



Alfa Laval SE43

Brazed plate heat exchanger for air conditioning and refrigeration

Introduction

Alfa Laval SE brazed plate heat exchangers provide efficient heat transfer with a small footprint. They are specifically designed to work as evaporators and condensers in applications such as chillers and heat pumps.

The Alfa Laval SE product line is thermally optimized for propane. It offers design and technical features specifically with safety in mind.

Applications

Benefits

- 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



DynaStatic™ Flexible refrigerant distribution



FlexFlow™ Superior thermal performance



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.

Asymmetric channels provide optimal efficiency in the most compact design. This results in low refrigerant charge, which



is specifically important when using propane, and lower pressure drop on the water or brine side, reducing the CO₂ footprint.

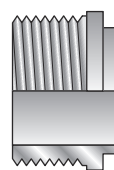
The product provides high performance, such as high evaporation temperature and low condensing temperature, which over its life time results in reduced environmental impact and lower operational cost

The integrated distribution system ensures an even distribution of the refrigerant throughout the plate package.

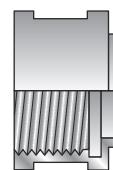
Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.

Optimized for propane.

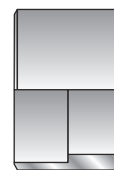
Examples of connections



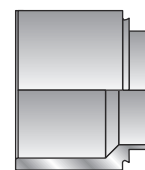
External thread



Internal thread



Soldering



Welding

Technical Data

Standard materials

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

Dimensions and weight ¹

A-measurement (mm)	12.5 + (1.22 * n)
A-measurement (inches)	0.49 + (0.05 * n)
Weight (kg) ²	1.4 + (0.09 * n)
Weight (lb) ²	3.09 + (0.20 * n)

¹ n = number of plates

² Excluding connections

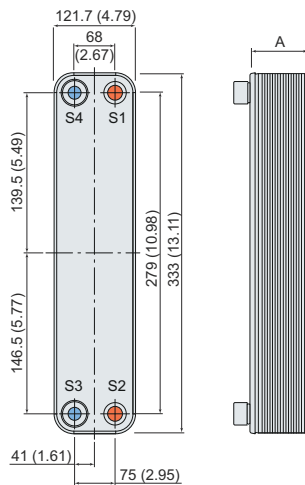
Standard data

Volume per channel, litres (gal)	(S1-S2) 0.0418 (0.0110) (S3-S4) 0.0263 (0.0069)
Max. particle size, mm (inch)	0.5 (0.020)
Max. flowrate ¹ m ³ /h (gpm)	8.8 (38.7)
Flow direction	Parallel
Min. number of plates	4
Max. number of plates	120

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

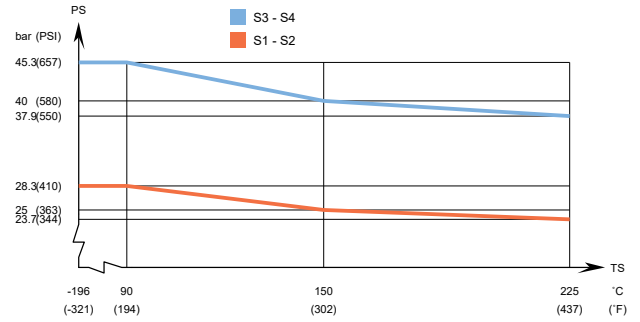
Dimensional drawing

Measurements in mm (inches)



Design pressure and temperature

SE43 – 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.

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