sup>2</sup> Excluding connections

### 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 m <sup>3</sup> /h (gpm)	11 (48.4)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	120

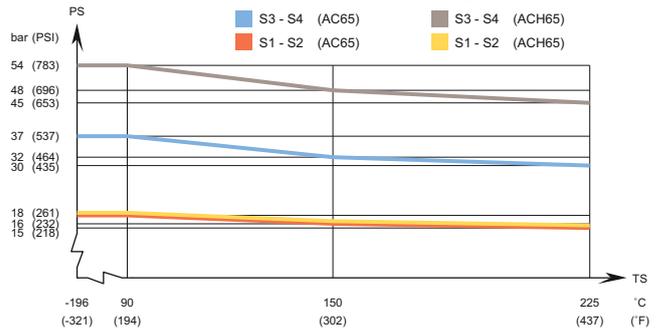
## Dimensional drawing

Measurements in mm (inches)



## Design pressure and temperature

### AC65/ACH65 – 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 AC70X / ACH70X / ACP70X

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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.

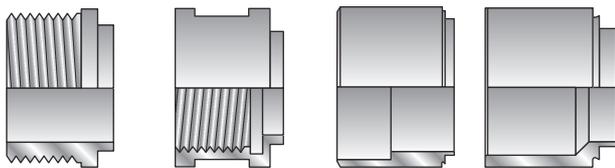
Different pressure ratings are available for different needs.

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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

Internal thread

Soldering

Welding



## Technical Data

### Standard materials

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

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

A measure (mm)	$11 + (2.3 * n)$
A measure (inches)	$0.43 + (0.09 * n)$
Weight (kg) <sup>2</sup>	$1.9 + (0.18 * n)$
Weight (lb) <sup>2</sup>	$4.19 + (0.40 * n)$

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

<sup>2</sup> Excluding connections

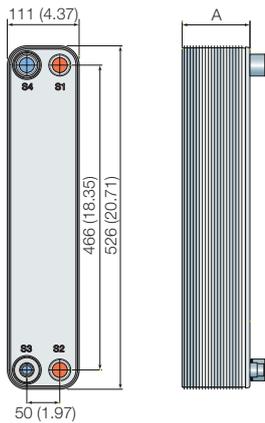
### Standard data

Volume per channel, litres (gal)	0.095 (0.0251)
Max. particle size, mm (inch)	1.0 (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	124

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

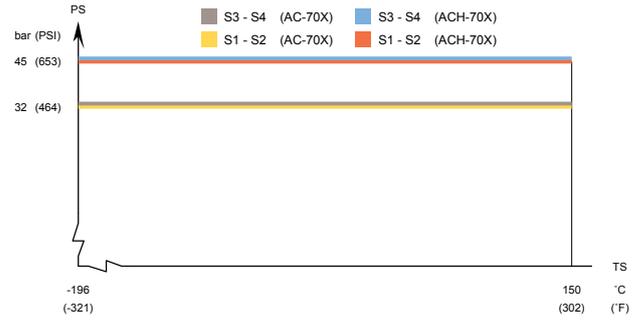
## Dimensional drawing

Measurements in mm (inches)

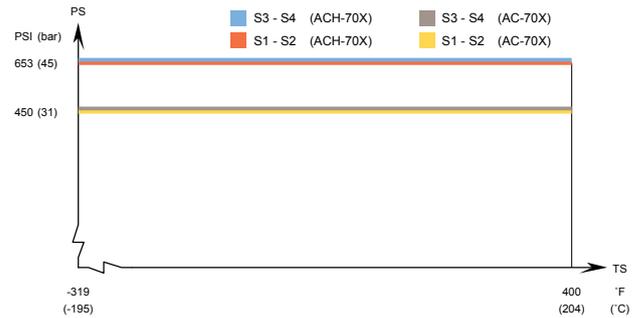


## Design pressure and temperature

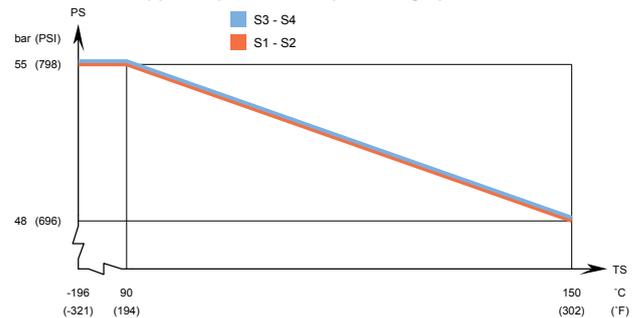
### AC70X/ACH70X – PED approval pressure/temperature graph



### AC70X/ACH70X – UL approval pressure/temperature graph



### ACP70X – 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 AC72 / ACH72

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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.

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.

Designed for high-efficiency applications, such as those applications with high evaporation temperature and low water/brine pressure drop. This results in reduced environmental impact and lower costs.

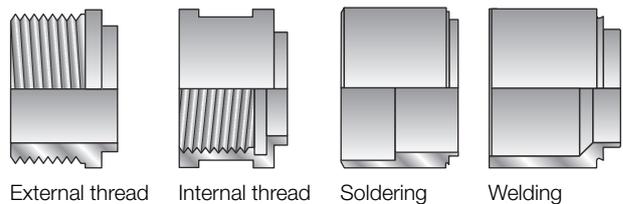
The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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

Internal thread

Soldering

Welding

## Technical Data

### Standard materials

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

### 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>	$2.1 + (0.19 * n)$
Weight (lb) <sup>2</sup>	$4.63 + (0.42 * n)$

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

<sup>2</sup> Excluding connections

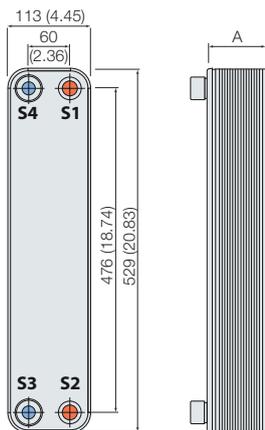
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.104 (0.0275) (S3-S4): 0.084 (0.0222)
Max. particle size, mm (inch)	1 (0.039)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	12 (52.8)
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	160

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

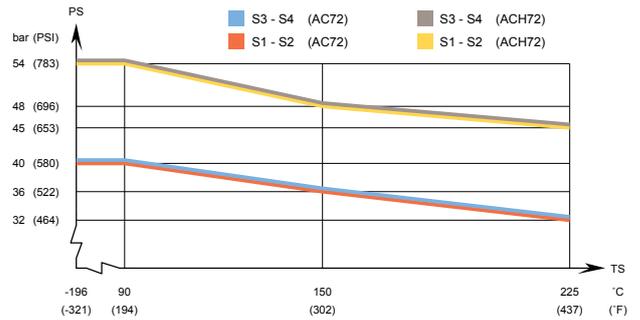
## Dimensional drawing

Measurements in mm (inches)

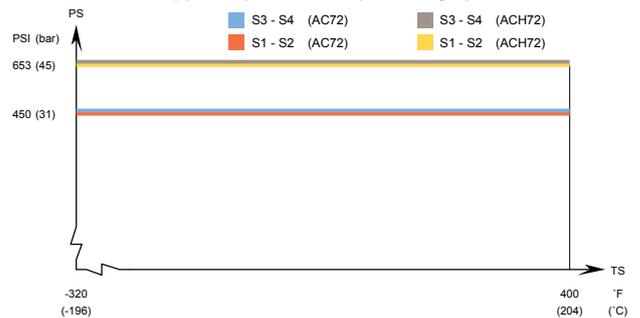


## Design pressure and temperature

### AC72/ACH72 – PED approval pressure/temperature graph /



### AC72/ACH72 – 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 ACH73

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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



**DynaStatic™** Flexible refrigerant distribution



**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.

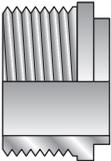
Designed for high-efficiency applications, such as those applications with high evaporation temperature and low water/brine pressure drop. This results in reduced environmental impact and lower costs.

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

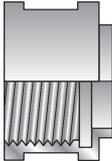
Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.

Suitable with most HFC, HFO and natural refrigerants.

