



Alfa Laval GL50 / GLH50

Gas-to-liquid plate heat exchanger

Introduction

The ultra-compact Alfa Laval GL product line ensures maximum heat transfer and efficiency in asymmetric gas applications.

Applications

- Exhaust gas heat recovery
- Compressed air cooling
- Charge air cooling
- Condenser

Benefits

- Compact
- Easy to install
- Low level of service and maintenance required
- All units are pressure and leak tested
- Integrated gas/condensate separation

Design

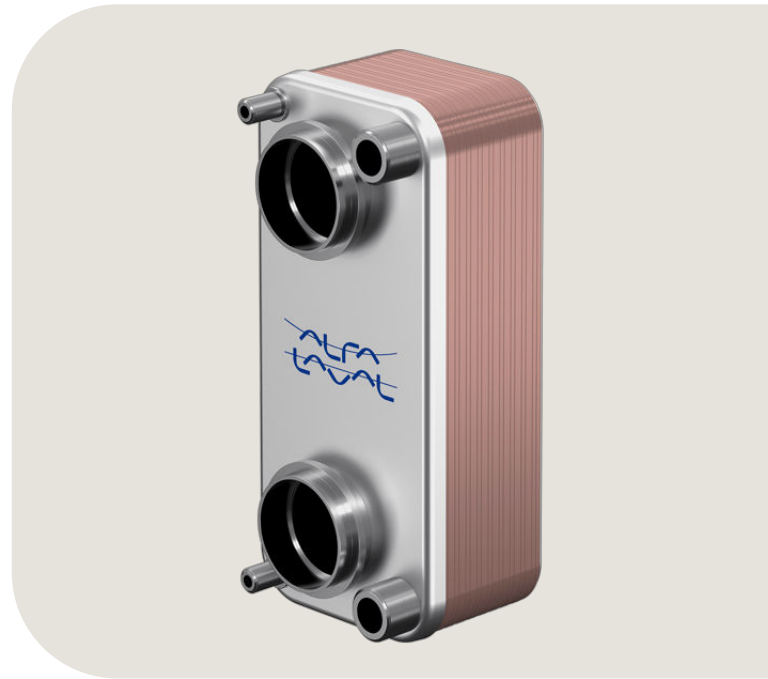
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

Different pressure ratings are available for different needs.

Asymmetric channels provide optimal efficiency in the most compact design. This results in very low pressure drop on the gas side.

Alfa Laval's unique brazed gas-to-liquid design enables much higher temperatures than traditional plate heat exchangers.

Our standard models handle gas temperatures up to 750 °C (1382 °F), with temperatures above 1400 °C (2552 °F) possible for special applications.



Technical Data

Standard materials

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

Dimensions and weight ¹

A measure (mm)	$4 + (4.05 * n)$
A measure (inches)	$0.16 + (0.16 * n)$
Weight (kg) ²	$1.07 + (0.11 * n)$
Weight (lb) ² s	$2.36 + (0.24 * n)$

¹ n = number of plates.

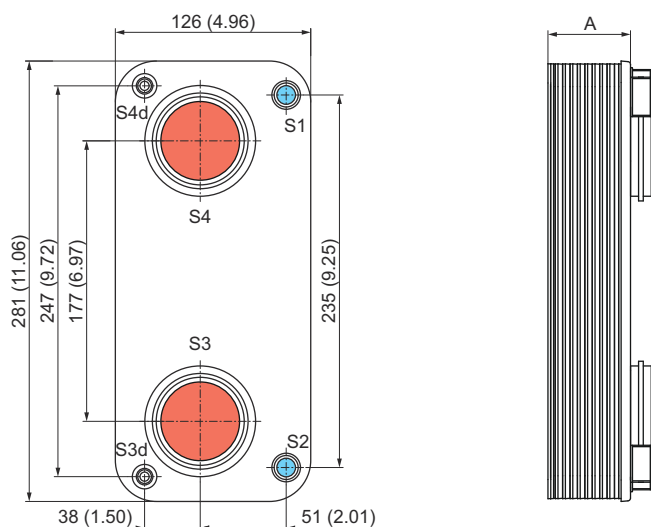
² Excluding connections.

