

# 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<sup>TM</sup> distribution area
- ClipGrip<sup>TM</sup> gasket attachment
- Offset gasket groove
- OmegaPort<sup>TM</sup> noncircular port holes
- Leak chamber
- FlexFlow<sup>TM</sup> 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.

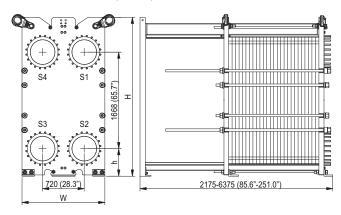
For information about our complete service offering and how to contact us - please visit www.alfalaval.com/service.

### 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	Н	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	lype	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, HeatSeal
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	Max. design
	barg (psig)	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

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