

Technical specifications

Fusion bonded plate heat exchanger (FHE) data and dimensions

	AlfaNova 14	AlfaNova 27	AlfaNova 52	AlfaNova 76	AlfaNova 400
Channel type	H	H, L	H, L	H, A, E	H, L
Max./min. design temperature (°C)	175/-160	175/-160	175/-160	175/-160	175/-160
Max. design pressure S3-S4/S1-S2 (bar *)	21/21	27/22	27/22	27/22	17/17
Volume/channel (litres)	0.02	0.05	0.095	0.25 ¹ /0.25	0.74
Max. flowrate (m ³ /h **)	4.5	7.5	14.5	34	170
Height, a (mm)	207	310	526	618	990
Width, b (mm)	77	111	111	191	390
Vertical connection distance, c (mm)	172	250	466	519	825
Horizontal connection distance, d (mm)	42	50	50	92	225
Plate pack length, A (mm)	n x 2.35 + 8	(n x 2.4) + 11	(n x 2.85) + 11	(n x 2.85) + 11 ³	(n x 2.65) + 14
Weight empty (kg)	(n x 0.046) + 0.74	(n x 0.13) + 1.5	(n x 0.23) + 2.2	(n x 0.47) + 11 ^{***}	(n x 1.5) + 44 ^{***}
Standard connection, external thread (in)	3/4"	1 1/4"/1"	1 1/4"/1"	2"	4"
Plate material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Connection material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Bounding material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Max. number of plates	50	100	150	150	270
Radiator heating, capacity (kW) ²	90	400	500	1200	3300
Tap water heating, capacity (kW) ²	60	180	380	700	2700

*) According to PED **) Water at 5 m/s (connection velocity) ***) weight with feet and LFS12 flanges n=number of plates

1) E channel 0.18/0.18; A channel 0.18/0.25 2) Varies from country to country depending on temperature duty. Given values are for typical district heating installations.

3) Valid for H-plate

One step further...

We have now taken our plate heat exchanger technology one step further and invented a new type of plate heat exchanger made of 100% stainless steel. We named it AlfaNova, and it is based on Alfa Laval's new revolutionary technology. This is a method to join stainless steel components. The principle: stainless steel pieces are set in contact with each other and bonded at a temperature close to the melting point. The joints then consist of material equal to the original components. The result: a heat exchanger made of 100 % stainless steel. Alfa Laval has invented this new production method including a unique filler metal. AlfaNova products are protected by patents.

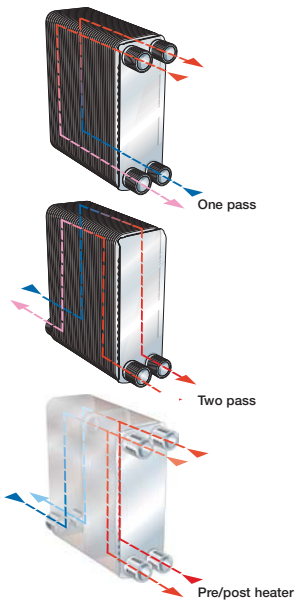
A variety of design options

For every application there is an optimal solution. This brochure shows heat exchangers suitable for HVAC applications. The design options are multiple. A number of plate patterns for each plate size means optimal function for any application. The fusion bonded heat exchangers can be configured as one-, two- or multi-pass versions with a wide range of connection designs and locations.

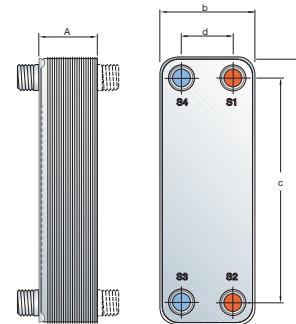
The products are offered pre-configured, available from stock for swift delivery. If these units do not meet the demand specification, you have the option to have a heat exchanger designed to meet your exact requirement.

Advantages

AlfaNova heat exchangers are well suited in applications requiring maximum hygiene. They are highly anti-corrosive and therefore suitable in applications where copper or nickel contamination is not accepted.



FHEs can be designed in many different ways to optimize our customers needs.



Testing

The FHEs are individually leak and pressure tested to ensure first-class quality, and Alfa Laval has approvals from all major certification bodies.

Approvals

- PED
- KHK
- UL
- KIWA
- ASME



Insulation



Feet and mounting brackets