

Alfa Laval DOC16

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.

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.



Technical Data

Standard materials

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

Dimensions and weight ¹

| | |
|--------------------------|----------------------|
| A measure (mm) | $8.8 + (2.16 * n)$ |
| A measure (inches) | $0.35 + (0.09 * n)$ |
| Weight (kg) ² | $0.267 + (0.04 * n)$ |
| Weight (lb) ² | $0.59 + (0.09 * n)$ |

¹ n = number of plates

² Excluding connections

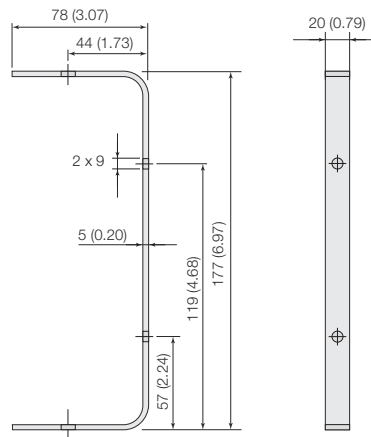
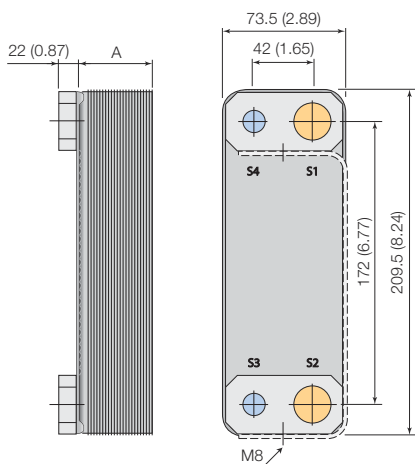
Standard data

| | |
|--|---|
| 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 ¹ m ³ /h (gpm) | 3.6 (15.9) |
| Flow direction | Parallel |
| Min. number of plates | 4 |
| Max. number of plates | 60 |

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

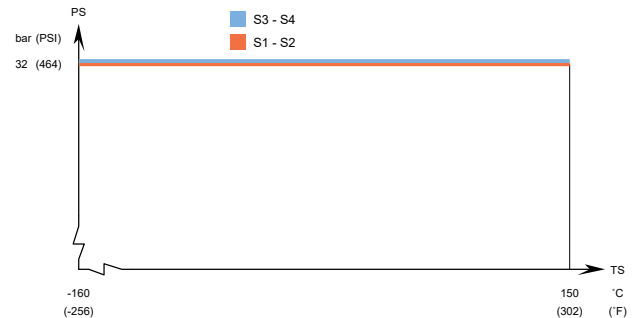
Dimensional drawing

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.

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