

Alfa Laval AXP14

Brazed plate heat exchanger for extreme high-pressure requirements

Alfa Laval AXP is specifically designed to work in air conditioning and other refrigeration applications, where the pressure requirements are extremely high.

Applications

Because of their high-pressure performance, they are particularly well-suited to CO_2 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

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.

Examples of connections







Soldering



Welding



Technical Data

Standard materials

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

Dimensions and weight¹

A measure (mm)	8 + (1.15 * n)
A measure (inches)	0.31 + (0.05 * n)
Weight (kg) ²	0.32 + (0.04 * n)
Weight (lb) ²	0.71 + (0.09 * n)

- 1. n = number of plates
- 2. Excluding connections

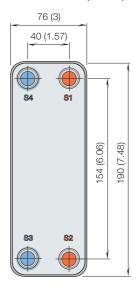
Standard data

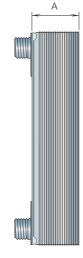
Volume per channel, litres (gal)	0.010 (0.0026)
Max. particle size, mm (inch)	0.4 (0.016)
Max. flowrate ¹ m ³ /h (gpm)	2.8 (12.3)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	150

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

Dimensional drawing

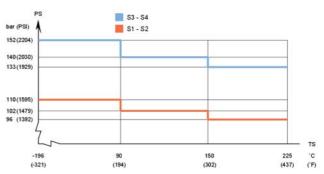
Measurements in mm (inches)



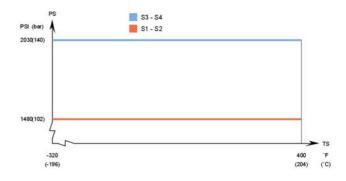


Design pressure and temperature

AXP14 - PED approval pressure/temperature graph (90 and 150)



AXP14 - UL 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.