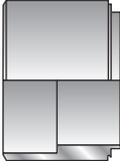
Examples of connections



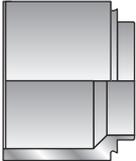
External thread



Internal thread



Soldering



Welding

## Technical Data

### Standard materials

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

### 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

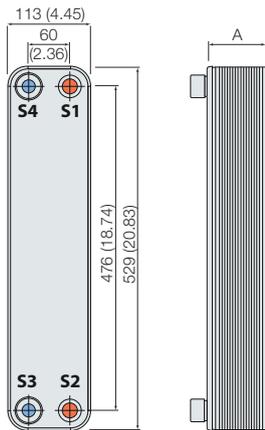
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.102 (0.0269) (S3-S4): 0.081 (0.0214)
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	10
Max. number of plates	160

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

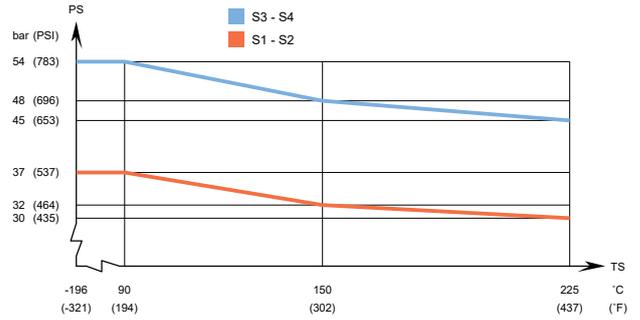
## Dimensional drawing

Measurements in mm (inches)

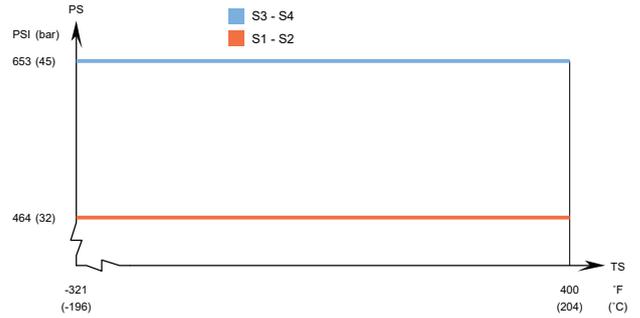


## Design pressure and temperature

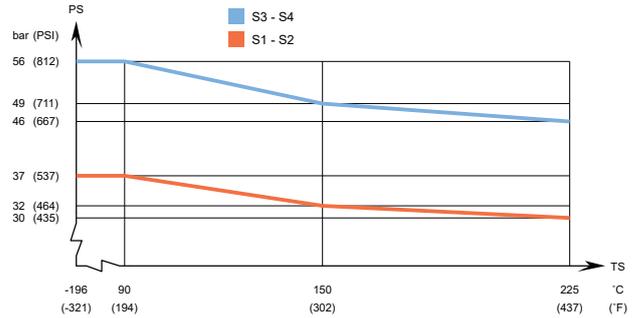
### ACH73 – PED approval pressure/temperature graph



### ACH73 – UL approval pressure/temperature graph



### ACK73 – 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 ACH74/ACK74

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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



**DynaStatic™** Flexible refrigerant distribution



**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.

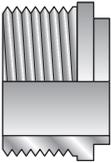
Designed for high-efficiency applications, such as those applications with high evaporation temperature and low water/brine pressure drop. This results in reduced environmental impact and lower costs.

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

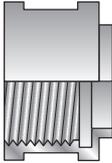
Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.

Suitable with most HFC, HFO and natural refrigerants.

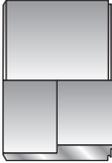
Examples of connections



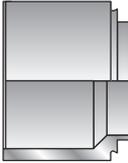
External thread



Internal thread



Soldering



Welding

## Technical Data

### Standard materials

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

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

A-measurement (mm)	$12 + (1.96 * n)$
A-measurement (inches)	$0.47 + (0.08 * n)$
Weight (kg) <sup>2</sup>	$2.6 + (0.22 * n)$
Weight (lb) <sup>2</sup>	$5.73 + (0.49 * n)$

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

<sup>2</sup> Excluding connections

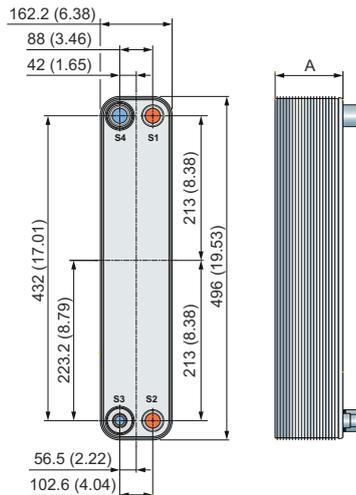
### Standard data

Volume per channel, litres (gal)	(S1-S2)0.148 (0.0391) (S3-S4) 0.11 (0.0291)
Max. particle size, mm (inch)	1.0 (0.039)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	27 (118.9)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	180

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

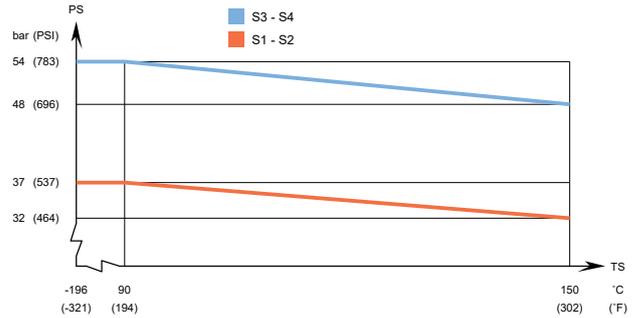
## Dimensional drawing

Measurements in mm (inches)

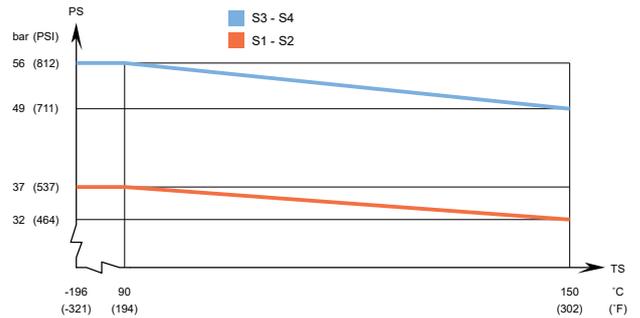


## Design pressure and temperature

### ACH74 – PED approval pressure/temperature graph



### ACK74 – 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 AC112 / ACH112

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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.

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.

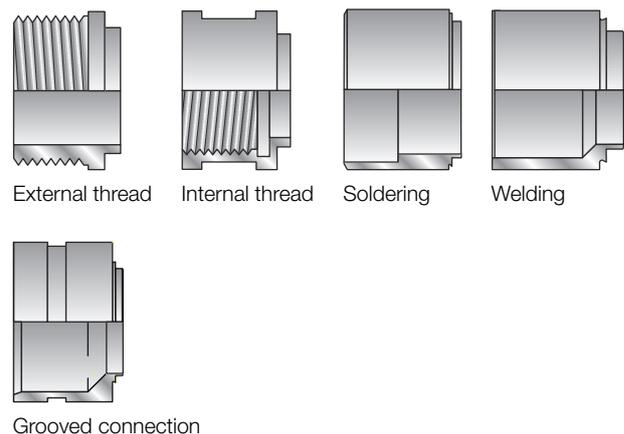
The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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



## Technical Data

### Standard materials

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

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

A measure (mm)	16 + (2.07 * n)
A measure (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

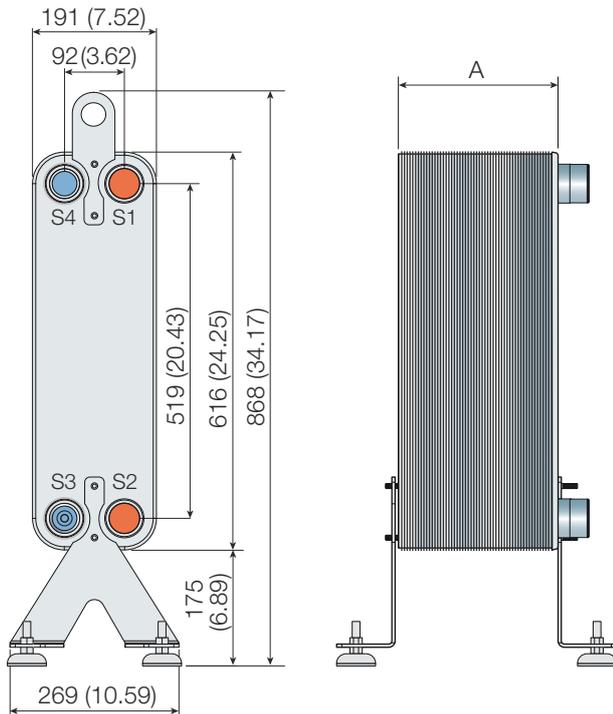
### Standard data

Volume per channel, litres (gal)	H, L, M: 0.18 (0.0476)
	AH, AM (S1-S2): 0.2 (0.0423)
	AH, AM (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)

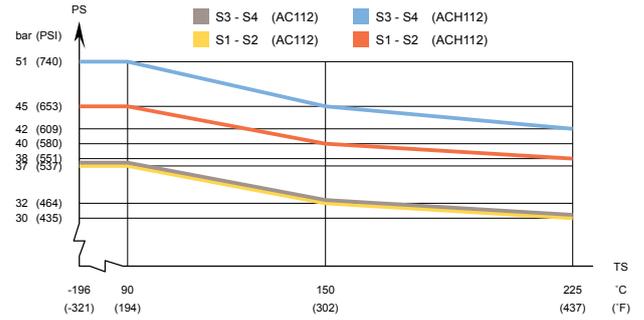
## Dimensional drawing

Measurements in mm (inches)

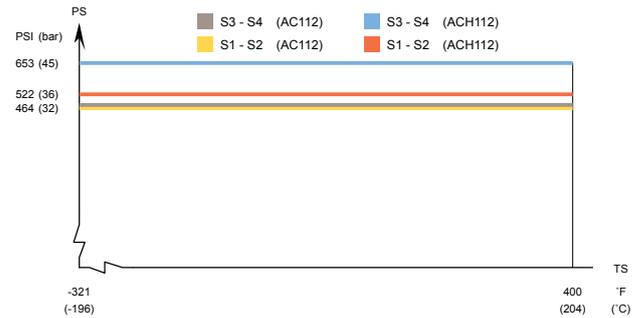


## Design pressure and temperature

### AC112/ACH112 – PED approval pressure/temperature graph



### AC112/ACH112 – 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 AC220EQ / ACH220EQ / ACP220EQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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.

