



# Alfa Laval T45

## Gasketed plate-and-frame heat exchanger for a wide range of applications

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 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:

- 5-point alignment system
- Reinforced hanger
- Chocolate pattern distribution area
- Glued gasket
- Base-ad gasket
- Leak chamber
- Bearing box
- Fixed bolt head
- Key hole bolt opening
- Lifting lug
- Lining
- Lock washer
- Pressure plate roller
- Swing feet
- Tightening bolt cover



### Extending performance

#### with Alfa Laval 360° Service Portfolio

Our extensive services ensure top performance from your Alfa Laval equipment throughout its life cycle. The availability of parts and our team's commitment and expertise bring you peace of mind.

#### Start-up

- Installation
- Installation Supervision
- Commissioning

#### Maintenance

- Cleaning Services
- Reconditioning
- Repair
- Service Tools
- Spare Parts

#### Support

- Exclusive Stock
- Technical Documentation
- Telephone Support
- Training
- Troubleshooting

#### Improvements

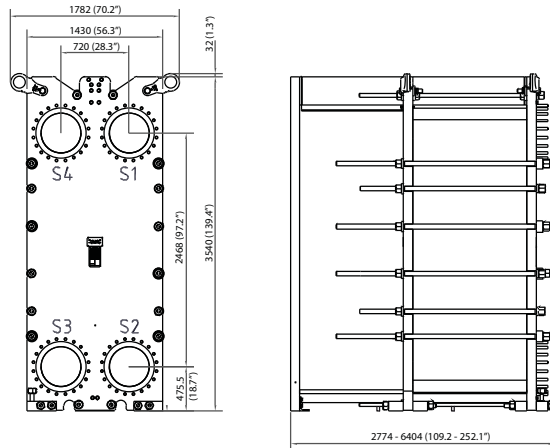
- Equipment Upgrades
- Redesign
- Replacement and Retrofit

#### Monitoring

- Condition Audit
- Performance Audit

## Dimensional drawing

Measurements mm (inches)



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

## Technical data

### Plates

| Name  | Type         | Free channel, mm (inches) |
|-------|--------------|---------------------------|
| T45-M | Single plate | 4.0 (0.16)                |

### Materials

|                          |  |
|--------------------------|--|
| Heat transfer plates     | 316/316L, 254<br>Ti  |
| Field gaskets            | NBR, EPDM  |
| Flange connections       | Carbon steel<br>Metal lined: stainless steel Alloy 316,<br>Alloy 254, titanium |
| Frame and pressure plate | Carbon steel, epoxy painted  |

Other materials may be available on request.

All option combinations may not be configurable.

## Operational data

| Frame, PV-code | Max. design pressure (barg/psig) | Max. design temperature (°C/°F) |
|----------------|----------------------------------|---------------------------------|
| FM, pvcALS     | 10.0/145                         | 180/356                         |
| FG, pvcALS     | 16.0/232                         | 150/302                         |
| FG, ASME       | 10.3/150                         | 250/482                         |
| FG, PED        | 16.0/232                         | 150/302                         |
| FD, ASME       | 17.2/250                         | 250/482                         |

Extended pressure and temperature rating may be available on request.

## Flange connections

|            |   |
|------------|---|
| FM, pvcALS | EN 1092-1 DN450 PN10<br>ASME B16.5 Class 150 NPS 18<br>JIS B2220 10K 450A |
| FG, pvcALS | EN 1092-1 DN450 PN16<br>ASME B16.5 Class 150 NPS 18<br>JIS B2220 16K 450A |
| FG, ASME   | ASME B16.5 Class 150 NPS 18   |
| FG, PED    | EN 1092-1 DN450 PN16<br>ASME B16.5 Class 150 NPS 18                       |
| FD, ASME   | ASME B16.5 Class 300 NPS 18   |

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

### How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit [www.alfalaval.com](http://www.alfalaval.com) to access the information direct.