

## Brazed plate heat exchanger for oil cooling

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
- Integrated mounting bracket

#### 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.

The robust connection flanges with internal threads 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.

#### По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72 Астана +7(7172)727-132 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395) 279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Тверь (4822)63-31-35 Томск (3822)98-41-53 Тула (4872)74-02-29 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Ярославль (4852)69-52-93

Киргизия (996)312-96-26-47

Казахстан (772)734-952-31 Таджикистан (992)427-82-92-69

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>	0.27 + (0.04 * n)	
Weight (lb) <sup>2</sup>	0.59 + (0.09 * n)	

- n = number of plates 1.
- 2. Excluding connections

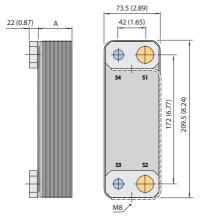
#### Standard data

Volume per channel, litres (gal)	A (S1-S2): 0.030 (0.0078) A (S3-S4): 0.024 (0.0063) H: 0.027 (0.0070)
Max. particle size, mm (inch)	1.1 (0.043)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	3.6 (15.8)
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	60

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

#### **Dimensional drawing**

Measurements in mm (inches)



#### Design pressure and temperature

DOC16 - 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.

#### CHE00037EN 2016-04

#### How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information direct.



## Brazed plate heat exchanger for oil cooling

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
- Integrated mounting bracket

## 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.



Standard materials

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

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

A measure (mm)	8 + (1.5 * n)
A measure (inches)	0.31 + (0.06 * n)
Weight (kg) <sup>2</sup>	0.6 + (0.08 * n)
Weight (lb) <sup>2</sup>	1.32 + (0.18 * n)

1. n = number of plates

2. Excluding connections

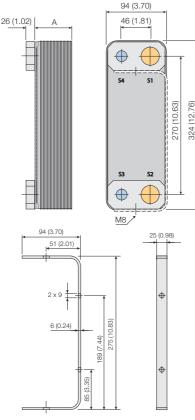
#### Standard data

Volume per channel, litres (gal)	0.028 (0.0072)	
Max. particle size, mm (inch)	0.6 (0.024)	
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	8.8 (38.72)	
Flow direction	Parallel	
Min. number of plates	10	
Max. number of plates	110	

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

## **Dimensional drawing**

Measurements in mm (inches)



#### 200000203EN 2017-12

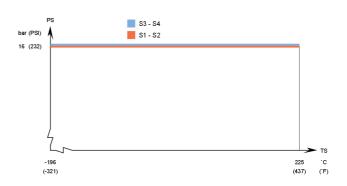
Alfa Laval reserves the right to change specifications without prior notification.

How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information direct.

## Design pressure and temperature

DOC20 - 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.



## Brazed plate heat exchanger for oil cooling

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
- Integrated mounting bracket

## 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.



Standard materials

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

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

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

- 1. n = number of plates
- 2. Excluding connections

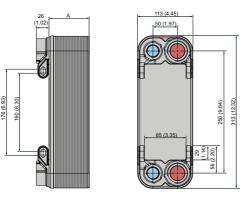
#### Standard data

Volume per channel, litres (gal)	0.054 (0.014)	
Max. particle size, mm (inch)	1 (0.04)	
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	8.8 (38.7)	
Flow direction	Parallel	
Min. number of plates	8	
Max. number of plates	100	

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

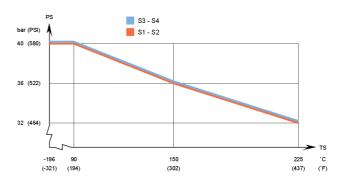
### **Dimensional drawing**

Measurements in mm (inches)

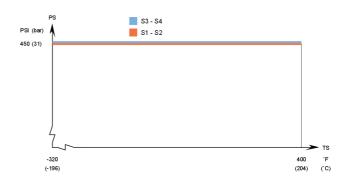


#### Design pressure and temperature

DOC30 - 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 reserves the right to change specifications without prior notification.

#### How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information direct.



## Brazed plate heat exchanger for oil cooling

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
- Integrated mounting bracket

## 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.



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 + (2.32 * n)
A measure (inches)	0.51 + (0.09 * n)
Weight (kg) <sup>2</sup>	2.1 + (0.18 * n)
Weight (lb) <sup>2</sup>	4.63 + (0.4 * n)

- 1. n = number of plates
- 2. Excluding connections

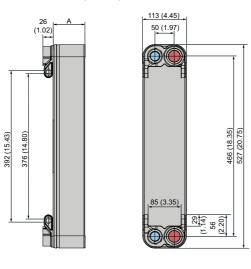
#### Standard data

Volume per channel, litres (gal)	0.10 (0.027)
Max. particle size, mm (inch)	1 (0.039)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	8.8 (38.7)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	120

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

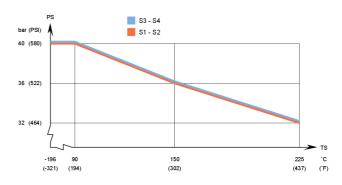
### **Dimensional drawing**

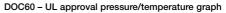
Measurements in mm (inches)

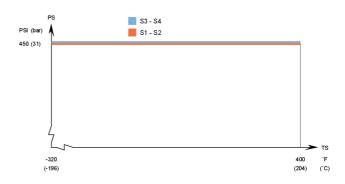


#### Design pressure and temperature

DOC60 - 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.