Standard data

Volume per channel, litres (gal)	AM (S1-S2): 0.094 (0.0248) AM (S3-S4): 0.154 (0.0407)
Max. particle size, mm (inch)	1 (0.039)
Flow direction	Parallel
Min. number of plates	6
Max. number of plates	80

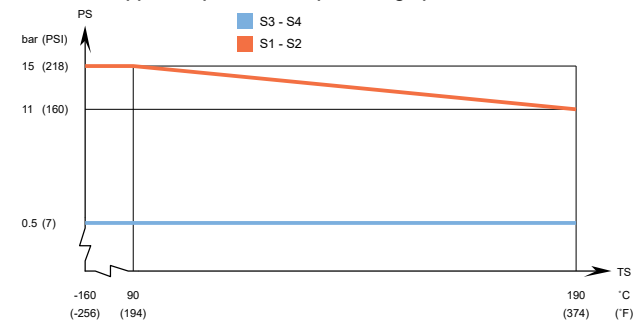
Dimensional drawing

Measurements in mm (inches).

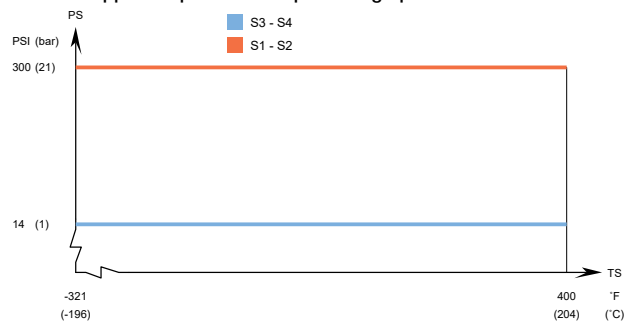


Design pressure and temperature

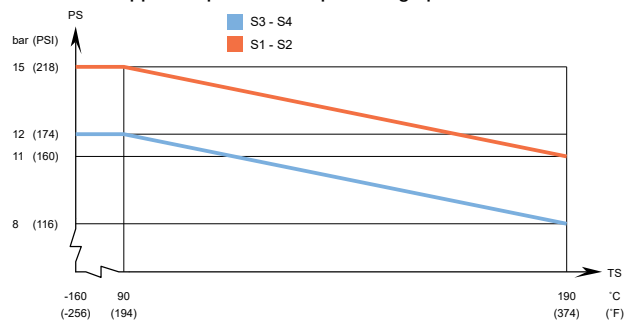
GL50 - PED approved pressure/temperature graph



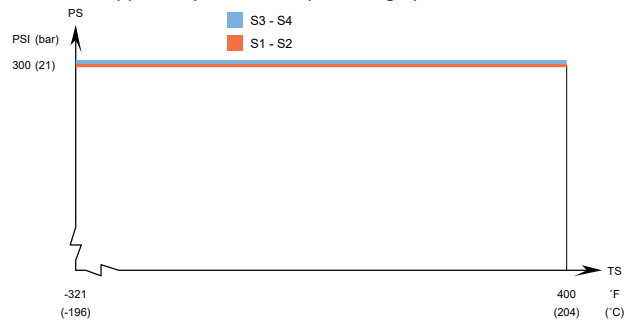
GL50 - UL approved pressure/temperature graph



GLH50 - PED approved pressure/temperature graph



GLH50 - UL approved pressure/temperature graph



Designed for full vacuum.

Max design temperature refers to the temperature of the plate material. Gas inlet temperatures can exceed the design temperature provided that there is sufficient coolant temperature and flow.

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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200001676-6-EN-GB

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