

Alfa Laval AXP 52 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 CO₂ 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

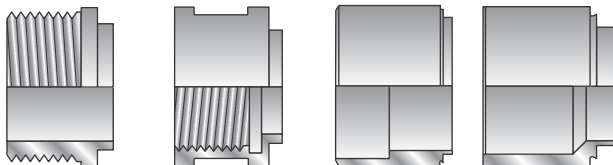
Design

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

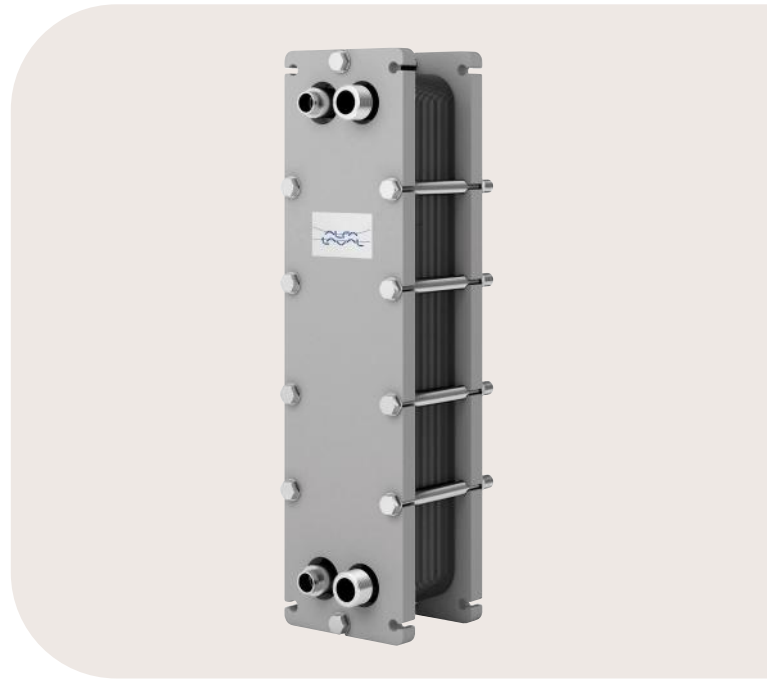


External thread

Internal 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 ¹

A measure (mm)	$15 + (2.48 * n)$
A measure (inches)	$0.59 + (0.10 * n)$
Weight (kg) ²	$38 + (0.22 * n)$
Weight (lb) ²	$83.77 + (0.49 * n)$

¹ n = number of plates

² Excluding connections

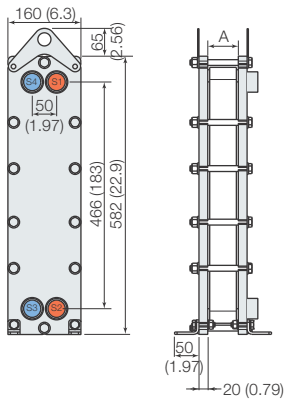
Standard data

Volume per channel, litres (gal)	0.095 (0.0251)
Max. particle size, mm (inch)	1.2 (0.047)
Max. flowrate ¹ m ³ /h (gpm)	14 (61.6)
Flow directions	Parallel
Min. number of plates	6
Max. number of plates	150

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

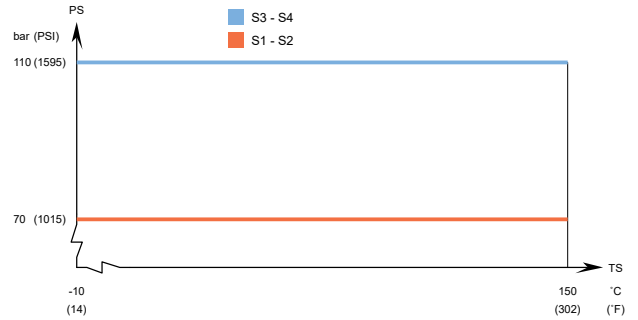
Dimensional Drawing

Measurements in mm (inches)



Design pressure and temperature

AXP52 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.

This document and its contents are subject to copyrights and other intellectual property rights owned by Alfa Laval Corporate AB. No part of this document may be copied, re-produced or transmitted in any form or by any means, or for any purpose, without Alfa Laval Corporate AB's prior express written permission. Information and services provided in this document are made as a benefit and service to the user, and no representations or warranties are made about the accuracy or suitability of this information and these services for any purpose. All rights are reserved.