#### CHE00039EN 2016-12

Alfa Laval reserves the right to change specifications without prior notification.

#### How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information direct.



## 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.



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

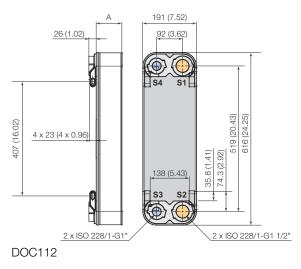
#### Standard data

Volume per channel, litres (gal)	0.21 (0.0555)
Max. particle size, mm (inch)	1.2 (0.047)
Max. flowrate <sup>1</sup> m3/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)

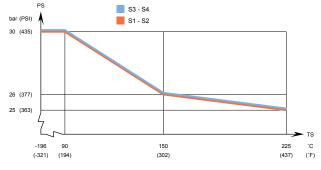
#### **Dimensional drawing**

Measurements in mm (inches)



### 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.

This document and its contents are subject to copyrights and other intellectual property rights owned by Alfa Laval Corporate AB. No part of this document may be copied, re-produced or transmitted in any form or by any means, or for any purpose, without Alfa Laval Corporate AB's prior express written permission. Information and services provided in this document are made as a benefit and service to the user, and no representations or warranties are made about the accuracy or suitability of this information and these services for any purpose. All rights are reserved.

#### CHE00040-4-EN-GB

© Alfa Laval Corporate AB

#### How to contact Alfa Laval

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



# Alfa Laval DOC112 / DOC112HF

## 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.



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

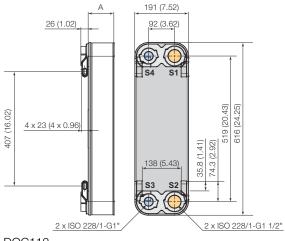
#### Standard data

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)
	DOC112: 20 (88.1)
Max. flowrate <sup>1</sup> m3/h (gpm)	DOC112HF: 37 (162.9)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	150

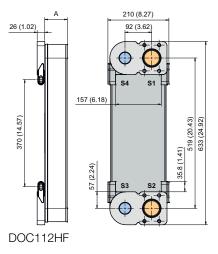
<sup>1</sup> Water at 5 m/s (16.4 ft/s) (connection velocity)

#### **Dimensional drawing**

Measurements in mm (inches)

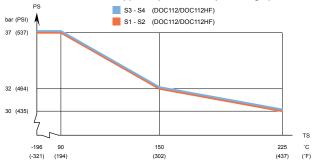




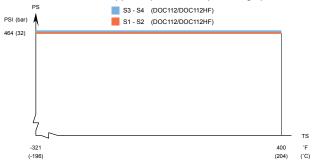


#### Design pressure and temperature

DOC112/DOC112HF - PED approval pressure/temperature graph



#### DOC112/DOC112HF - 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.



## 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.



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

#### Dimensions and weight

A measure (mm)	14.2 + (2.17 * n)
A measure (inches)	0.56 + (0.09 * n)
Weight (kg) <sup>2</sup>	19.5 + (1.14 * n)
Weight (lb) <sup>2</sup>	42.99 + (2.51 * n)

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

<sup>2</sup> Excluding connections

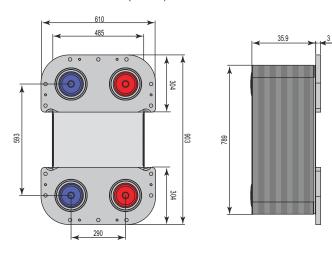
#### Standard data

Volume per channel, litres (gal)	0.69 (0.1823)
Max. flowrate <sup>1</sup> m3/h (gpm)	265 (1166.8)
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 DOC410 – PED approval pressure/temperature graph

По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72 Астана +7(7172)727-132 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395) 279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12

Новокузнецк (3843)20-46-81 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Тверь (4822)63-31-35 Томск (3822)98-41-53 Тула (4872)74-02-29 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Ярославль (4852)69-52-93

Киргизия (996)312-96-26-47

Казахстан (772)734-952-31 Таджикистан (992)427-82-92-69

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.

