



## DOC16

### Brazed plate heat exchanger for oil cooling

#### General information

Alfa Laval introduced its first brazed plate heat exchanger in 1977 and has since continuously developed and optimized its performance and reliability.

Brazing the stainless steel plates together eliminates the need for gaskets and thick frame plates, which makes the heat exchanger compact and saves material. 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 lifetime.

The Dedicated Oil Cooler (DOC) brazed plate heat exchangers are specifically designed for hydraulic oil cooling applications. The connection flanges give a robust construction that can withstand tough operating conditions.

#### Typical applications

Hydraulic oil cooling

#### Capacity range

DOC16 cover capacities from 10 up to 16 kW. Based on standard components and a modular concept, each unit is custom-designed for each specific installation.

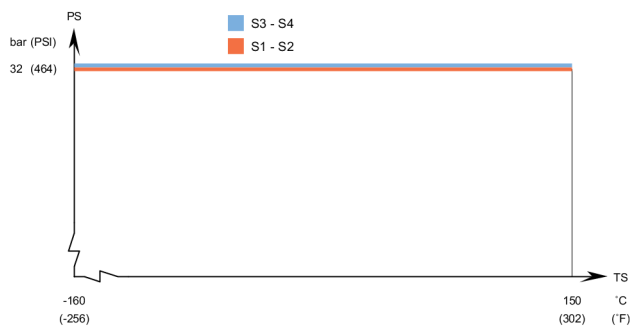
#### Particulars required for quotation

To enable Alfa Laval's representative to make a specific quotation, specify the following particulars in your enquiry:

- Required flow rates or heat load
- Temperature program
- Physical properties of liquids in question
- Desired working pressure
- Maximum permitted pressure drop



## DOC16 - PED approval pressure/temperature graph



## Standard dimensions and weight

|                |   |                     |                                   |
|----------------|---|---------------------|-----------------------------------|
| A measure mm   | = | $8.5 + (2.16 * n)$  | ( $\pm 2$ mm or $\pm 2.5$ %)      |
| A measure inch | = | $0.33 + (0.09 * n)$ | ( $\pm 0.08$ inch or $\pm 2.5$ %) |
| Weight** kg    | = | $0.27 + (0.04 * n)$ |                                   |
| Weight** lb    | = | $0.59 + (0.09 * n)$ |                                   |

(n = number of plates)

\*\* Excluding connections

## Standard data

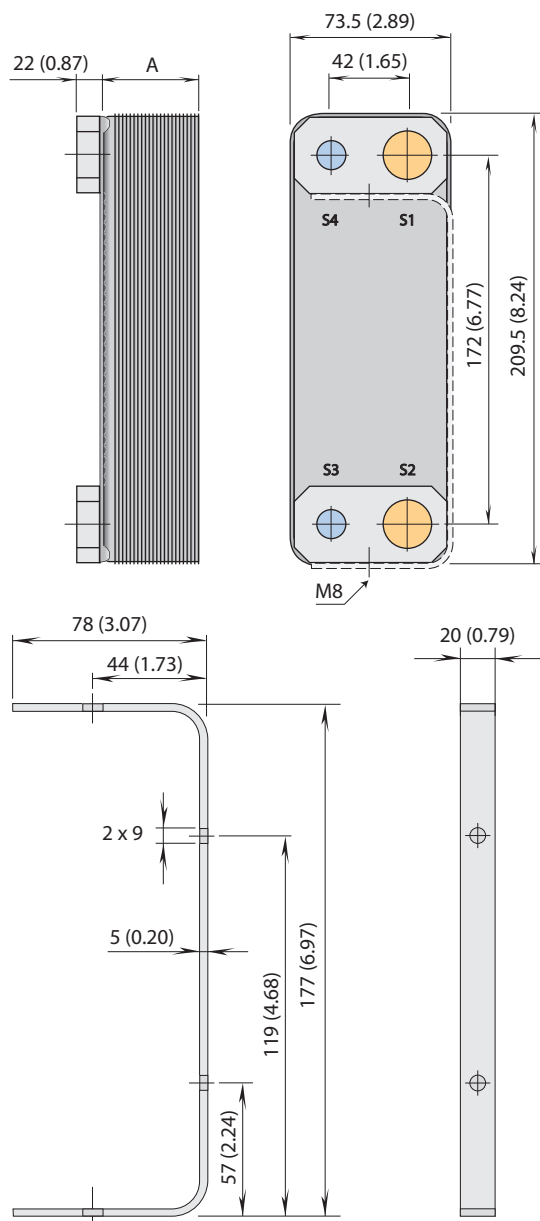
|                                        |               |
|----------------------------------------|---------------|
| Min. working temperature               | see graph     |
| Max. working temperature               | see graph     |
| Min. working pressure                  | vacuum        |
| Max. working pressure                  | see graph     |
| Volume per channel, litres (ga)        | 0.027 (0.007) |
| Max. particle size mm (inch)           | 1.1 (0.04)    |
| Max. flowrate* m <sup>3</sup> /h (gpm) | 4.1 (18.04)   |
| Min. nbr of plates                     | 4             |
| Max. nbr of plates                     | 60            |

