For Your Utility Heating and Cooling

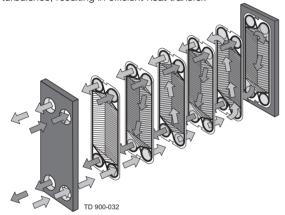
M-Series Plate Heat Exchangers

Applications

For your utility heating and cooling duties the industrial plate heat exchangers of Alfa Laval can be used . These are detailed in the following product sheets.

Working principle

Channels are formed between the plates and the corner ports are arranged so that the two media flow through alternate channels. The heat is transferred through the plate between the channels, and complete counter-current flow is created for highest possible efficiency. The corrugation of the plates provides the passage between the plates, supports each plate against the adjacent one and enhances the turbulence, resulting in efficient heat transfer.



Flow principle of an M3,M6, M10 and M15 plate heat exchanger

Standard Materials

Frame plate

Mild steel, Epoxy painted

Nozzles

Carbon steel Pipe: Alloy 316, Titanium

Plates

Stainless steel: AISI 316 or Titanium

Gaskets

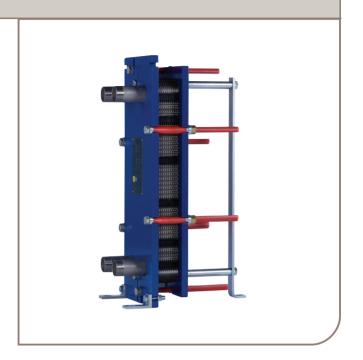
M3 Nitrile, EPDM, HeatSealF™ M3D Nitrile, EPDM

Technical Data

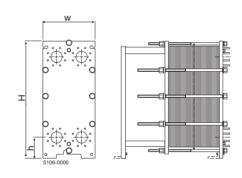
Pressure vessel codes, PED, ASME, pvcALS™ Mechanical design pressure (g) / temperature

	107	•	
FM		pvcALS™	1.0 MPa / 160°C
FG		PED	1.6 MPa / 180°C *)
FG		ASME	150 psig / 320°F
FG		pvcALS™	1.6 MPa / 180°C
FD		PED, pvcALS™	2.5 MPa / 160°C
FD		ASME	300 psig / 320°F

*) Frame FG also approved for 1.2 MPa/200°C to allow use in steam systems without safety valves.



Dimensions



Type	Н	W	h
M6	[mm]	[mm]	[mm]
M6-FM	920	320	140
M6-FG	920	320	140
M6-FD	940	330	150
M10			
M10-FM	1,084	470	215
M10-FG	1,084	470	215
M10-FD	981	470	131
M10-FD ASME	1,084	470	215
M15			
M15-FL	1,815	610	275
M15-FM	max. 1,941	610	275
M15-FG	max. 1,941	650	275
M15-FD	max. 2,036	650	370

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