

# Alfa Laval TS45

## Gasketed plate heat exchanger for a wide range of applications

### Introduction

Alfa Laval Industrial line is a wide product range that is used in virtually all types of industry.

Designed for high throughput, this model delivers excellent thermal performance. A large selection of plate and gasket types is available.

### Applications

- Biotech and Pharmaceutical
- Chemicals
- Energy and Utilities
- Food, Dairy and Beverages
- Home and Personal care
- HVAC and Refrigeration
- Machinery and Manufacturing
- Marine and Transportation
- Mining, Minerals and Pigments
- Pulp and Paper
- Semiconductor and Electronics
- Water and Waste treatment

### Benefits

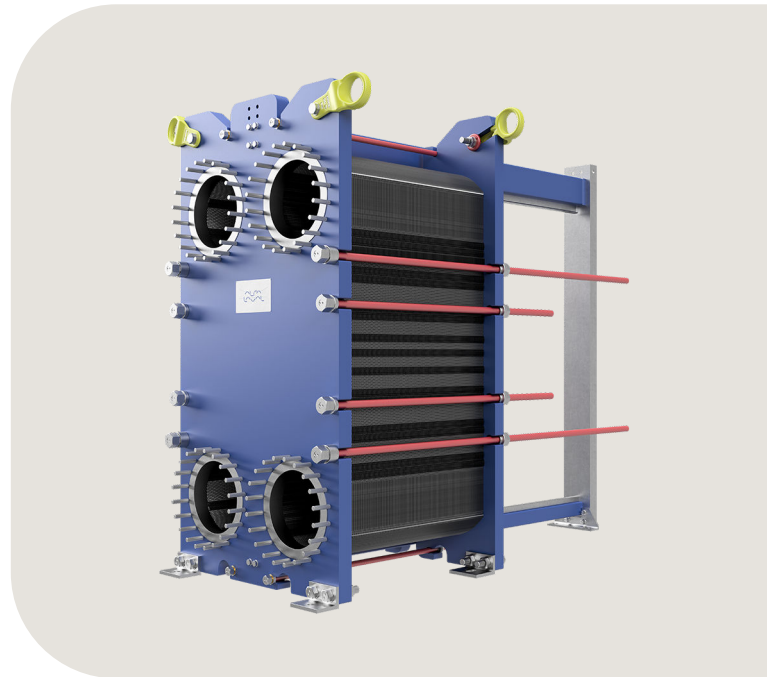
- High energy efficiency – low operating cost
- Flexible configuration – heat transfer area can be modified
- Easy to install – compact design
- High serviceability – easy to open for inspection and cleaning and easy to clean by CIP
- Access to Alfa Laval's global service network

### Features

Every detail is carefully designed to ensure optimal performance, maximum uptime and easy maintenance. Selection of available features, depending on configuration some features may not be applicable:



- Five-point alignment
- T-bar roller
- CurveFlow™ distribution area
- ClipGrip™ gasket attachment
- Offset gasket groove
- OmegaPort™ noncircular port holes
- Leak chamber
- FlexFlow™ plate design



- Bearing boxes
- Fixed bolt head
- Key hole bolt opening
- Lifting lug
- Lining
- Lock washer
- Tightening bolt cover

### Alfa Laval 360° Service Portfolio

Our extensive service offering ensure top performance from your Alfa Laval equipment throughout its life cycle. The Alfa Laval 360 Service Portfolio include installation services, cleaning and repair as well as spare parts, technical documentation and trouble shooting. We also offer replacement, retrofit, integrity testing, monitoring and much more.

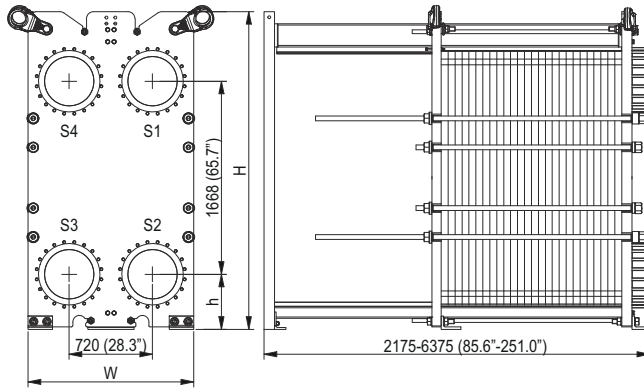
For information about our complete service offering and how to contact us - please visit [www.alfalaval.com/service](http://www.alfalaval.com/service).

## General remarks for technical information

- The global offering presented in this leaflet may not be available for all regions
- All combinations may not be configurable

## Dimensional drawing

Measurements mm (inches)



Frame type	H	W	h
FD	2745 (108.1")	1430 (56.3")	476 (18.7")
FG	2745 (108.1")	1430 (56.3")	476 (18.7")
FM	2745 (108.1")	1430 (56.3")	476 (18.7")

## Technical data

Plates	Type	Free channel, mm (inches)
TS45-M	Single plate	3.95 (0.155)

### Materials

Heat transfer plates	304, 316, 254, Ti
Field gaskets	NBR, EPDM, FKM
Flange connections	Carbon steel Metal lined: stainless steel, Alloy 254, titanium
Frame and pressure plate	Carbon steel, epoxy painted

Other materials may be available on request

## Operational data

Frame type	Max. design pressure (barg/psig)	Max. design temperature (°C/°F)
FM, pvcALS	11.0/159	200/392
FG, pvcALS	18.0/261	200/392
FG, ASME	10.4/151	250/482
FG, PED	18.5/268	200/392
FD, pvcALS	24.0/348	200/392
FD, ASME	21.4/310	250/482

Extended pressure and temperature rating may be available on request.

## Flange connections

Frame type	Connection standard
FM, pvcALS	EN 1092-1 DN450 PN10
	EN 1092-1 DN500 PN10
	ASME B16.5 Class 150 NPS 18 JIS B2220 10K 450A
FG, pvcALS	EN 1092-1 DN450 PN16
	ASME B16.5 Class 150 NPS 18 JIS B2220 16K 450A
FG, ASME	ASME B16.5 Class 150 NPS 18
FG, PED	EN 1092-1 DN450 PN16
	ASME B16.5 Class 150 NPS 18
FD, pvcALS	EN 1092-1 DN450 PN25
	ASME B16.5 Class 150 NPS 18
	ASME B16.5 Class 300 NPS 18 JIS B2220 20K 450A
FD, ASME	ASME B16.5 Class 300 NPS 18

Standard EN1092-1 corresponds to GOST 12815-80 and GB/T 9115.

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### How to contact Alfa Laval

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