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

## Standard materials

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

## Standard dimensions mm (inch)



For exact values please contact your local Alfa Laval representative

## How to contact Alfa Laval

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## DOC30

### Brazed plate heat exchanger for oil cooling

#### General information

Alfa Laval introduced its first brazed plate heat exchanger in 1977 and has since continuously developed and optimized its performance and reliability.

Brazing the stainless steel plates together eliminates the need for gaskets and thick frame plates, which makes the heat exchanger compact and saves material. 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 lifetime.

The Dedicated Oil Cooler (DOC) brazed plate heat exchangers are specifically designed for hydraulic oil cooling applications. The connection flanges give a robust construction that can withstand tough operating conditions.

#### Typical applications

Hydraulic oil cooling

#### Capacity range

DOC30 cover capacities from 10 up to 100 kW. Based on standard components and a modular concept, each unit is custom-designed for each specific installation.

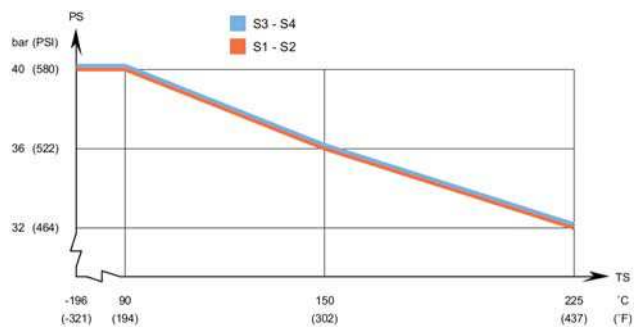
#### Particulars required for quotation

To enable Alfa Laval's representative to make a specific quotation, specify the following particulars in your enquiry:

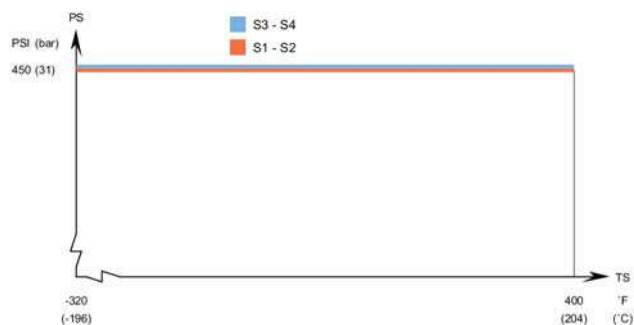
- Required flow rates or heat load
- Temperature program
- Physical properties of liquids in question
- Desired working pressure
- Maximum permitted pressure drop



### DOC30 - PED approval pressure/temperature graph\*



### DOC30 - UL approval pressure/temperature graph\*



### Standard dimensions and weight\*

$$\begin{aligned} \text{A measure mm} &= 13 + (2.31 * n) (\pm 2 \text{ mm or } \pm 1.5 \%) \\ \text{A measure inch} &= 0.51 + (0.09 * n) (\pm 0.08 \text{ inch or } \pm 1.5 \%) \\ \text{Weight** kg} &= 1.2 + (0.11 * n) \\ \text{Weight** lb} &= 2.65 + (0.24 * n) \end{aligned}$$

(n = number of plates)