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.

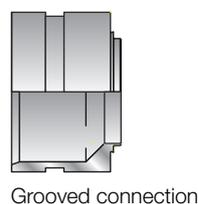
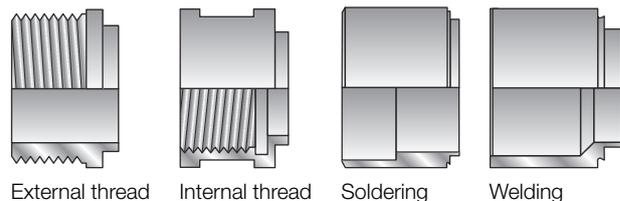
The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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



## Technical Data

### Standard materials

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

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

A-measurement (mm)	$16 + (2.06 * n)$
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

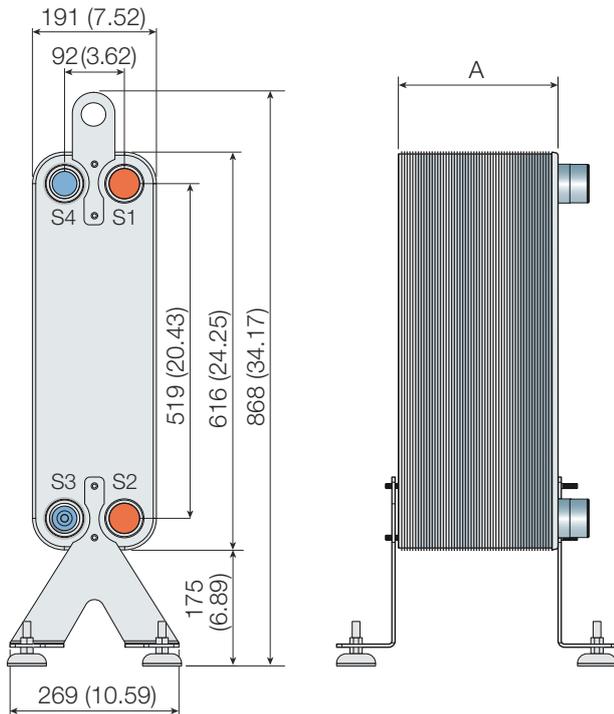
### Standard data

Volume per channel, litres (gal)	M, L: 0.2 (0.0528)
	AH, AM (S1-S2): 0.2 (0.0528)
	AH, AM (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)

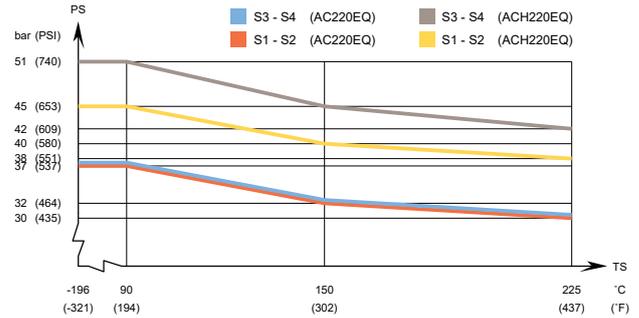
## Dimensional drawing

Measurements in mm (inches)

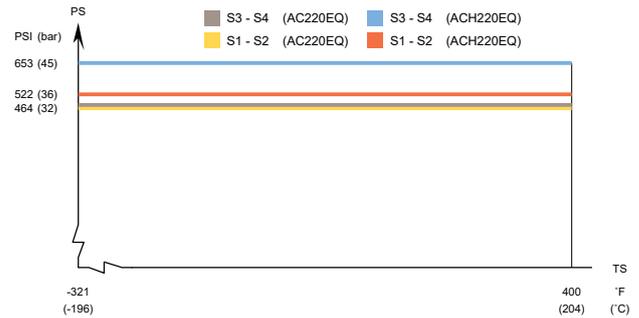


## Design pressure and temperature

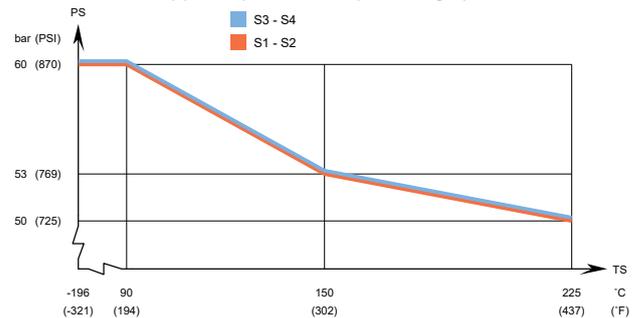
### AC220EQ/ACH220EQ – PED approval pressure/temperature graph



### AC220EQ/ACH220EQ – UL approval pressure/temperature graph



### AC220EQ – 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

ACMH220EQ can be delivered with marine classification certificate (ABS, BV, CCS, ClassNK, DNV-GL, KR, LR, RINA)



# Alfa Laval AC230DQ / ACH230DQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- 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

### 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 True dual-circuit design provides a higher freezing resistance compared to back-to-back solutions.

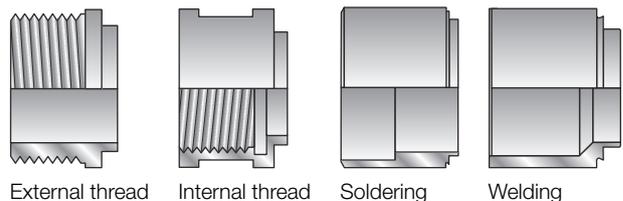
The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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

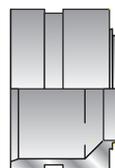


External thread

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 <sup>1</sup>

A measure (mm)	13 + (2.14 * n)
A measure (inches)	0.51 + (0.08 * n)
Weight (kg) <sup>2</sup>	6 + (0.40 * n)
Weight (lb) <sup>2</sup>	13.23 + (0.88 * n)

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

<sup>2</sup> Excluding connections

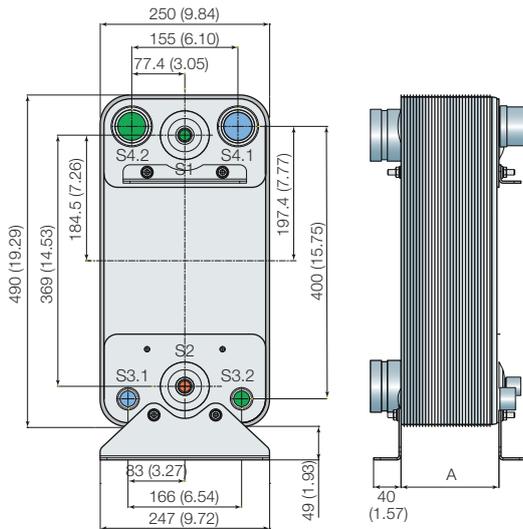
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.156 (0.0412) (S3-S4): 0.2 (0.0528)
Max. particle size, mm (inch)	0.9 (0.035)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	60 (264.2)
Flow direction	Diagonal
Min. number of plates	10
Max. number of plates	250

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

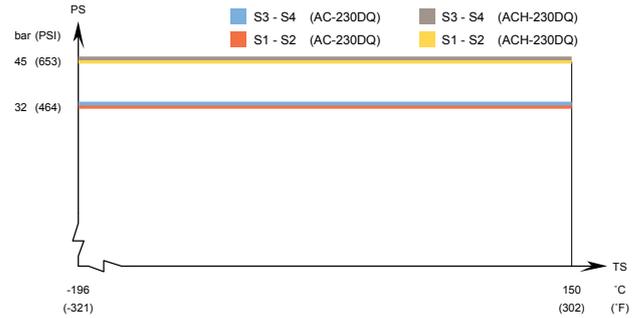
## Dimensional drawing

Measurements in mm (inches)

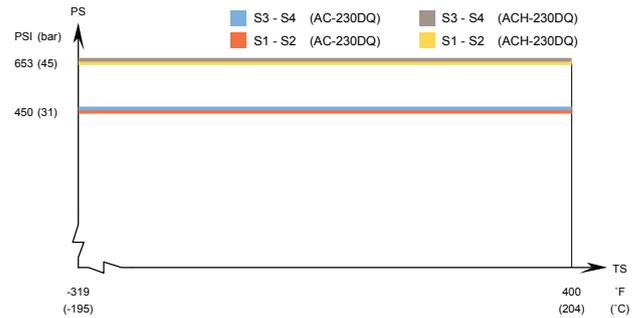


## Design pressure and temperature

### AC230DQ/ACH230EQ – PED approval pressure/temperature graph



### AC230DQ/ACH230DQ – 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 AC232DQ / ACH232DQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- 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

### 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 True dual-circuit design provides a higher freezing resistance compared to back-to-back solutions.

