



Alfa Laval AlfaNova 18

Fusion-bonded plate heat exchanger in 100% stainless steel

Introduction

Alfa Laval AlfaNova fusion-bonded plate heat exchangers are made of 100% stainless steel. They are suitable for applications which place high demand on cleanliness, applications where aggressive media like ammonia are used or where copper and nickel contamination is unacceptable.

AlfaNova provides efficient heat transfer with a small footprint, has an extreme pressure fatigue resistance and covers high temperatures, up to 550°C/1022°F.

Applications

Suitable for a wide range of applications, such as:

- HVAC heating and cooling
- Refrigeration
- Oil cooling
- Industrial heating and cooling
- Process heating and 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
- Copper free

Design

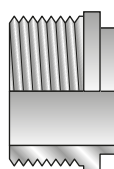
The AlfaFusion filler material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.

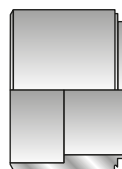
Asymmetric channels provide optimal efficiency in the most compact design. This results in low refrigerant charge or lower pressure drop on the water or brine side, reducing the CO₂ footprint.



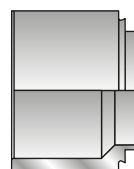
Examples of connections



External thread



Soldering



Welding

Technical Data

Standard materials	
Cover plates	Stainless steel
Connections	Stainless steel
Plates	Stainless steel
AlfaFusion filler	Stainless steel

Dimensions and weight ¹

A measure (mm)	$9.3 + (2.1 * n)$
A measure (inches)	$0.37 + (0.08 * n)$
Weight (kg) ²	$0.441 + (0.07 * n)$
Weight (lb) ²	$0.97 + (0.15 * n)$

¹ n = number of plates

² Excluding connections

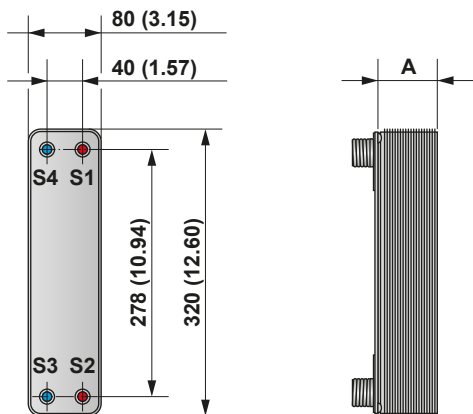
Standard data

Volume per channel, litres (gal)	0.0385 (0.0102)
Max. particle size, mm (inch)	1 (0.039)
Max. flowrate ¹ m ³ /h (gpm)	4.1 (18.1)
Flow directions	Parallel
Min. number of plates	4
Max. number of plates	60

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

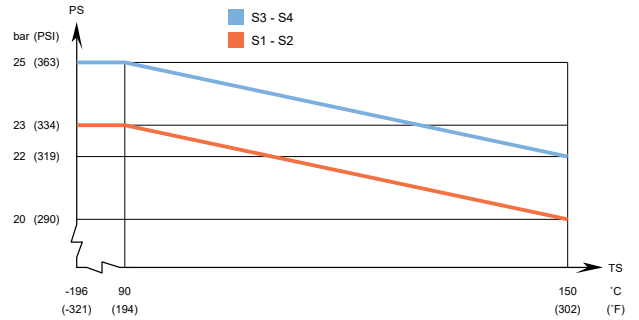
Dimensional Drawing

Measurements in mm (inches)



Design pressure and temperature

AlfaNova 18 - PED approved 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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