\* Excluding connections

### Standard data

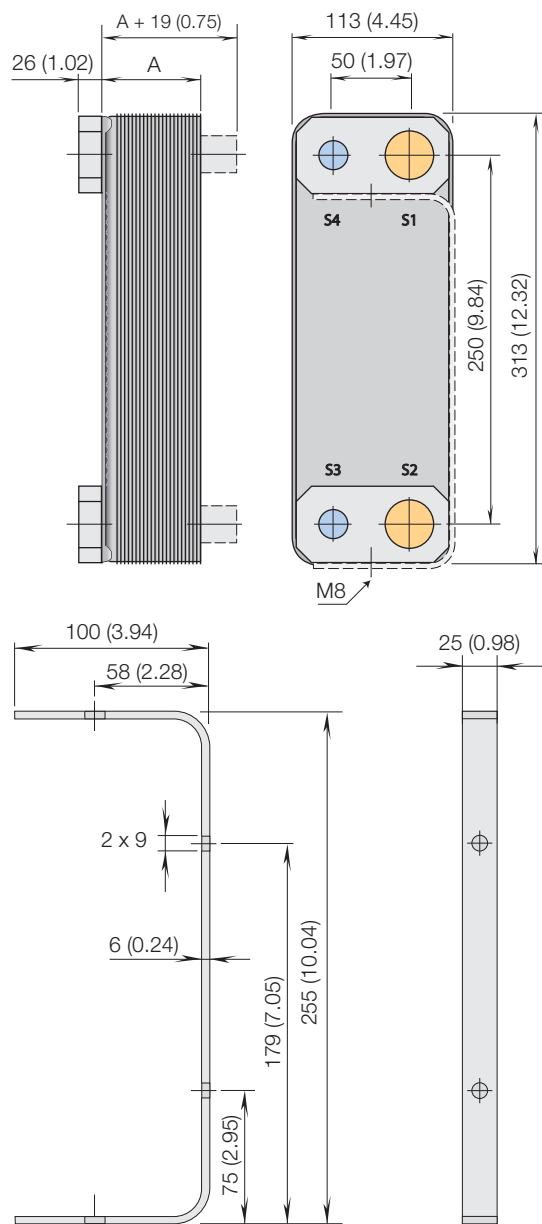
|                                        |              |
|----------------------------------------|--------------|
| Min. working temperature               | see graph    |
| Max. working temperature               | see graph    |
| Min. working pressure                  | vacuum       |
| Max. working pressure                  | see graph    |
| Volume per channel, litres (ga)        | 0.054 (0.01) |
| Max. particle size mm (inch)           | 1 (0.04)     |
| Max. flowrate* m <sup>3</sup> /h (gpm) | 8.8 (38.72)  |
| Min. nbr of plates                     | 8            |
| Max. nbr of plates                     | 100          |

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

### Standard materials

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

### Standard dimensions mm (inch)



For exact values please contact your local Alfa Laval representative

### How to contact Alfa Laval

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## DOC60

### Brazed plate heat exchanger for oil cooling

#### General information

Alfa Laval introduced its first brazed plate heat exchanger in 1977 and has since continuously developed and optimized its performance and reliability.

Brazing the stainless steel plates together eliminates the need for gaskets and thick frame plates, which makes the heat exchanger compact and saves material. 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 lifetime.

The Dedicated Oil Cooler (DOC) brazed plate heat exchangers are specifically designed for hydraulic oil cooling applications. The connection flanges give a robust construction that can withstand tough operating conditions.

#### Typical applications

Hydraulic oil cooling

#### Capacity range

DOC60 cover capacities from 20 up to 140 kW. Based on standard components and a modular concept, each unit is custom-designed for each specific installation.

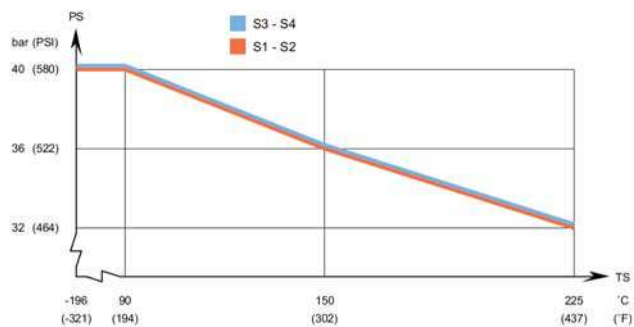
#### Particulars required for quotation

To enable Alfa Laval's representative to make a specific quotation, specify the following particulars in your enquiry:

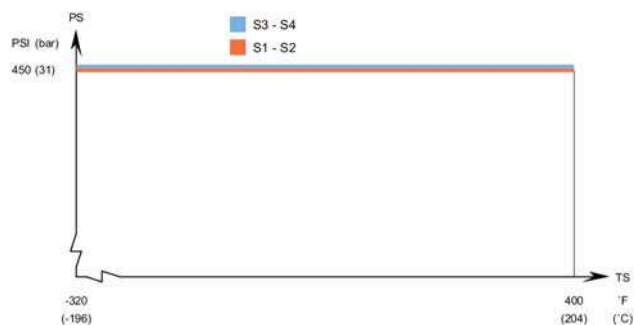
- Required flow rates or heat load
- Temperature program
- Physical properties of liquids in question
- Desired working pressure
- Maximum permitted pressure drop



#### DOC60 - PED approval pressure/temperature graph\*



#### DOC60 - UL approval pressure/temperature graph\*



#### Standard dimensions and weight\*

$$\begin{aligned} \text{A measure mm} &= 13 + (2.35 * n) \pm 1.5 \% \\ \text{A measure inch} &= 0.51 + (0.09 * n) \pm 0.06 \% \\ \text{Weight** kg} &= 2.1 + (0.18 * n) \\ \text{Weight** lb} &= 4.63 + (0.4 * n) \end{aligned}$$

(n = number of plates)

\* Excluding connections

#### Standard data

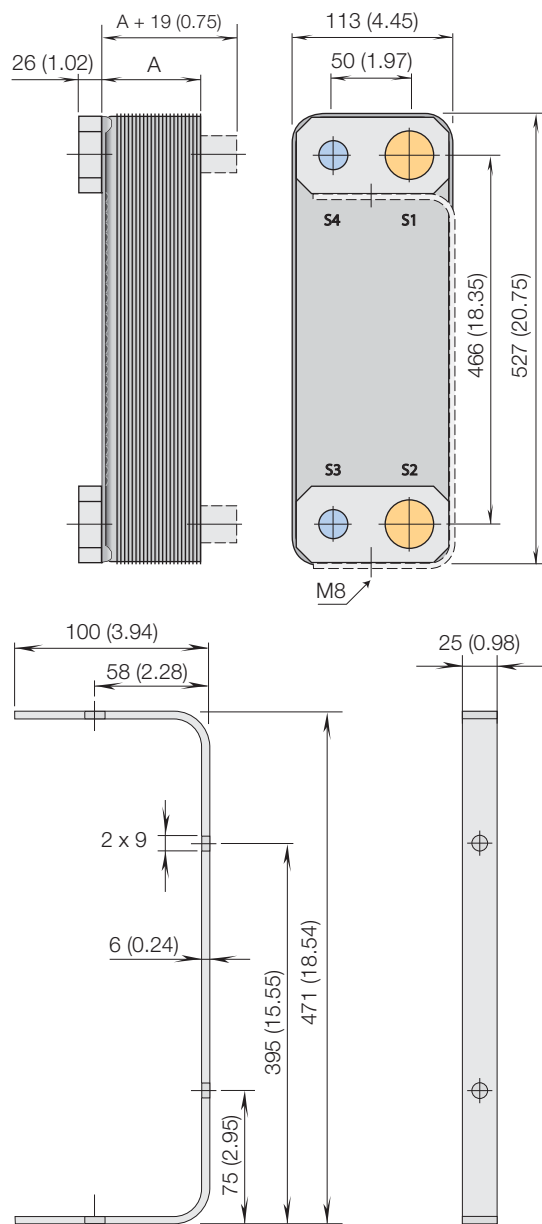
|                                        |             |
|----------------------------------------|-------------|
| Min. working temperature               | see graph   |
| Max. working temperature               | see graph   |
| Min. working pressure                  | vacuum      |
| Max. working pressure                  | see graph   |
| Volume per channel, litres (ga)        | 0.10 (0.03) |
| Max. particle size mm (inch)           | 1 (0.04)    |
| Max. flowrate* m <sup>3</sup> /h (gpm) | 8.8 (38.72) |
| Min. nbr of plates                     | 10          |
| Max. nbr of plates                     | 100         |

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

#### Standard materials

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

#### Standard dimensions mm (inch)



For exact values please contact your local Alfa Laval representative

#### How to contact Alfa Laval

Up-to-date AlfaLaval contact details for all countries are always available on our website on [www.alfalaval.com](http://www.alfalaval.com)



## DOC110

### Brazed plate heat exchanger for Oil Cooling

#### General information

Alfa Laval introduced its first brazed plate heat exchanger in 1977 and has since continuously developed and optimized its performance and reliability.

