Alfa Laval AXP112

Brazed plate heat exchanger for extreme high-pressure requirements

Introduction

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

Branded Features

IceSafe	Controlled, non-destructive freezing
PressureSecure	Unparalleled strength for demanding duties
REFuture	A future-proof investment for tomorrow's refrigerants
ValuePlus	Total support – with value-adding options to fit your needs

Design

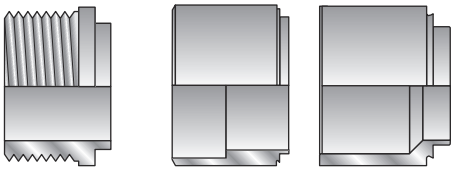
The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service life.

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

The unit can be supplied with a refrigerant distribution system for optimal evaporator performance.

Always delivered with lifting lugs for easy handling.

Examples of connections



External thread | Soldering | Welding

Technical Data

Standard materials	
Cover plates	Stainless steel
Connections	Stainless steel
Plates	Stainless steel
Brazing filler	Copper
External frame	Carbon steel, Zinc electroplated

Dimensions and weight [1]	
A measure (mm)	23 + (2.07 * n)
A measure (inches)	0.91 + (0.08 * n)
Weight (kg) [2]	105 + (0.35 * n)
Weight (lb) [2]	231.48 + (0.77 * n)

[1] n = number of plates

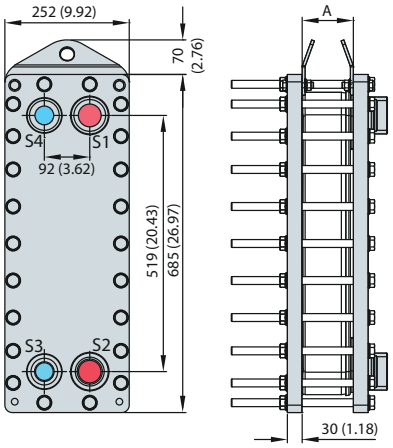
[2] Excluding connections

Standard data	
Volume per channel, litres (gal)	0.18 (0.0476)
Max. particle size, mm (inch)	1 (0.039)
Max. flowrate[1] m3/h (gpm)	51 (224.5)
Flow direction	Parallel
Min. number of plates	10
Max. number of plates	300

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

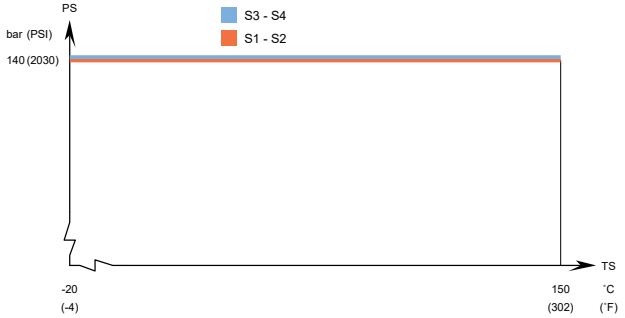
Dimensional drawing

Measurements in mm (inches)



Design pressure and temperature

AXP112 – PED 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.

Marine approvals

AXPM112 can be delivered with marine classification certificate (ABS, BV, CCS, ClassNK, KR, LR, RINA, RMRS)

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