Designed for high-efficiency applications, such as those applications with high evaporation temperature and low water/brine pressure drop. This results in reduced environmental impact and lower costs.

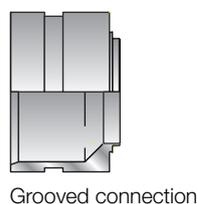
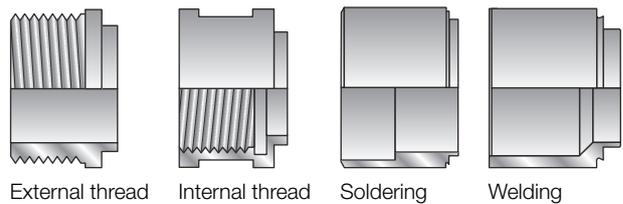
The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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



Grooved connection

## Technical Data

### Standard materials

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

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

A measure (mm)	13 + (2.14 * n)
A measure (inches)	0.51 + (0.08 * n)
Weight (kg) <sup>2</sup>	6 + (0.40 * n)
Weight (lb) <sup>2</sup>	13.23 + (0.88 * n)

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

<sup>2</sup> Excluding connections

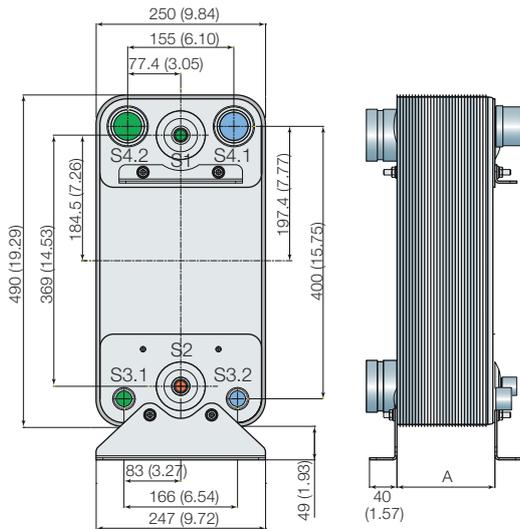
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.156 (0.0412) (S3-S4): 0.2 (0.0528)
Max. particle size, mm (inch)	0.9 (0.035)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	60 (264.2)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	260

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

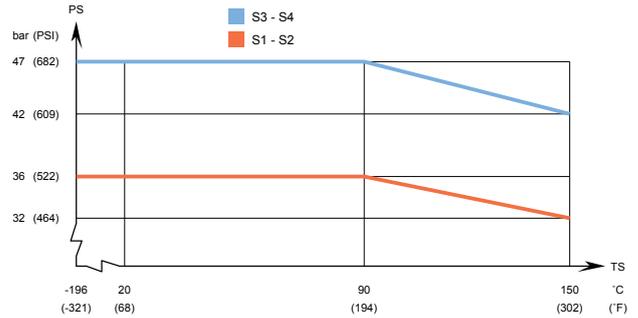
## Dimensional drawing

Measurements in mm (inches)

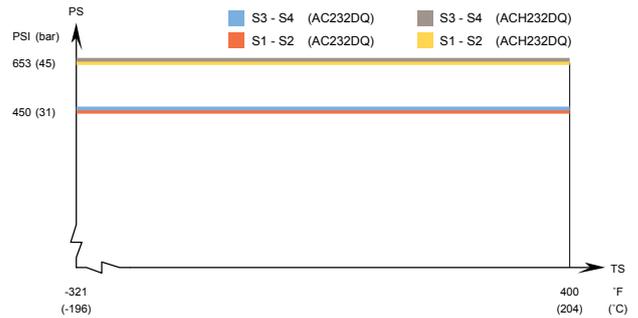


## Design pressure and temperature

### AC232DQ/ACH232DQ – PED approval pressure/temperature graph



### AC232DQ/ACH232DQ – 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 AC230EQ / ACH230EQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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.

Single-circuit design.

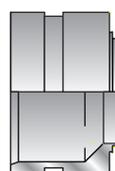
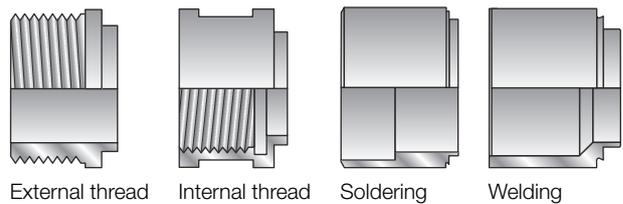
The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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



Grooved connection

## Technical Data

### Standard materials

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

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

A measure (mm)	$13 + (2.14 * n)$
A measure (inches)	$0.51 + (0.08 * n)$
Weight (kg) <sup>2</sup>	$5.6 + (0.40 * n)$
Weight (lb) <sup>2</sup>	$12.35 + (0.88 * n)$

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

<sup>2</sup> Excluding connections

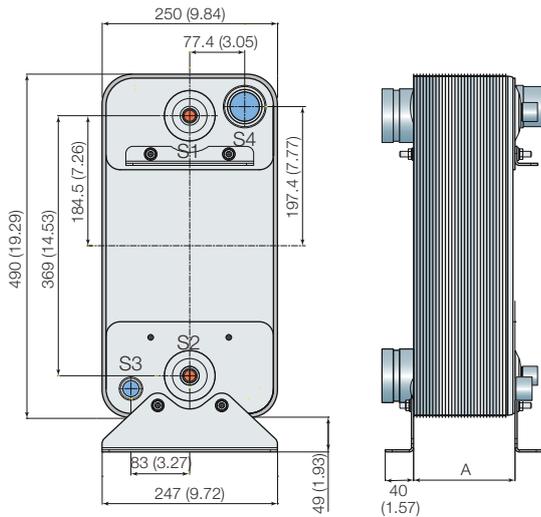
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.156 (0.0412) (S3-S4): 0.2 (0.0528)
Max. particle size, mm (inch)	0.9 (0.035)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	60 (264.2)
Flow direction	Diagonal
Min. number of plates	10
Max. number of plates	250

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

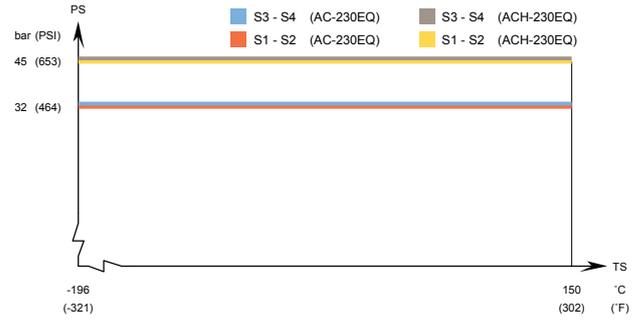
## Dimensional drawing

Measurements in mm (inches)

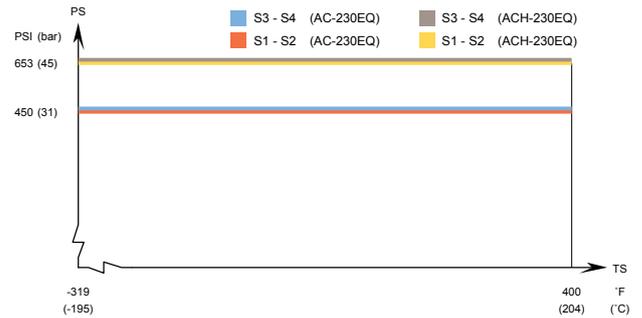


## Design pressure and temperature

### AC230EQ/ACH230EQ – PED approval pressure/temperature graph



### AC230EQ/ACH230EQ – 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 ACH240DQ/ACK240DQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- 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

### 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 True dual-circuit design provides a higher freezing resistance compared to back-to-back solutions.

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.

The asymmetry guarantees the best performance in both full- and partial-load conditions.

Designed for high-efficiency applications, such as those applications with high evaporation temperature and low water/brine pressure drop. This results in reduced environmental impact and lower costs.