Brazing the stainless steel plates together eliminates the need for gaskets and thick frame plates, which makes the heat exchanger compact and saves material. 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 lifetime.

The Dedicated Oil Cooler (DOC) brazed plate heat exchangers are specifically designed for hydraulic oil cooling applications. The connection flanges give a robust construction that can withstand tough operating conditions.

#### Typical applications

Hydraulic oil cooling

#### Capacity range

DOC110 cover capacities from 40 up to 170 kW. Based on standard components and a modular concept, each unit is custom-designed for each specific installation.

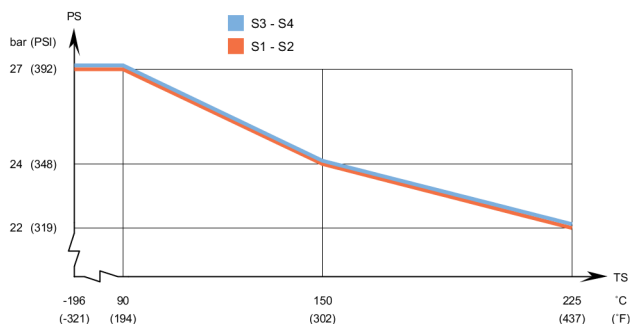
#### Particulars required for quotation

To enable Alfa Laval's representative to make a specific quotation, specify the following particulars in your enquiry:

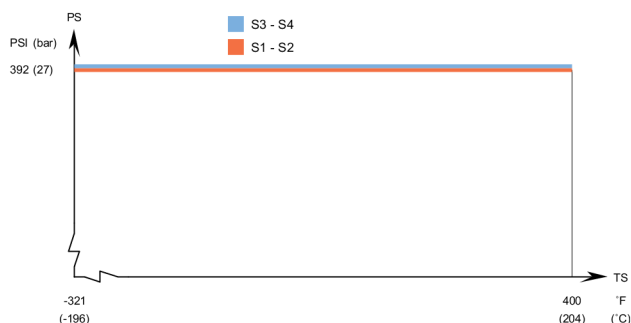
- Required flow rates or heat load
- Temperature program
- Physical properties of liquids in question
- Desired working pressure
- Maximum permitted pressure drop



## DOC110 - PED approval pressure/temperature graph



## DOC110 - UL approval pressure/temperature graph



## Standard dimensions and weight

$$\begin{aligned} \text{A measure mm} &= 15 + (2.56 * n) (\pm 2 \text{ mm or } \pm 1.5 \%) \\ \text{A measure inch} &= 0.59 + (0.1 * n) (\pm 0.08 \text{ inch or } \pm 1.5 \%) \\ \text{Weight** kg} &= 4.82 + (0.35 * n) \\ \text{Weight** lb} &= 10.63 + (0.77 * n) \end{aligned}$$

(n = number of plates)

\*\* Excluding connections

## Standard data

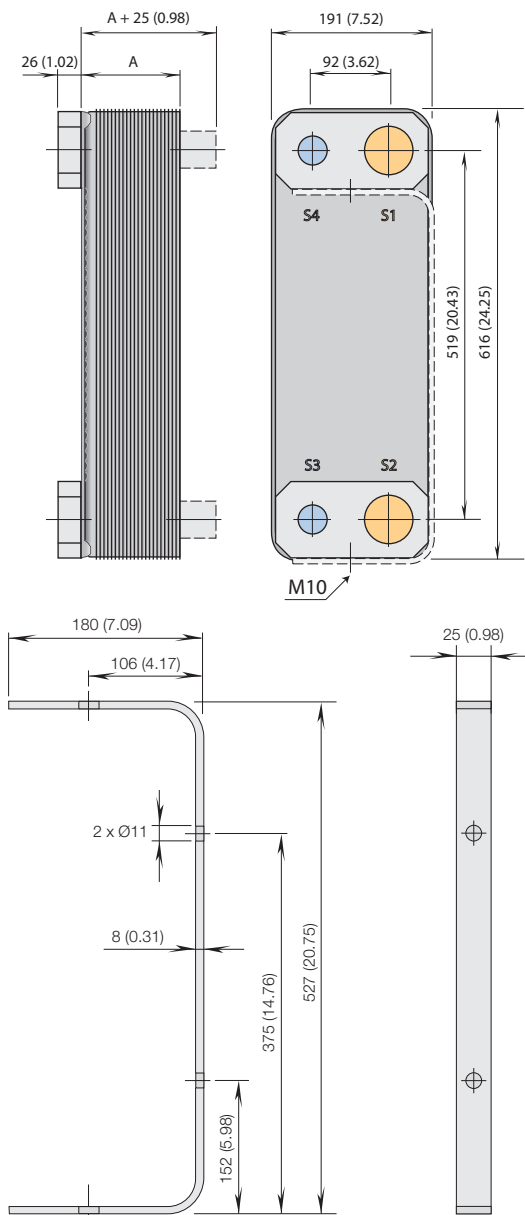
|                                        |              |
|----------------------------------------|--------------|
| Min. working temperature               | see graph    |
| Max. working temperature               | see graph    |
| Min. working pressure                  | vacuum       |
| Max. working pressure                  | see graph    |
| Volume per channel, litres (ga)        | 0.21 (0.054) |
| Max. particle size mm (inch)           | 1.2 (0.05)   |
| Max. flowrate* m <sup>3</sup> /h (gpm) | 37 (162.8)   |
| Min. nbr of plates                     | 10           |
| Max. nbr of plates                     | 240          |

