



# Alfa Laval M3

# 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.

Suitable for a wide range applications, this model is available with a large selection of plate and gasket types.

In addition to normal single plate configuration, this model is also available with double wall plates. Double wall plates are used as an extra precaution to avoid intermixing of fluids.

## **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

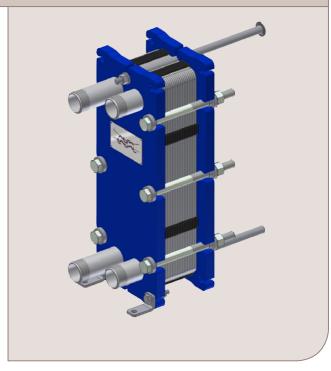
#### **Benefits**

- 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:

- Glued gasket
- Clip-on gasket
- Leak chamber
- Fixed bolt head
- Key hole bolt opening
- Lifting lug
- Lining
- Lock washer
- 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

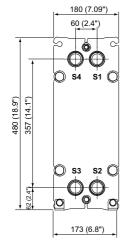
- Equipment Upgrades
  - Redesign
- Replacement and Retrofit

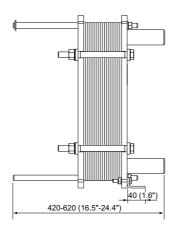
## Monitoring

- Condition Audit
- Performance Audit

#### Dimensional drawing

Measurements mm (inches)





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

### Technical data

## **Plates**

| Name | Туре                             | Free channel, mm (inches) |
|------|----------------------------------|---------------------------|
| M3   | Single plate                     | 2.4 (0.095)               |
| M3-D | Double wall plate                | 2.4 (0.095)               |
| M3-G | Gemini (hygienic)<br>Double wall | 2.4 (0.095)               |
| М3-Х | Single plate<br>Diagonal flow    | 2.4 (0.095)               |

### Materials

| Heat transfer plates     | 316/316L                    |  |
|--------------------------|-----------------------------|--|
|                          | C-276                       |  |
|                          | Ti, TiPd                    |  |
| Field gaskets            | NBR, EPDM, FKM              |  |
| Flange connections       | Carbon steel                |  |
| Pipe connections         | Stainless steel, 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,<br>PV-code | Max. design<br>pressure<br>(barg/psig) | Max. design temperature (°C/°F) |
|-------------------|--|---------------------------------|
| FG, ASME          | 10.3/150                               | 177/350                         |
| FG, PED           | 16.0/232                               | 180/356                         |

Extended pressure and temperature rating may be available on request.

## Pipe connections

| Threaded port              | ISO 228 - G 1 1/4   |
|----------------------------|---------------------|
| Internal parallel threaded | ISO 228 - G 1       |
| External parallel threaded | ISO 228 - G 1 1/4 B |
| External tapered threaded  | ISO 7 - R 1 1/4     |
|                            | 1 1/4 - 11.5 NPT    |

Other connection types may be available on request.