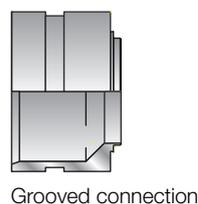
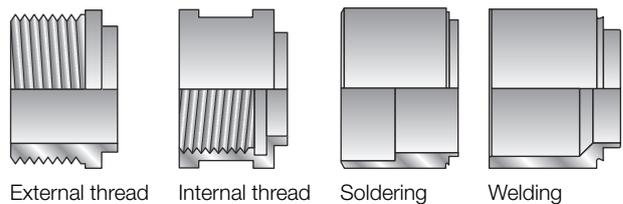
The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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



Grooved connection

## Technical Data

### Standard materials

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

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

A measure (mm)	$12.6 + (2.13 * n)$
A measure (inches)	$0.50 + (0.08 * n)$
Weight (kg) <sup>2</sup>	$6 + (0.43 * n)$
Weight (lb) <sup>2</sup>	$13.23 + (0.95 * n)$

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

<sup>2</sup> Excluding connections

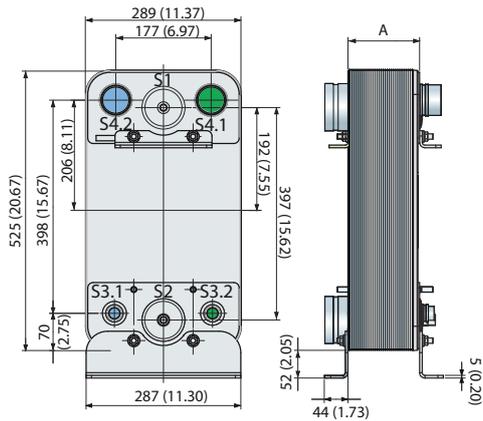
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.27 (0.0713) (S3-S4): 0.24 (0.0634)
Max. particle size, mm (inch)	0.9 (0.035)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	71 (312.6)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	262

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

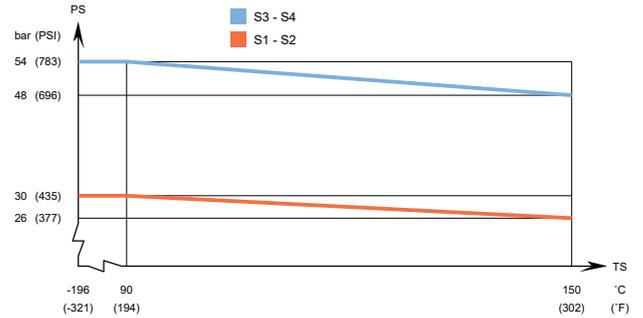
## Dimensional drawing

Measurements in mm (inches)

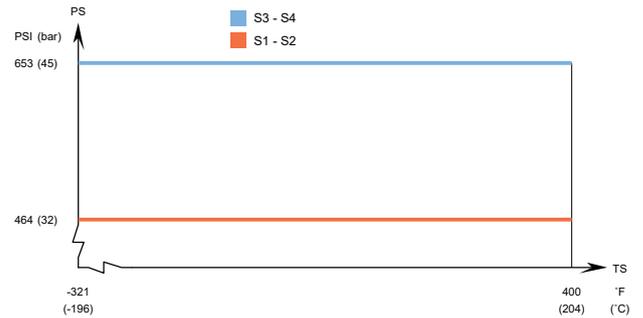


## Design pressure and temperature

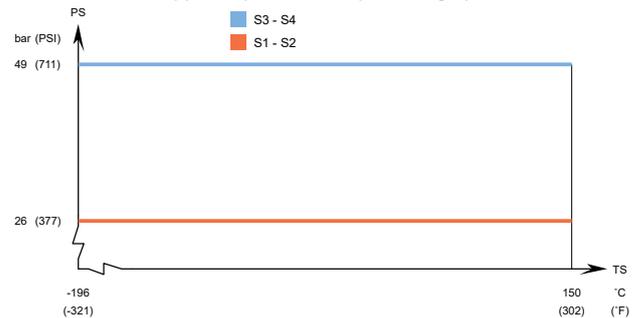
### ACH240DQ – PED approval pressure/temperature graph



### ACH240DQ – UL approval pressure/temperature graph



### ACK240DQ – 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 ACH240EQ / ACK240EQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

#### 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



**DynaStatic™**

Flexible refrigerant distribution



**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.

Single-circuit design.

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.

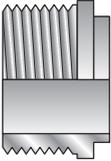
The asymmetry guarantees the best performance in both full- and partial-load conditions.

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

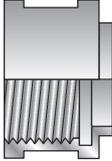
Based on standard components and a modular concept, including symmetric and asymmetric channels, each unit is custom-built to meet the specific requirements of each individual installation.

Suitable with most HFC, HFO and natural refrigerants.

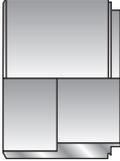
Examples of connections



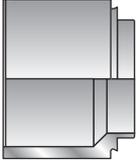
External thread



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 <sup>1</sup>

A measure (mm)	$12.6 + (2.13 * n)$
A measure (inches)	$0.50 + (0.08 * n)$
Weight (kg) <sup>2</sup>	$6 + (0.43 * n)$
Weight (lb) <sup>2</sup>	$13.23 + (0.95 * n)$

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

<sup>2</sup> Excluding connections

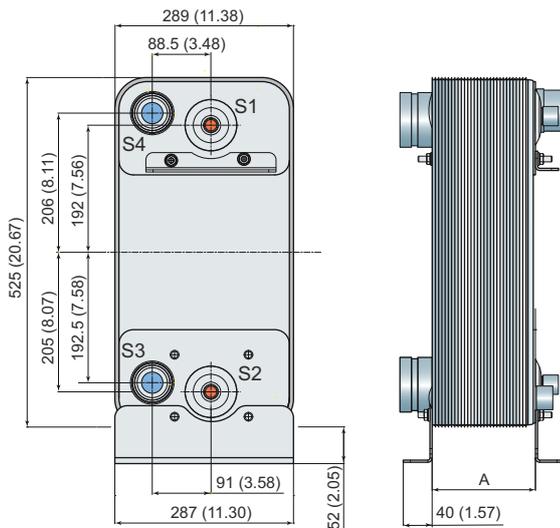
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.27 (0.0713) (S3-S4): 0.24 (0.0634)
Max. particle size, mm (inch)	0.9 (0.035)
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	262

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

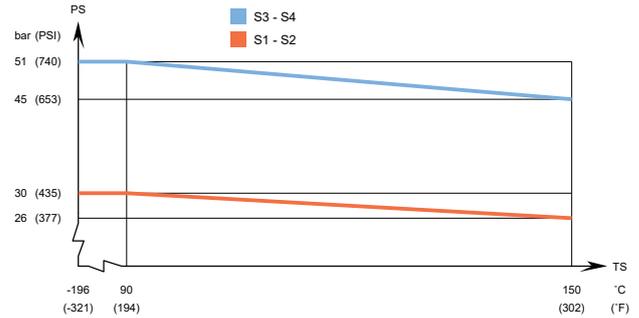
## Dimensional drawing

Measurements in mm (inches)

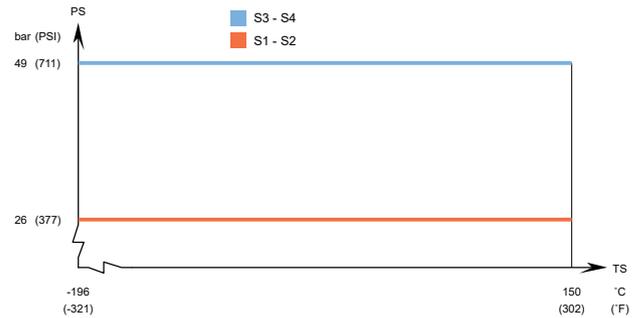


## Design pressure and temperature

### ACH240EQ – PED approval pressure/temperature graph



### ACK240EQ – 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.

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# Alfa Laval AC500DQ / ACH500DQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- 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

### 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 True dual-circuit design provides a higher freezing resistance compared to back-to-back solutions.

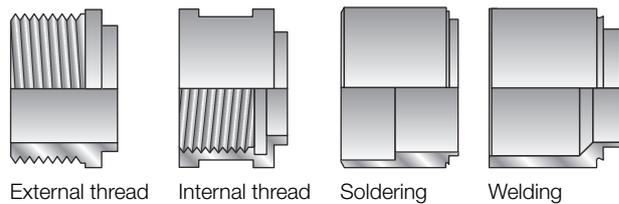
The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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

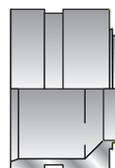


External thread

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 <sup>1</sup>

A measure (mm)	$12 + (2.61 * n)$
A measure (inches)	$0.47 + (0.10 * n)$
Weight (kg) <sup>2</sup>	$13 + (0.84 * n)$
Weight (lb) <sup>2</sup>	$28.66 + (1.85 * n)$

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

<sup>2</sup> Excluding connections

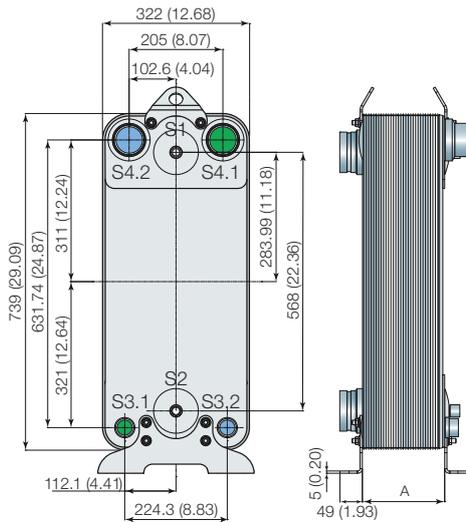
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.47 (0.1242) (S3-S4): 0.5 (0.1321)
Max. particle size, mm (inch)	1.1 (0.043)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	120 (528.3)
Flow direction	Diagonal
Min. number of plates	10
Max. number of plates	270

