

# Alfa Laval AXP 27 AN

## Fusion-bonded plate heat exchanger for extreme high-pressure applications

### Introduction

Alfa Laval AXP AN is specially designed for high-pressure applications with requirements for 100% stainless steel, for example, high pressure ammonia systems or compressor cooling.

### Applications

Designed for applications requiring 100% stainless steel.

Because of their high-pressure performance, they are particularly well-suited to CO<sub>2</sub> applications, such as transcritical gas cooling.

### Benefits

- Tolerates extremely high operating pressures
- 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

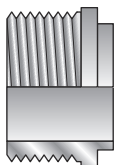
### Design

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.

AXP AN are fusion-bonded plate heat exchangers with thin external frames in carbon steel that are able to withstand extremely high operating pressures.

Always delivered with lifting lug for easy handling.

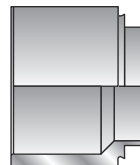
### Examples of connections



External thread



Soldering



Welding



## Technical Data

### Standard materials

Cover plates	Stainless steel
Connections	Stainless steel
Plates	Stainless steel
AlfaFusion filler	Stainless steel
External frame	Carbon steel, Zinc electroplated

### Dimensions and weight <sup>1</sup>

A measure (mm)	$15 + (2.42 * n)$
A measure (inches)	$0.59 + (0.10 * n)$
Weight (kg) <sup>2</sup>	$21 + (0.13 * n)$
Weight (lb) <sup>2</sup>	$46.30 + (0.29 * n)$

<sup>1</sup> n = number of plates

<sup>2</sup> Excluding connections

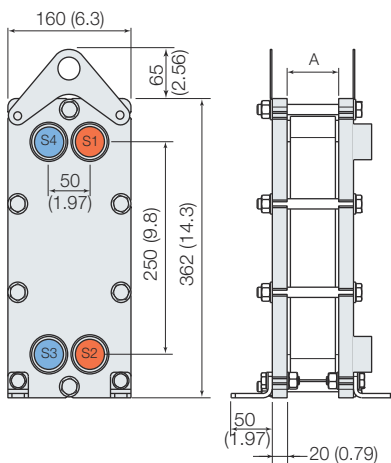
### Standard data

Volume per channel, litres (gal)	0.05 (0.0132)
Max. particle size, mm (inch)	1.2 (0.047)
Max. flowrate <sup>1</sup> m <sup>3</sup> /h (gpm)	14 (61.6)
Flow directions	Parallel
Min. number of plates	6
Max. number of plates	100

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

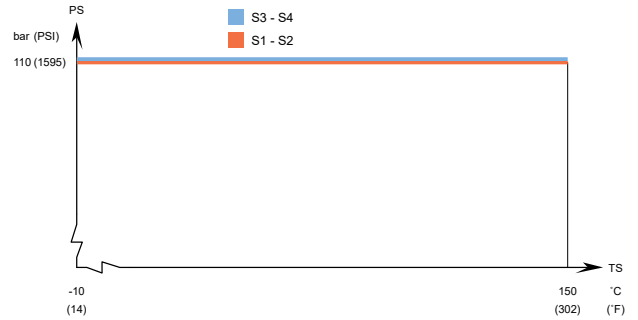
## Dimensional Drawing

Measurements in mm (inches)



## Design pressure and temperature

### AXP27 AN - 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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