# Alfa Laval AlfaNova GL50

## Gas-to-liquid plate heat exchanger in 100% stainless steel

### Introduction

The ultra-compact Alfa Laval AlfaNova GL product line ensures maximum heat transfer and efficiency in various asymmetric gas applications. AlfaNova GL fusion-bonded plate heat exchangers are made of 100% stainless steel. They are suitable for applications which place high demand on cleanliness or where copper and nickel contamination is unaccepted.

### 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
- Copper free

### Branded Features

| | |
|---|---|
| **AlfaNova** | 100% stainless steel |

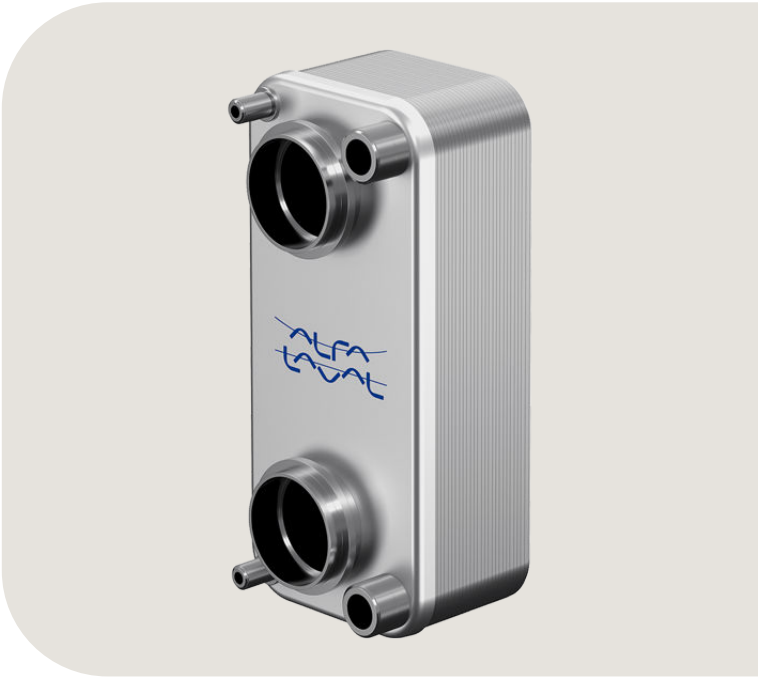
### Design

The AlfaFusion filler 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 fusion—bonded 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), given suitable coolant and operational conditions.

## Technical Data

**Standard materials**

| | |
|---|---|
| Cover plate | Stainless steel |
| Connections | Stainless steel |
| Plates | Stainless steel |
| AlfaFusion filler | Stainless steel |

**Dimensions and weight** [1]

| | |
|---|---|
| A measure (mm) | 4 + (4.09 * n) |
| A measure (inches) | 0.16 + (0.16 * n) |
| Weight (kg)[2] | 0.95 + (0.13 * n) |
| Weight (lb)[2] | 2.09 + (0.29 * n) |

[1] n = number of plates.

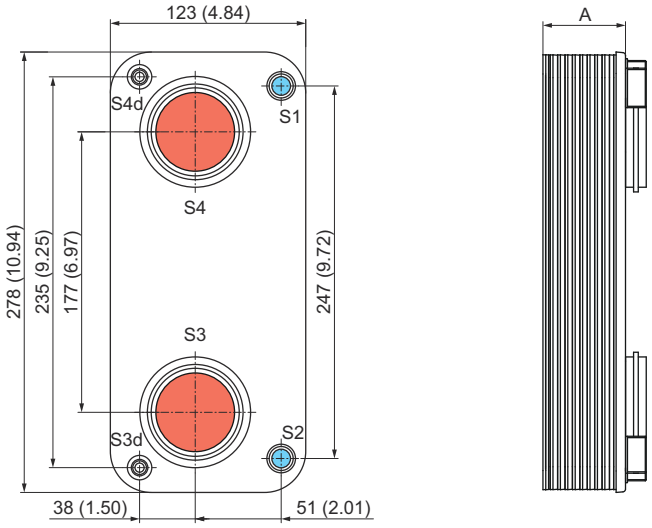
[2] Excluding connections.

**Standard data**

| | |
|---|---|
| Volume per channel, litres (gal) | AM (S1–S2): 0.094 (0.0248)<br>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 |

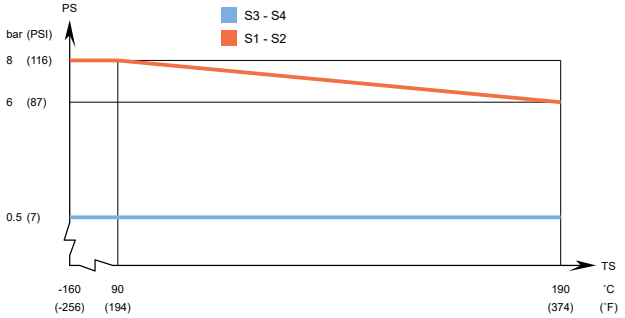
## Dimensional drawing

Measurements in mm (inches).




## Design pressure and temperature

**AlfaNova GL50 - PED 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.







**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