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

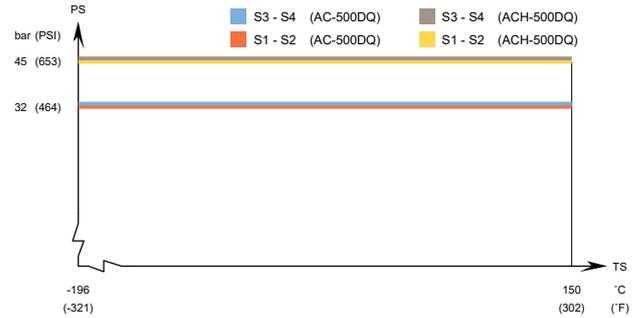
## Dimensional drawing

Measurements in mm (inches)

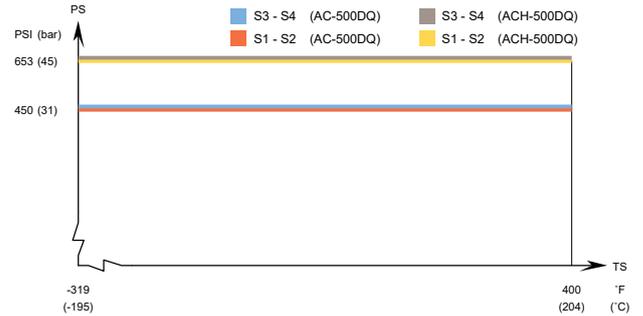


## Design pressure and temperature

### AC500DQ/ACH500DQ – PED approval pressure/temperature graph



### AC500DQ/ACH500DQ – 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 AC500EQ / ACH500EQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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.

Single-circuit design.

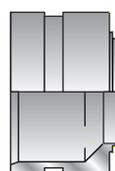
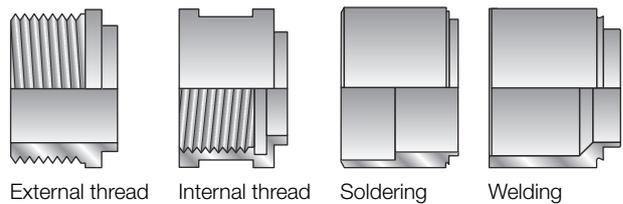
The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

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



Grooved connection

## Technical Data

### Standard materials

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

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

A measure (mm)	$12 + (2.61 * n)$
A measure (inches)	$0.47 + (0.10 * n)$
Weight (kg) <sup>2</sup>	$12.5 + (0.84 * n)$
Weight (lb) <sup>2</sup>	$27.56 + (1.85 * n)$

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

<sup>2</sup> Excluding connections

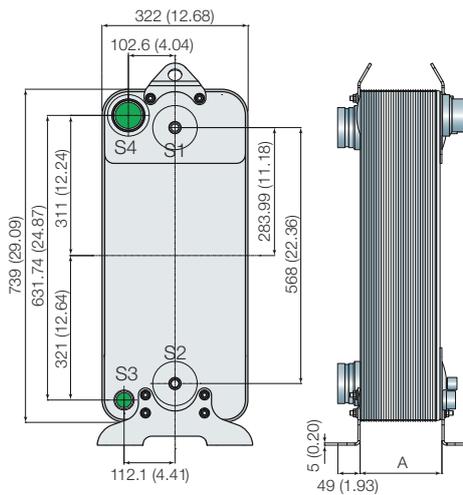
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.47 (0.1242) (S3-S4): 0.5 (0.1321)
Max. particle size, mm (inch)	1.1 (0.043)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	120 (528.3)
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)

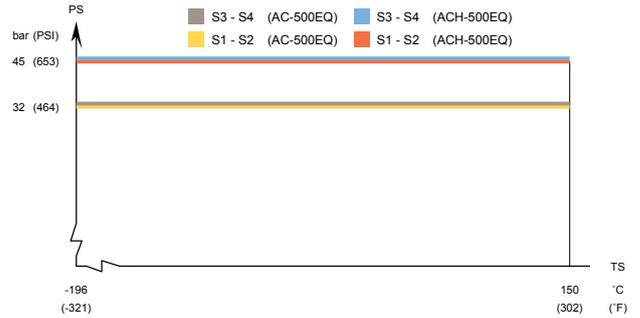
## Dimensional drawing

Measurements in mm (inches)

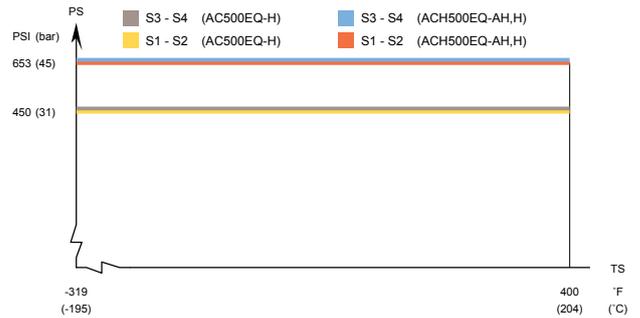


## Design pressure and temperature

### AC500EQ/ACH500EQ – PED approval pressure/temperature graph



### AC500DEQ/ACH500EQ – 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 AC502DQ / ACH502DQ / ACK502DQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- 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



**DynaStatic™** Flexible refrigerant distribution



**FlexFlow™** Superior thermal performance



**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 True dual-circuit design provides a higher freezing resistance compared to back-to-back solutions.



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.

The asymmetry guarantees the best performance in both full- and partial-load conditions.

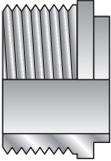
Designed for high-efficiency applications, such as those applications with high evaporation temperature and low water/brine pressure drop. This results in reduced environmental impact and lower costs.

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

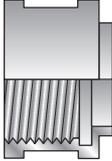
Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.

Suitable with most HFC, HFO and natural refrigerants.

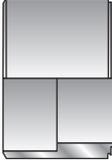
Examples of connections



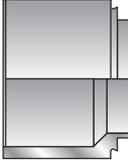
External thread



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 <sup>1</sup>

A measure (mm)	12 + (2.52 * n)
A measure (inches)	0.47 + (0.10 * n)
Weight (kg) <sup>2</sup>	13 + (0.48 * n)
Weight (lb) <sup>2</sup>	28.66 + (1.06 * n)

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

<sup>2</sup> Excluding connections

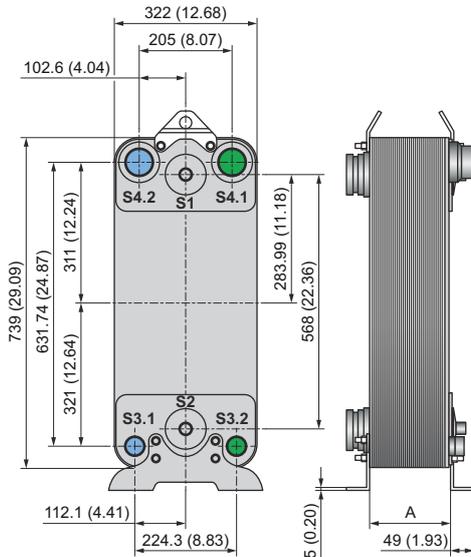
### Standard data

Volume per channel, litres (gal)	H (S1-S2): 0.52 (0.1374)
	H (S3-S4): 0.5 (0.1321)
	AH (S1-S2): 0.52 (0.1374)
	AH (S3-S4): 0.45 (0.1189)
Max. particle size, mm (inch)	1.1 (0.043)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	120 (528.3)
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)

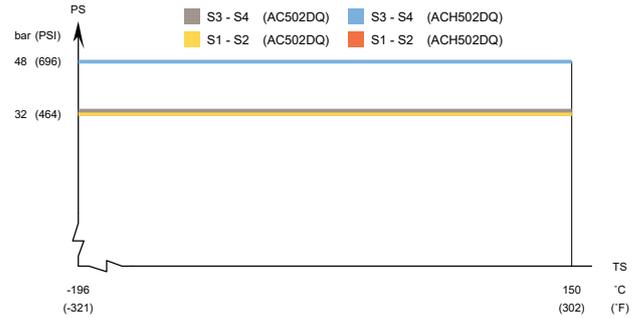
## Dimensional drawing

Measurements in mm (inches)

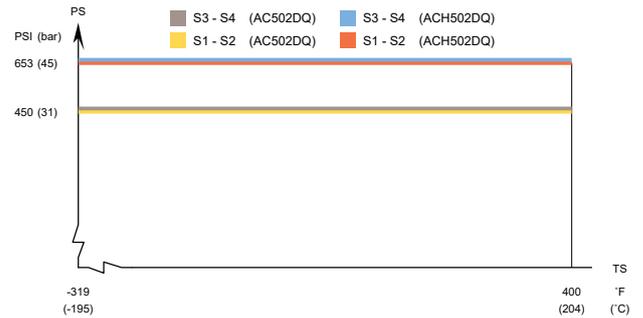


## Design pressure and temperature

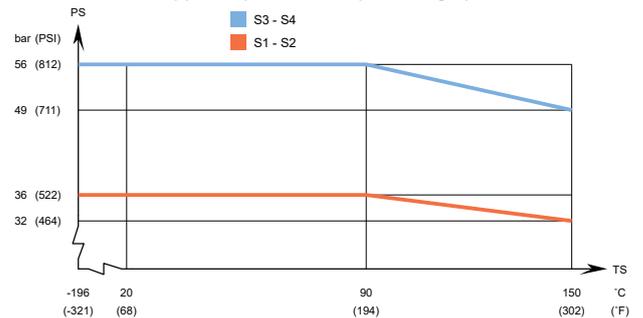
### AC502DQ/ACH502DQ – PED approval pressure/temperature graph



### AC502DQ/ACH502DQ – UL approval pressure/temperature graph



### ACK502DQ – 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 AC502EQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- 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



**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.

Single-circuit design.

