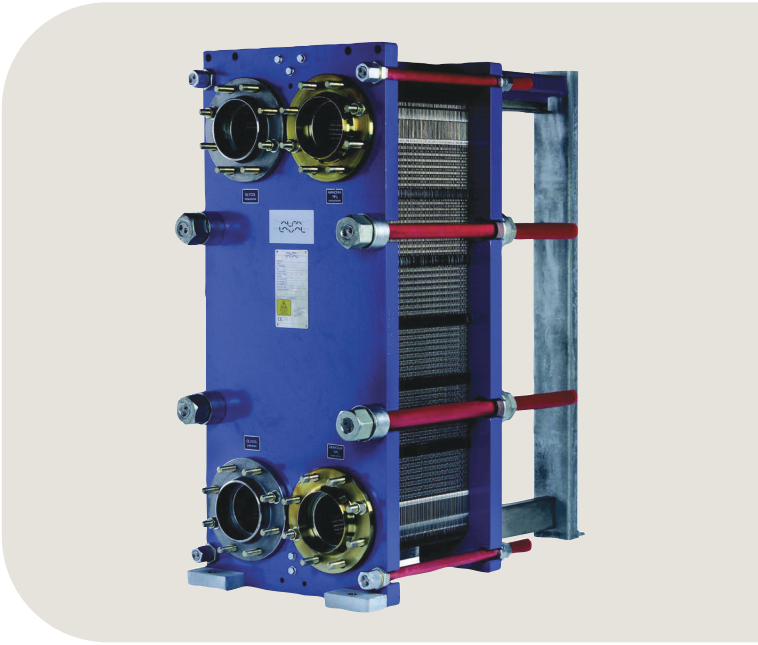
Alfa Laval Semi-welded MK15

Gasketed plate heat exchanger for demanding applications

Introduction

Alfa Laval Industrial semi-welded line is used when gaskets are not suitable for one of the process media. The semi-welded line can also withstand a higher design pressure compared to fully gasketed plate-and-frame heat exchangers.

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

- Chemicals
- Energy and Utilities
- Food, Dairy and Beverages
- HVAC and Refrigeration
- Marine and Transportation
- Mining, Minerals and Pigments
- Pulp and Paper
- 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
- Chocolate pattern distribution area
- Clip-on gasket
- Leak chamber
- Compact frame
- Bearing boxes
- Fixed bolt head
- Key hole bolt opening
- Lifting lug
- Lining
- Lock washer
- Pressure plate roller
- Tightening bolt cover
- Optimized Alfa Laval drain connection

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.

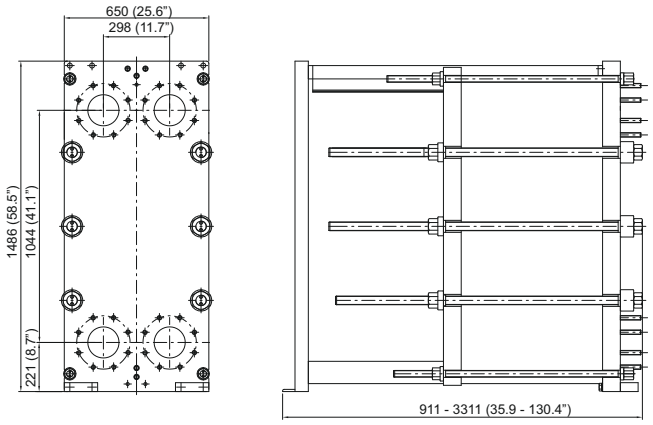
For information about our complete service offering and how to contact us - please visit www.alfalaval.com/service.

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)



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

Technical data

Plates	Type	Free channel, mm (inches)
MK15-BW	Semi-welded	2.5 (0.098)

Materials	
Heat transfer plates	304/304L, 316/316L, 254 SMO C-276, C-2000, D-205 Ti
Field gaskets	NBR, EPDM, CR
Ring gaskets	NBR, EPDM, FKM, PTFE, CR, HeatSeal
Flange connections	Carbon steel Metal lined: stainless steel, Alloy C-276, 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)
FG, pvcALS	15.5/225	200/392
FG, ASME	10.3/150	180/356
FG, PED	16.0/232	180/356
FGR, PED	16.0/232	180/356
FD, pvcALS	25.0/362	180/356
FD, ASME	20.7/300	180/356
FD, PED	25.0/362	180/356
FDR, PED	30.0/435	180/356
FTc, PED		
FT, ALS		
FT, ASME	41.4/600	180/356

Extended pressure and temperature rating may be available on request.

Flange connections

Frame type	Connection standard
FG, pvcALS	ASME B16.5 Class 150 NPS 6 JIS B2220 16K 150A
FG, Marine [1]	
FG, ASME	ASME B16.5 Class 150 NPS 6
FG, PED	EN 1092-1 DN150 PN16 EN 1092-1 DN150 PN25 ASME B16.5 Class 150 NPS 6
FGR, PED	EN 1092-1 DN150 PN16 EN 1092-1 DN150 PN25 ASME B16.5 Class 150 NPS 6
FD, pvcALS	EN 1092-1 DN150 PN25 ASME B16.5 Class 300 NPS 6 JIS B2220 20K 150A
FD, ASME	ASME B16.5 Class 300 NPS 6
FDc, ASME	
FD, PED	EN 1092-1 DN150 PN25 ASME B16.5 Class 300 NPS 6
FDR, PED	EN 1092-1 DN150 PN25 ASME B16.5 Class 300 NPS 6
FT, ALS	
FT, PED	EN 1092-1 DN150 PN40 ASME B16.5 Class 300 NPS 6
FT, ASME	ASME B16.5 Class 300 NPS 6

[1] Marine includes the standards: ABS, BV, CCS, DNV GL, ClassNK, KR, LR, RINA, and RMRS.

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