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

## Standard materials

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

## Standard dimensions mm (inch)



For exact values please contact your local Alfa Laval representative

## How to contact Alfa Laval

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## DOC112

### Brazed plate heat exchanger for oil cooling

#### General information

Alfa Laval introduced its first brazed plate heat exchanger in 1977 and has since continuously developed and optimized its performance and reliability.

Brazing the stainless steel plates together eliminates the need for gaskets and thick frame plates, which makes the heat exchanger compact and saves material. 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 lifetime.

The Dedicated Oil Cooler (DOC) brazed plate heat exchangers are specifically designed for hydraulic oil cooling applications. The connection flanges give a robust construction that can withstand tough operating conditions.

#### Typical applications

Hydraulic oil cooling

#### Capacity range

DOC112 cover capacities from 40 up to 170 kW. Based on standard components and a modular concept, each unit is custom-designed for each specific installation.

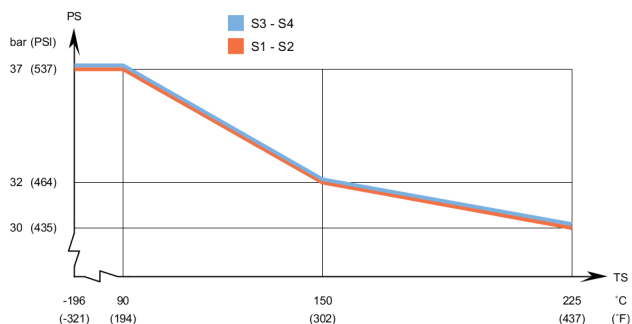
#### Particulars required for quotation

To enable Alfa Laval's representative to make a specific quotation, specify the following particulars in your enquiry:

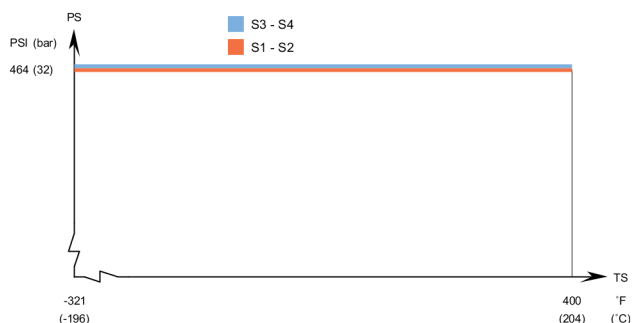
- Required flow rates or heat load
- Temperature program
- Physical properties of liquids in question
- Desired working pressure
- Maximum permitted pressure drop



## DOC112 - PED approval pressure/temperature graph



## DOC112 - UL approval pressure/temperature graph



## Standard dimensions and weight\*

$$\begin{aligned} \text{A measure mm} &= 16 + (2.07 * n) (\pm 3 \text{ mm or } \pm 1.5 \%) \\ \text{A measure inch} &= 0.63 + (0.08 * n) (\pm 0.12 \text{ inch or } \pm 1.5 \%) \\ \text{Weight* kg} &= 4.82 + (0.35 * n) \\ \text{Weight* lb} &= 10.63 + (0.77 * n) \end{aligned}$$

(n = number of plates)