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.

The asymmetry guarantees the best performance in both full- and partial-load conditions.

Designed for high-efficiency applications, such as those applications with high evaporation temperature and low water/



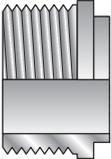
brine pressure drop. This results in reduced environmental impact and lower costs.

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

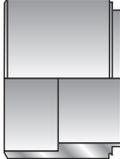
Based on standard components and a modular concept, including symmetric and asymmetric channels, each unit is custom-built to meet the specific requirements of each individual installation.

Suitable with most HFC, HFO and natural refrigerants.

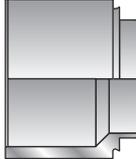
Examples of connections



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 <sup>1</sup>

A measure (mm)	12 + (2.61 * n)
A measure (inches)	0.47 + (0.10 * n)
Weight (kg) <sup>2</sup>	13 + (0.84 * n)
Weight (lb) <sup>2</sup>	28.66 + (1.85 * n)

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

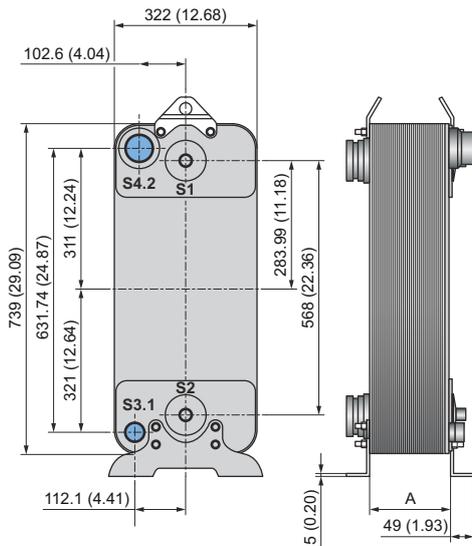
<sup>2</sup> Excluding connections

### Standard data

Volume per channel, litres (gal)	AH (S1-S2): 0.52 (0.1374) AH (S3-S4): 0.45 (0.1189) H (S1-S2): 0.47 (0.1242) H (S13-S4): 0.5 (0.1321)
Max. particle size, mm (inch)	1.1 (0.043)
Max. flowrate m <sup>3</sup> /h (gpm)	168 (739.7)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	270

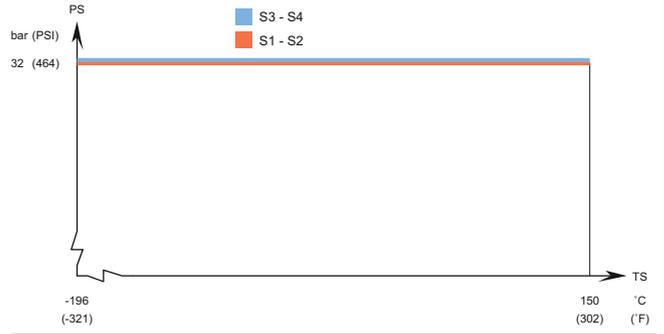
## Dimensional drawing

Measurements in mm (inches)

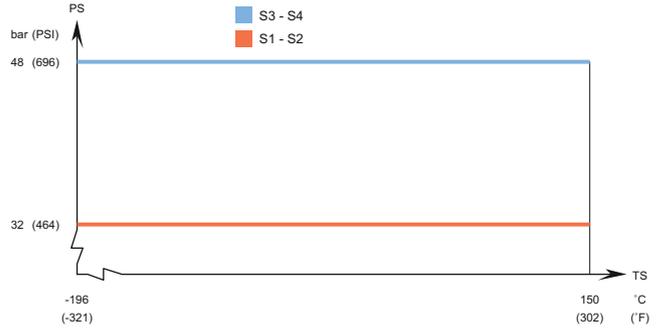


## Design pressure and temperature

### AC502EQ – PED approval pressure/temperature graph



### ACH502EQ – 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 AC540DQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- Evaporator
- Condenser
- Cascade systems

### 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



**DynaStatic™** Flexible refrigerant distribution



**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 True dual-circuit design provides a higher freezing resistance compared to back-to-back solutions.

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.

The asymmetry guarantees the best performance in both full- and partial-load conditions.

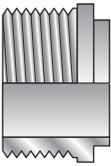
Designed for high-efficiency applications, such as those applications with high evaporation temperature and low water/brine pressure drop. This results in reduced environmental impact and lower costs.

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

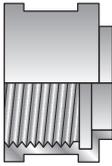
Based on standard components and a modular concept, including symmetric and asymmetric channels, each unit is custom-built to meet the specific requirements of each individual installation.

Suitable with most HFC, HFO and natural refrigerants.

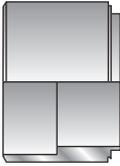
**Examples of connections**



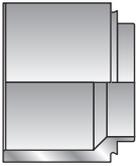
External thread



Internal thread



Soldering



Welding

## Technical Data

### Standard materials

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

### Dimensions and weight <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

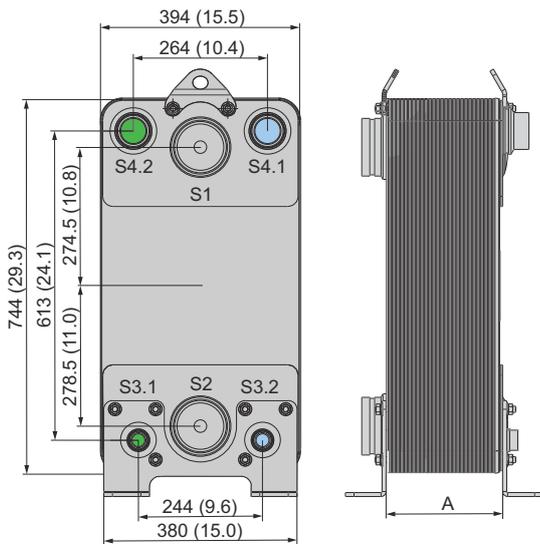
### Standard data

Volume per channel, litres (gal)	(S1-S2) 0.73 (0.1928) (S3-S4) 0.56 (0.1479)
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)

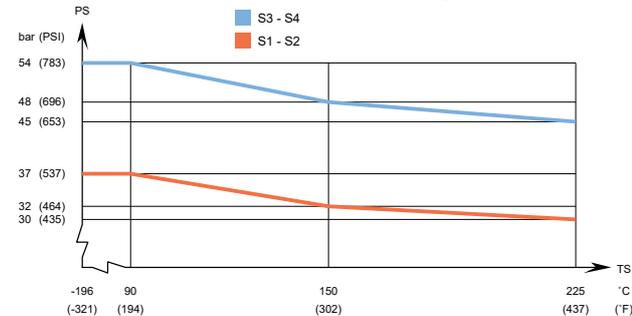
## Dimensional drawing

Measurements in mm (inches)

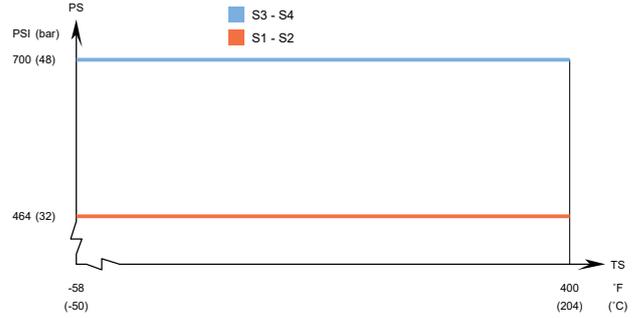


## Design pressure and temperature

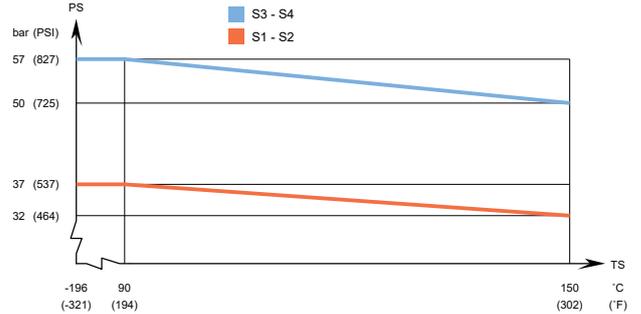
### ACH540DQ – PED approval pressure/temperature graph



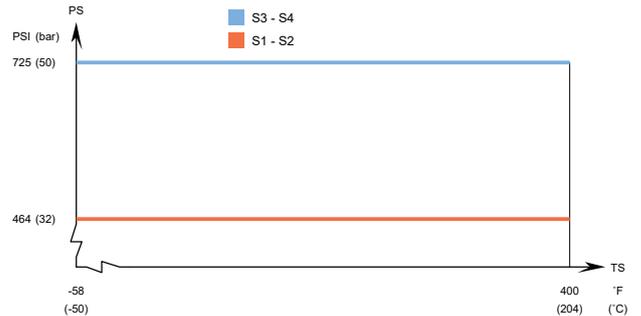
### ACH540DQ – UL approval pressure/temperature graph



### ACK540DQ – PED approval pressure/temperature graph



### ACK540DQ – 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.



# Alfa Laval AC1000DQ / ACH1000DQ / ACK1000DQ

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- 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

### 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 True dual-circuit design provides a higher freezing resistance compared to back-to-back solutions.

