



# Alfa Laval DOC110

## Brazed plate heat exchanger for oil cooling

### Introduction

Alfa Laval DOC - Dedicated oil coolers are brazed plate heat exchangers with robust connection flanges, which are suitable for hydraulic oil cooling applications.

### Applications

- Oil cooling

### Benefits

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

### 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 robust connection flanges with internal threads and integrated mounting brackets are specifically designed for oil cooling under tough operating conditions and reduces costs because of easy installation. Additionally, the flanges allow significantly higher torque at installation than conventional 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)	15 + (2.56 * n)
A measure (inches)	0.59 + (0.10 * n)
Weight (kg) <sup>2</sup>	4.82 + (0.35 * n)
Weight (lb) <sup>2</sup>	10.63 + (0.77 * n)

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

<sup>2</sup> Excluding connections

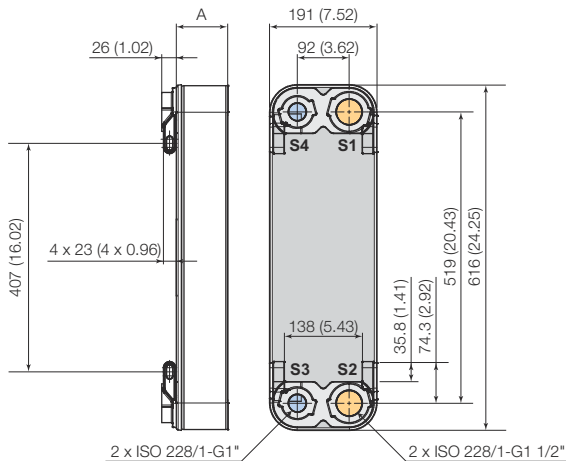
### Standard data

Volume per channel, litres (gal)	0.21 (0.0555)
Max. particle size, mm (inch)	1.2 (0.047)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	20 (88.1)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	150

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

## Dimensional drawing

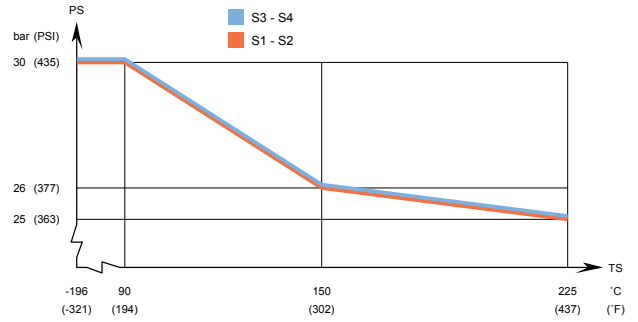
Measurements in mm (inches)



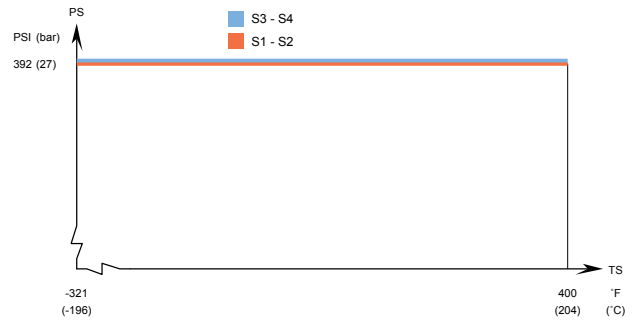
DOC112

## Design pressure and temperature

### DOC110 – PED approval pressure/temperature graph



### DOC110 – 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 DOC112 / DOC112HF

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## 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

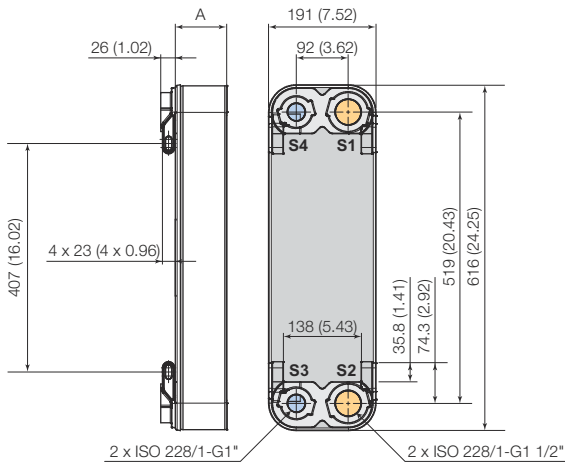
### Standard data

Volume per channel, litres (gal)	DOC112: 0.18 (0.0476) DOC112HF (S1-S2): 0.2 (0.0528) DOC112HF (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)	DOC112: 20 (88.1) DOC112HF: 37 (162.9)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	150

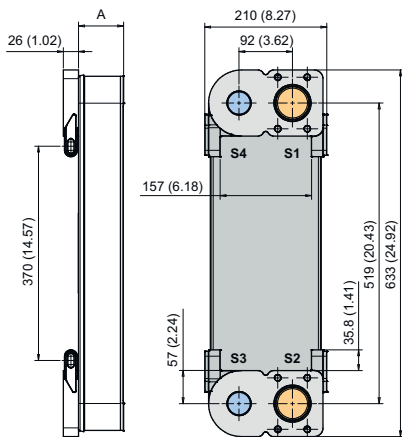
<sup>1</sup> Water at 5 m/s (16.4 ft/s) (connection velocity)

## Dimensional drawing

Measurements in mm (inches)



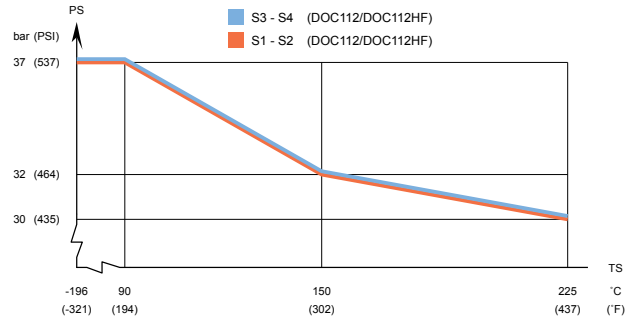
DOC112



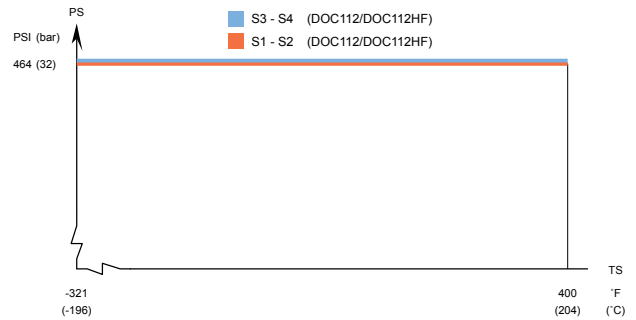
DOC112HF

## Design pressure and temperature

### DOC112/DOC112HF – PED approval pressure/temperature graph



### DOC112/DOC112HF – UL approval pressure/temperature graph



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