Alfa Laval TS50

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.

The relatively short plate makes this model suitable for duties with short temperature programs and when a low pressure drop is appreciated. A large range of plate and gasket types is available.

Applications

- Biotech and Pharmaceutical
- Chemicals
- Energy and Utilities
- Food 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
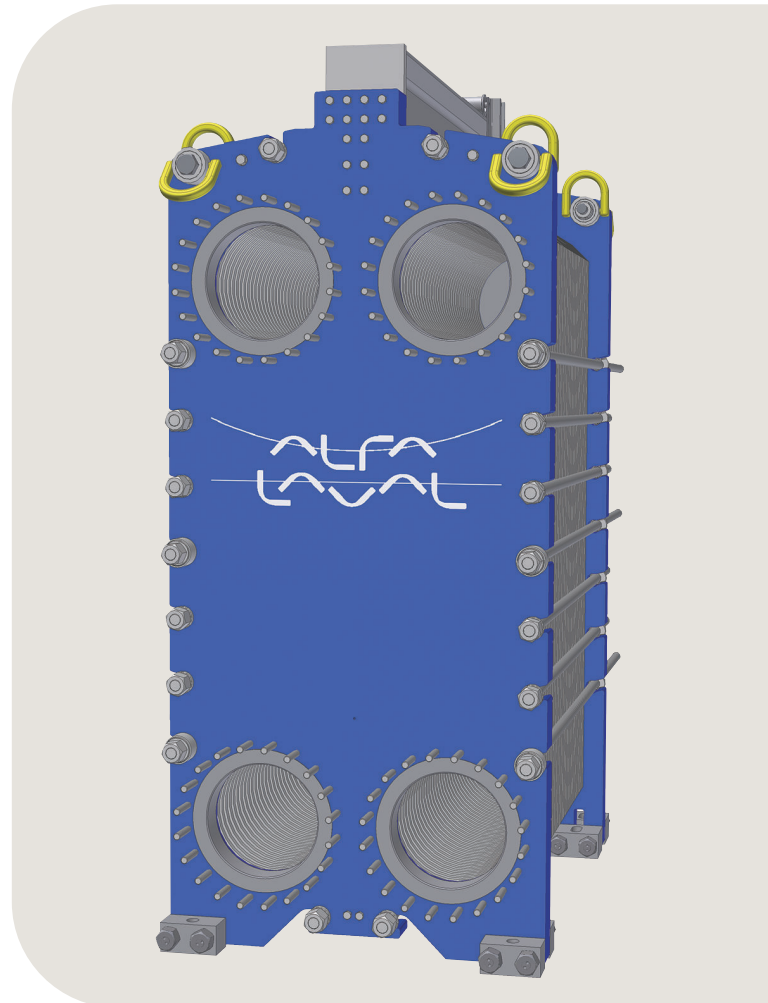- Steel
- Water and Waste treatment

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
- Reinforced hanger
- Chocolate pattern distribution area
- Glued gasket
- Base-ad gasket
- Leak chamber

- Bearing boxes
- Fixed bolt head
- Key hole bolt opening
- Lifting lug
- Lining
- Lock washer
- Pressure plate roller
- 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, monitoring and much more.
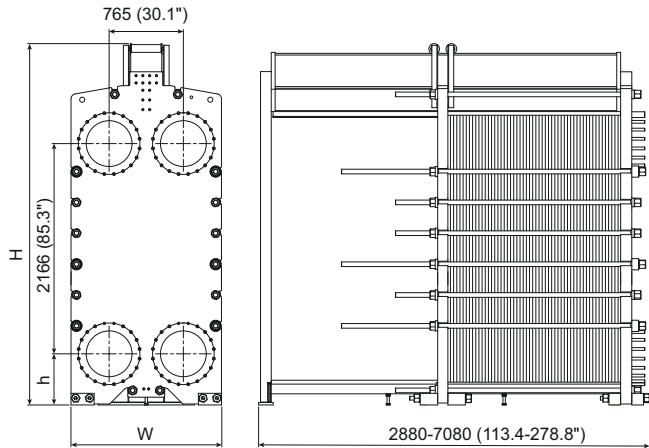
For information about our complete service offering and how to contact us - please visit www.alfalaval.com/service.

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)

Type	H	W	h
TS50-FM	3433 (135.2")	1550 (61.0")	467 (18.4")
TS50-FG	3723 (146.6")	1550 (61.0")	467 (18.4")
TS50-FD	3723 (146.6")	1550 (61.0")	467 (18.4")

The number of tightening bolts may vary depending on pressure rating.

Technical data

Plates	Type	Free channel, mm (inches)
TS50-M	Single plate	3.9 (0.15)

Materials	
Heat transfer plates	316/316L
	Ti
Field gaskets	NBR, EPDM
Flange connections	Carbon steel
	Metal lined: stainless steel, titanium
Frame and pressure plate	Carbon steel, epoxy painted

Other materials may be available on request

Operational data

Frame, PV-code	Max. design pressure (barg/psig)	Max. design temperature (°C/°F)
FM, pvcALS	10.0/145	150/302
FG, ASME	10.3/150	177/350
FG, PED	16.0/232	180/356
FD, ASME	20.7/300	177/350
FD, PED	25.0/362	180/356

Extended pressure and temperature rating may be available on request.

Flange connections

Frame model	Connection standard
FM, pvcALS	EN 1092-1 DN500 PN10
	ASME B16.5 Class 150 NPS 20
FG, ASME	ASME B16.5 Class150 NPS 20
FG, PED	ASME B16.5 Class 300 NPS 20
FD, ASME	ASME B16.5 Class 150 NPS 20
	ASME B16.5 Class 300 NPS 20
FDc, ASME	
FD, PED	EN 1092-1 DN500 PN25
	ASME B16.5 Class 300 NPS 20

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

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