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.

The asymmetry guarantees the best performance in both full- and partial-load conditions.

Designed for high-efficiency applications, such as those applications with high evaporation temperature and low water/brine pressure drop. This results in reduced environmental impact and lower costs.

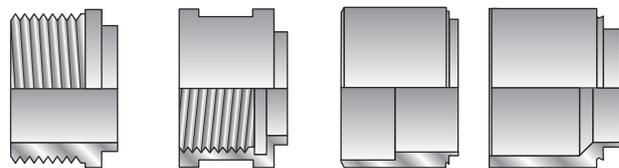
The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.



Innovative plate design and optional large plate package enable very high capacities of up to 1200 kW with R410A.

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

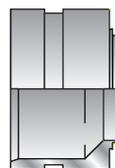


External thread

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 <sup>1</sup>

A measure (mm)	18 + (2.41 * n)
A measure (inches)	0.71 + (0.09 * n)
Weight (kg) <sup>2</sup>	31.5 + (1.36 * n)
Weight (lb) <sup>2</sup>	69.44 + (3.00 * n)

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

<sup>2</sup> Excluding connections

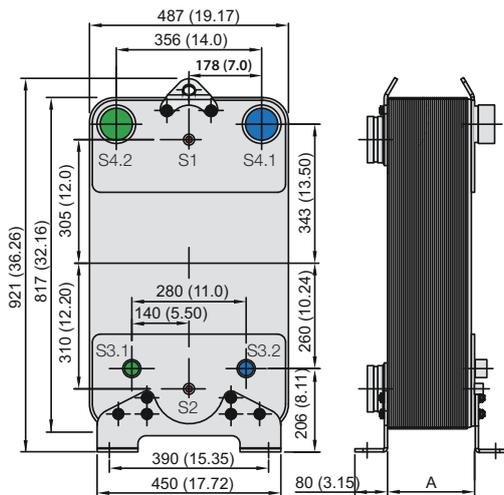
### Standard data

Volume per channel, litres (gal)	(S1-S2): 0.74 (0.1955) (S3-S4): 0.61 (0.1611)
Max. particle size, mm (inch)	1.1 (0.043)
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	342

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

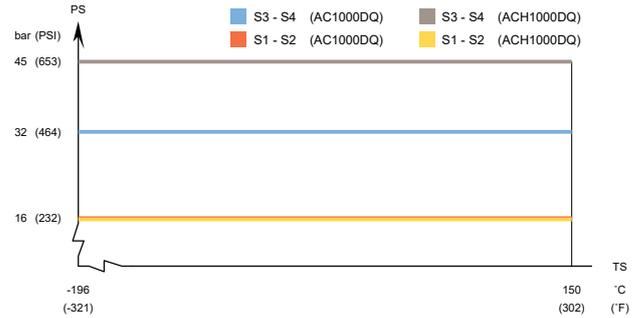
## Dimensional drawing

Measurements in mm (inches)

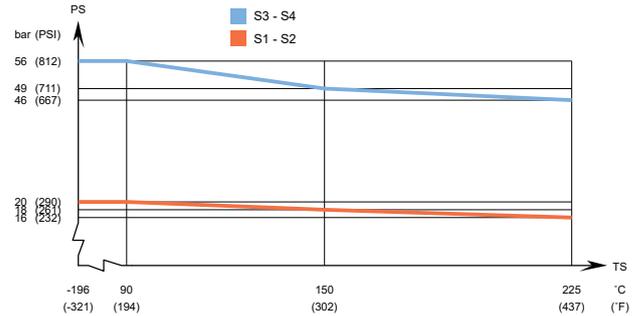


## Design pressure and temperature

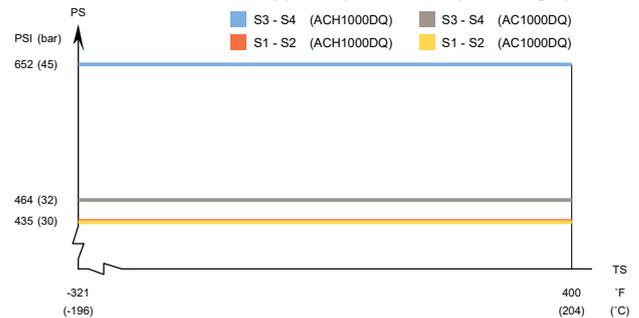
### AC1000DQ/ACH1000DQ – PED approval pressure/temperature graph



### ACK1000DQ – PED approval pressure/temperature graph



### AC1000DQ/ACH1000DQ – 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.

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# Alfa Laval AC900/ACH900

## Brazed plate heat exchanger for air conditioning and refrigeration

### Introduction

Alfa Laval AC brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work in air conditioning and refrigeration applications as evaporators and condensers in chillers and heat pumps.

### Applications

- 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



**DynaStatic™** Flexible refrigerant distribution



**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 channel design provides optimal efficiency in the most compact design.

The design guarantees the best performance in both full- and partial-load conditions.

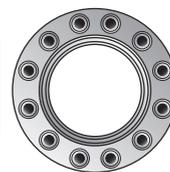
Designed for high-efficiency applications, such as those applications with high evaporation temperature and low water/brine pressure drop. This results in reduced environmental impact and lower costs.

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

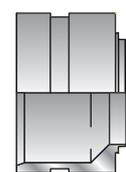
### Examples of connections



Compact flange



Soldering



Grooved connection

## Technical Data

### Standard materials

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

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

A measure (mm)	$18 + (2.41 * n)$
A measure (inches)	$0.71 + (0.09 * n)$
Weight (kg) <sup>2</sup>	$41.5 + (1.39 * n)$
Weight (lb) <sup>2</sup>	$91.49 + (3.06 * n)$

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

<sup>2</sup> Excluding connections

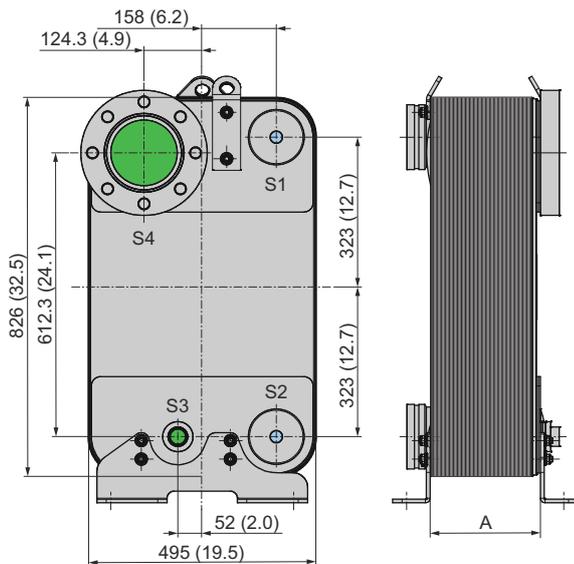
### Standard data

Volume per channel, litres (gal)	(S1-S2) 0.7 (0.1849) (S3-S4) 0.7 (0.1849)
Max. particle size, mm (inch)	1.1 (0.043)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	507 (2232.3)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	342

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

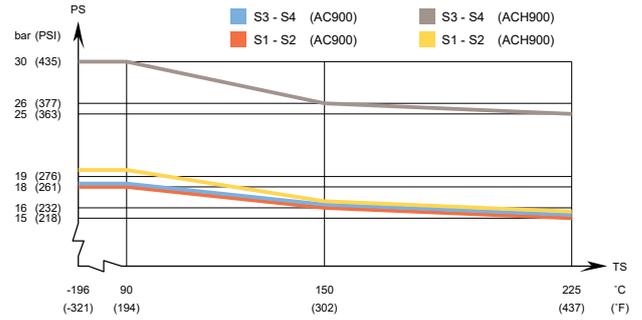
## Dimensional drawing

Measurements in mm (inches)



## Design pressure and temperature

### AC900/ACH900Q – 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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