

**PLATE HEAT EXCHANGERS PAT**

**ENG**

**DESCRIPTION**

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

**MAIN FEATURES**

- Compact and easy to install.
- Corrosion-resistant stainless steel plates.
- Highly efficient heat transfer.
- Flexible configuration, allowing increase of heat transfer area by adding extra plates.
- Low liquid content.
- Easily serviced due to gasketed and bolted design.

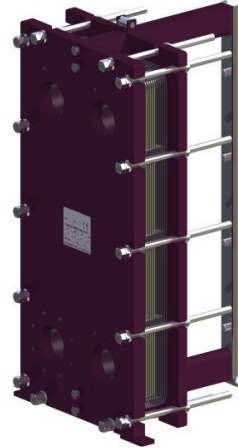
**OPTIONS:** Special designs and materials (titanium, special alloys, lined flanged connections, etc).  
 Thermal insulation.  
 Stainless steel frame.

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

**AVAILABLE MODELS:** PAT00 to PAT30.  
 PATL00 to PATL50.  
 PATR00 to PATR50.

**CONNECTIONS:** Female threaded ISO 228 or NPT.  
 Flanged EN 1092-1 PN 10 or ASME B16.5 Class 150.  
 Others on request.

**INSTALLATION:** Vertical installation. Horizontal installation on request.  
 See IMI – Installation and maintenance instructions.



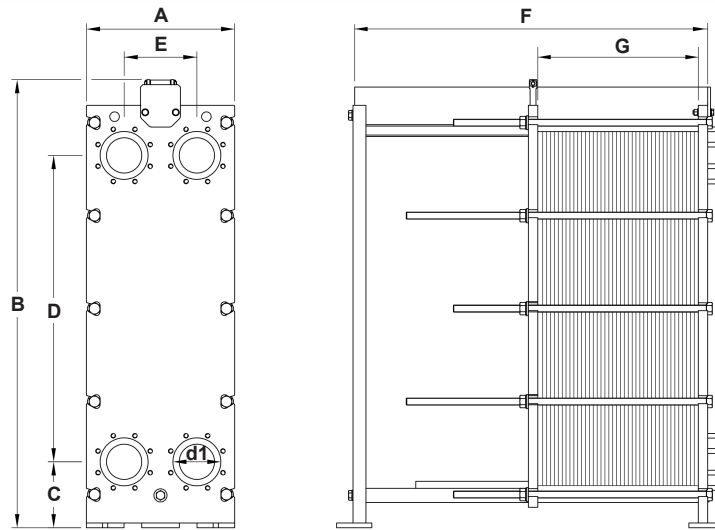
**CE MARKING – GROUP 2 (PED – European Directive)**

Non-standardized product designed acc. to requirements. Conformity assessment and CE marking are carried out case by case.

**LIMITING CONDITIONS \***

Maximum operating pressure		10 bar
Maximum operating temperature	NBR seals	140 °C
	EPDM seals	150 °C
	TF-EPDM or TF-NBR seals	150 °C
	EPDM-HT seals	180 °C
	FKM seals	180 °C
Minimum allowable temperature		-20 °C

\* Actual limiting conditions may vary depending on the requirements and final design.  
 Design code: ASME VIII div. 1.



DIMENSIONS (mm)										
MODEL	A	B	C	D	E	F Min. - Max.	G *	d1	W ** (m <sup>2</sup> )	W1 *** (m <sup>2</sup> )
PAT00	160	330	40	250	60	120 - 200	K x 2,45	1"	0,864	0,018
PAT01	300	835	200	535	115	250 - 1600	K x 3,20	2"	23,93	0,087
PAT10	400	1164	230	760	186	400 - 1300	K x 2,70	50	53,8	0,20
PAT30	578	1813	260	1316	280	700 - 2900	K x 3,10	100	245	0,49
PATL00	350	860	200	560	160	200 - 400	K x 4,10	2"	6,12	0,12
PATL10	440	1102	230	706	222	400 - 1300	K x 4,50	100	28	0,20
PATL30	620	1548	278	1023	300	700 - 3300	K x 5,20	150	143,10	0,45
PATL50	810	1936	320	1345	400	700 - 3300	K x 5,20	200	332	0,83
PATR00	220	440	68.5	308	102	200 - 300	K x 3,20	11/4"	2,19	0,043
PATR10	460	1212	230	804	230	400 - 1800	K x 3,20	100	96,9	0,255
PATR30	630	1824	280	1302	309	700 - 2400	K x 3,60	150	254,2	0,62
PATR50	800	2222	320	1520	360	900 - 4100	K x 4,00	200	512,87	0,948

\* Distance between pressure plates. K: number of heat transfer plates.

\*\* W: Maximum total surface area (m<sup>2</sup>).

\*\*\* W1: Surface area per plate (m<sup>2</sup>).

Remarks: Connections (d1) are sized according with the process conditions. For certified values, please consult the manufacturer.

Other sizes and designs can be supplied on request.

MATERIALS	
DESIGNATION	MATERIAL
Heat transfer plates	ASME SA240 316L; ASME SA240 304L; Titanium ASME SB265 Gr. 1; Titanium ASME SB265 Gr. 11; Nickel ASME SB162; Hastelloy ASME SB575
Frame and pressure plates	ASME SA516 Gr.60 or S355J2-N; ASME SA240 316; ASME SA240 304;
Gaskets *	NBR; EPDM; EPDM-HT; FKM; TF-EPDM; TF-NBR
Connections	AISI 304 / 1.4301; AISI 316 / 1.4401; NBR; EPDM; Titanium
Tightening bolts and nuts	AISI 304 / 1.4301; ASTM A193 Gr. B7

\* Available spare parts.



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