

PAT Series Plate heat exchangers

DESCRIPTION

The ADCATHERM PAT – plate heat exchangers (gasketed and bolted), consist of a variable number of pressed plates, clamped together between a fixed and a movable plate, all assembled in a metal frame.

MAIN FEATURES

Corrosion-resistant stainless steel plates.
Highly efficient heat transfer (K-values much higher, when compared with shell and tube design).
Less area required for installation.
Low liquid content.
Additional capacity available by fitting extra transfer plates.

OPTIONS: Special designs and materials (titanium, etc).
Brazed construction.
Thermal insulation.
Stainless steel frame.

USE: Steam, water, hot condensate and other fluids compatible with the construction.

AVAILABLE

MODELS: PAT – Bolted plate heat exchanger.

CONNECTIONS: Threaded BS21.
Flanged EN 1092-1 or ANSI.

INSTALLATION: Vertical installation. Horizontal on request.

ORDER

REQUIREMENTS: Hot fluid pressure and temperature.
Cold fluid inlet and outlet temperature.
Mass flow or heat duty.
See inquiry sheet.



CE MARKING – GROUP 2 (PED – European Directive)

Since this is not a standard product, and can have a variable number of plates, pressure ratings and models, the conformity assessment and CE marking has to be carried out case by case.

LIMITING CONDITIONS *

Rating	Sealing material	Temp. (°C)	Rating	Sealing material	Temp. (°C)
PN6	NBR	150	PN25	NBR	150
PN10	EPDM	160		EPDM	150
PN16	Viton – S	195 **		Viton – S	150

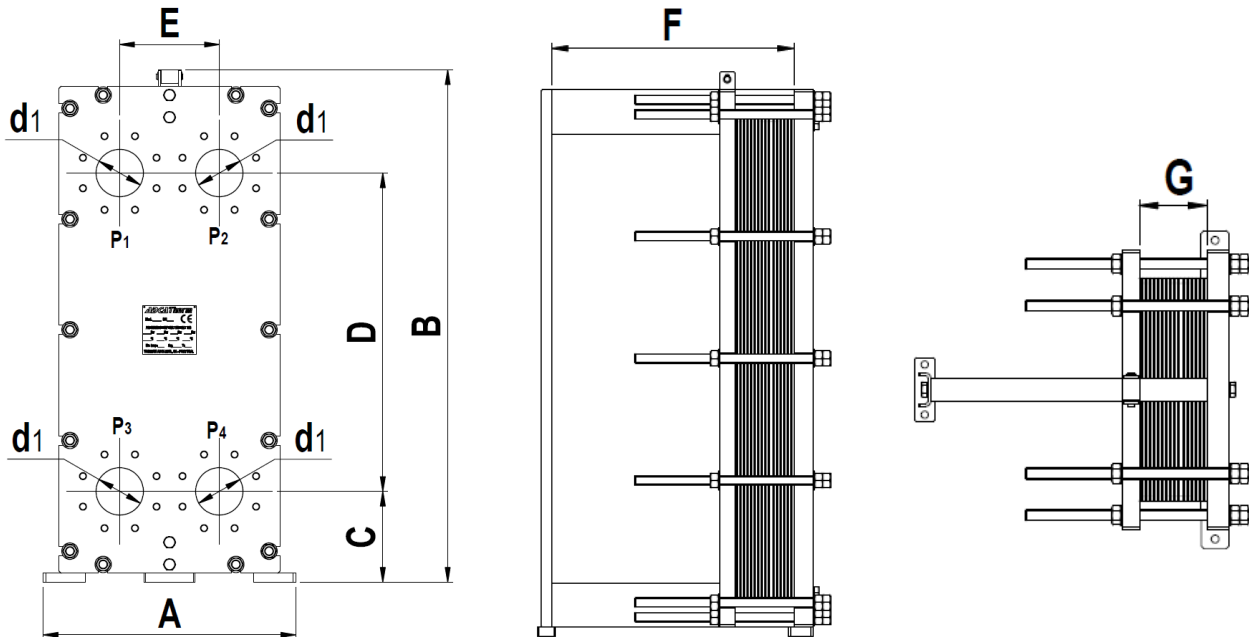
Minimum operating temperature: -20 °C;

Design code: AD-Merkblatt.

* Rating according to EN 1092-1:2018;

MATERIALS	
DESIGNATION	MATERIAL
Plates	AISI 316L / 1.4404 ; AISI 304 / 1.4301 ; Titanium ASTM 265B Grade 1
Frame	P250GH / 1.0460 ; AISI 304 / 1.4301 ; AISI 316 / 1.4401
Gaskets and rubber liner	NBR ; EPDM ; Viton – S
Flanges	P250GH / 1.0460 ; AISI 316 / 1.4401
Tightening bolts	AISI 304 / 1.4301 ; AISI 316 / 1.4401

EN 10204 3.1 certificates available, if requested with the order.



DIMENSIONS											
MODEL	PN (bar)	A	B	C	D	E	F *	G **	d1	W (m ²)	W1 (m ²)
PAT 05	10 to 16	185	470	45	381	70	250 – 1000	K x 2,7	1"	6	0,04
PAT 09	10 to 16	185	765	45	676	70	250 – 1000	K x 2,7	1"	12	0,08
PAT 10	10 to 25	310	733	128	494	126	250 – 1000	K x 2,9	2"	20	0,1
PAT 16	10 to 25	310	933	128	694	126	250 – 1000	K x 2,9	2"	30	0,16
PAT 22	10 to 25	310	1182	128	894	126	250 – 1000	K x 2,9	2"	45	0,21
PAT 31	10 to 25	480	1332	204	894	225	500 – 3000	K x 3,1	100	150	0,3
PAT 40	10 to 25	480	1579	204	1141	225	500 – 3000	K x 3,1	100	200	0,4
PAT 41	10 to 25	620	1470	225	941	290	500 – 4000	K x 3,5	150	280	0,4
PAT 42	10 to 25	620	1470	225	941	290	500 – 4000	K x 3,1	150	315	0,4
PAT 50	10 to 25	480	1826	204	1388	225	500 – 3000	K x 3,1	100	250	0,5
PAT 60	10 to 25	620	1835	225	1306	290	500 – 4000	K x 3,5	150	420	0,6
PAT 62	10 to 25	620	1835	225	1306	290	500 – 4000	K x 3,1	150	450	0,6
PAT 70	10 to 25	760	1740	285	1130	395	500 – 4000	K x 3,1	200	355	0,7
PAT 71	10 to 25	480	2320	204	1882	225	500 – 3000	K x 3,1	100	350	0,7
PAT 80	10 to 25	620	2200	225	1671	290	500 – 4000	K x 3,5	150	560	0,8
PAT 81	6 to 25	980	1930	365	1100	480	1780 – 5280	K x 3,7	300	640	0,8

*Minimum and maximum possible measures; **Distance between frames: K = number of plates; W – Maximum total surface area (m²);

W1 – Surface area per plate (m²); d1 to d4 connections sized according with the flow conditions.

Consult factory for certified dimensions and weight. Other sizes and designs can be supplied under request.

The pipe connections are sized considering the correct thermal insulation possibility. The insulation is not included but it is recommended to be done after the installation.