\* Excluding connections

## Standard data

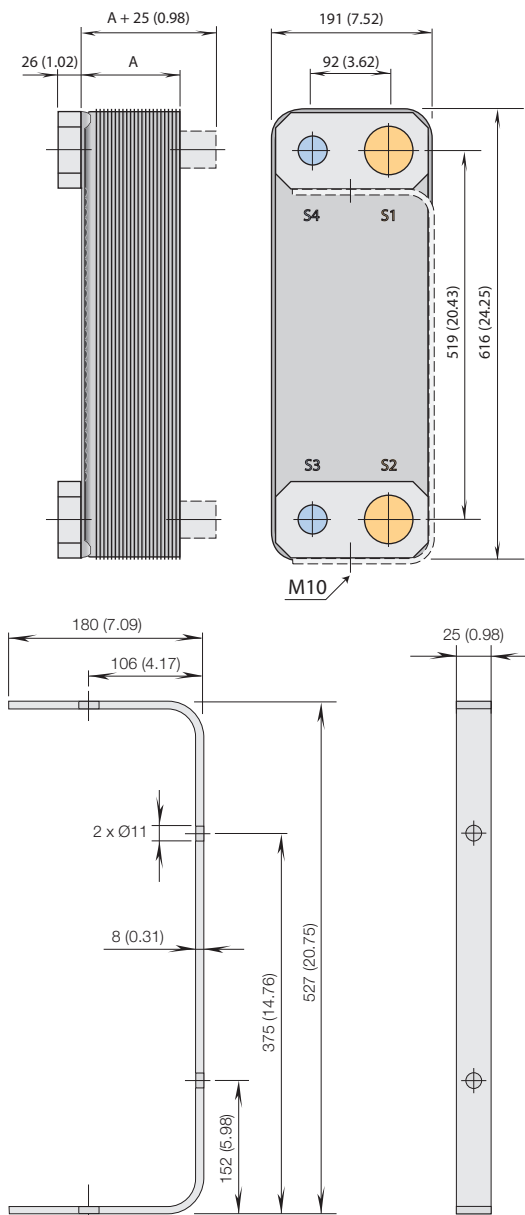
|                                        |              |
|----------------------------------------|--------------|
| Min. working temperature               | see graph    |
| Max. working temperature               | see graph    |
| Min. working pressure                  | vacuum       |
| Max. working pressure                  | see graph    |
| Volume per channel, litres (ga)        | 0.18 (0.046) |
| Max. particle size mm (inch)           | 1 (0.04)     |
| Max. flowrate* m <sup>3</sup> /h (gpm) | 37 (163)     |
| Min. nbr of plates                     | 10           |
| Max. nbr of plates                     | 300          |

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

## Standard materials

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

## Standard dimensions mm (inch)



For exact values please contact your local Alfa Laval representative

## How to contact Alfa Laval

Up-to-date AlfaLaval contact details for all countries are always available on our website on [www.alfalaval.com](http://www.alfalaval.com)



## DOC112HF

### Brazed plate heat exchanger for oil cooling

#### General information

Alfa Laval introduced its first brazed plate heat exchanger in 1977 and has since continuously developed and optimized its performance and reliability.

Brazing the stainless steel plates together eliminates the need for gaskets and thick frame plates, which makes the heat exchanger compact and saves material. 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 lifetime.

The Dedicated Oil Cooler (DOC) brazed plate heat exchangers are specifically designed for hydraulic oil cooling applications. The connection flanges give a robust construction that can withstand tough operating conditions.

#### Typical applications

Hydraulic oil cooling

#### Capacity range

DOC112HF cover capacities from 120 up to 360 kW. Based on standard components and a modular concept, each unit is custom-designed for each specific installation.

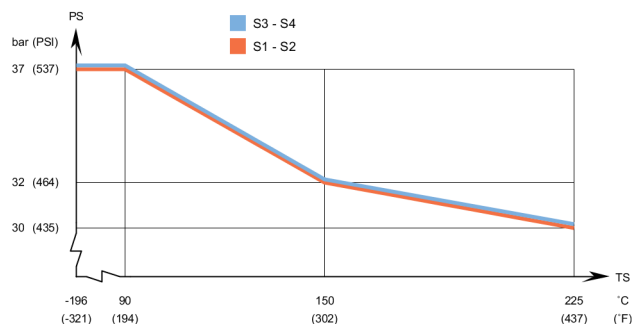
#### Request for quotation

To receive a quotation for brazed plate heat exchangers that meet your requirements, please provide Alfa Laval representatives with:

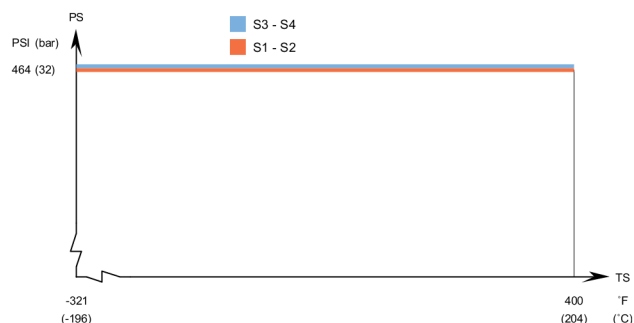
- Required flow rates or heat load
- Temperature program
- Physical properties of liquids in question
- Desired working pressure
- Maximum permitted pressure drop



## DOC112HF - PED approval pressure/temperature graph



## DOC112HF - UL approval pressure/temperature graph



## Standard dimensions and weight\*

$$\begin{aligned} \text{A measure mm} &= 16 + (2.06 * n) (\pm 3 \text{ mm or } \pm 1.5 \%) \\ \text{A measure inch} &= 0.63 + (0.08 * n) (\pm 0.12 \text{ inch or } \pm 1.5 \%) \\ \text{Weight* kg} &= 4.82 + (0.35 * n) \\ \text{Weight* lb} &= 10.63 + (0.77 * n) \end{aligned}$$

(n = number of plates)

\* Excluding connections

## Standard data

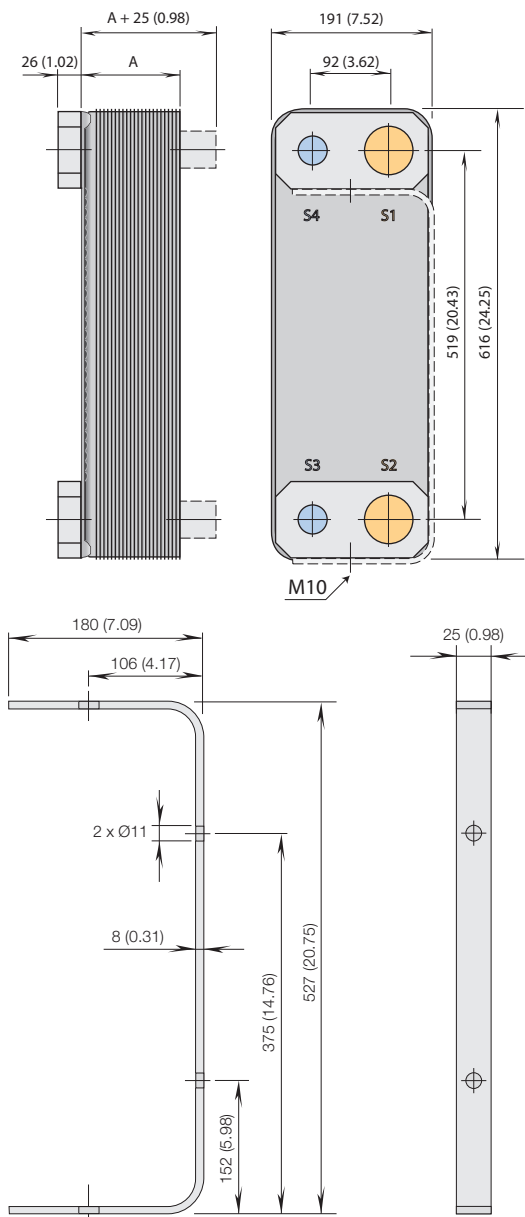
|                                        |              |
|----------------------------------------|--------------|
| Min. working temperature               | see graph    |
| Max. working temperature               | see graph    |
| Min. working pressure                  | vacuum       |
| Max. working pressure                  | see graph    |
| Volume per channel, litres (ga) AH     | 0.20 (0.052) |
| Volume per channel, litres (ga) H      | 0.16 (0.041) |
| Max. particle size mm (inch)           | 1 (0.04)     |
| Max. flowrate* m <sup>3</sup> /h (gpm) | 51 (224)     |
| Min. nbr of plates                     | 10           |
| Max. nbr of plates                     | 300          |

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

## Standard materials

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

## Standard dimensions mm (inch)



For exact values please contact your local Alfa Laval representative

## How to contact Alfa Laval

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