



CHEVON

PLATE HEAT EXCHANGER

Plate heat exchangers are used extensively in many established industries as they are designed to optimise heat transfer. The carefully designed corrugated surface of the plates provides a large heat transfer area while occupying a relatively smaller space. Plate heat exchangers are compact and flexible. The flexibility in plate arrangement ensures maximum turbulence and high heat transfer efficiency.

APPLICATION

Plate heat exchangers are used in general heating and cooling duties in Marine, Pharmaceuticals, Food, Medical, Process, Petro-chemical and general industries.

STANDARD DESIGN

The plate heat exchanger consists of a series of thin corrugated plates that are assembled between a fixed frame plate and a movable pressure plate and compressed by tightening bolts. The number of plates is determined by the cooling surface required, the flow rate, physical properties of the fluids and their pressure drop. Connections are located in the frame plate or, in some applications, in the frame and pressure plates.



SURFACE AREA

Range from 0.5 m² to 1000 m².

MATERIAL

Plates - SS304, SS316, SS316L, TA1, Ti-Pd.

Gasket - NBR, EPDM, Viton, Silicon.

ADVANTAGES OF PLATE HEAT EXCHANGER

EFFECTIVE HEAT TRANSFER

The plate heat exchanger generally yields heat transfer rates of three to five times greater than other types of heat exchangers due to its counter flows and high turbulence design.

SPACE SAVING, EASY TO MAINTAIN

The cooling plates are closely packed together. Hence, for the same cooling capacity, the space required is about 1/2 to 1/3 compared to a shell and tube heat exchanger. The plate heat exchanger can be easily cleaned by sliding out the plates on the sliding bar and does not require extra space for dismantling. Cleaning, servicing and maintainance can be done with minimum downtime.

IDEAL FOR CLOSE APPROACH TEMPERATURE

Due to the truly counter flow operation, it is ideal for operating conditions involving temperature crosses and close approach temperatures between the hot and cold media.

SAFE AND RELIABLE

The gasket is designed with double sealing to minimize contamination.

FLEXIBLE

The cooling capacity can be easily changed by adding or removing some plates. The flow pattern can also be changed by adjusting the orientation of the plates.

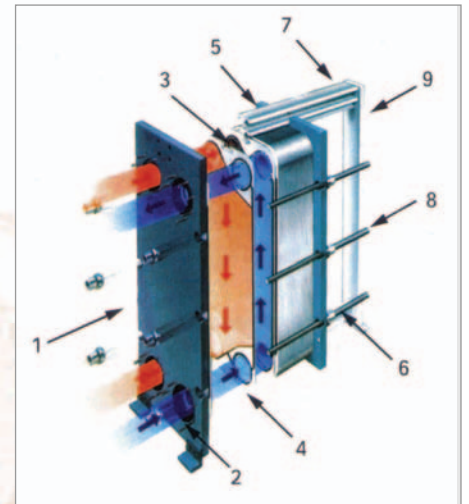
LOW HEAT LOSS

Due to the compact design, the exposed area is kept to a minimum and thus insulation is usually not required.

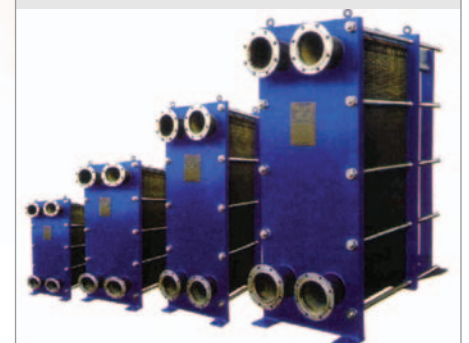
MULTIPLE USAGE

The plate exchanger can be used for heating and cooling. Its material can operate with many types of hot and cold media.

PLATE HEAT EXCHANGER



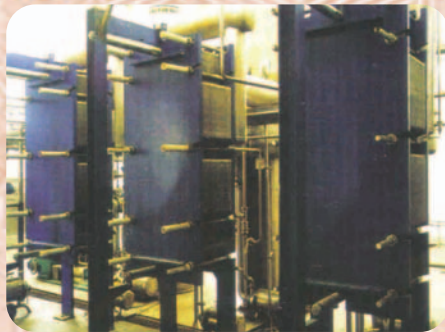
- 1 - Fixed Frame Plate
- 2 - Connection
- 3 - Gasket
- 4 - Corrugated Plates
- 5 - Movable Pressure Plate
- 6 - Bottom Guide Bar
- 7 - Top Guide Bar
- 8 - Compression Bolt
- 9 - Support Beam



APPLICATION OF PLATE HEAT EXCHANGERS



Air Conditioning Industry



Food Industry



Hot Water Supply



Refinery



Chemical



Heat Recovery System



Marine Industry



Pharmaceutical

CPE006 -CPE01B

MATERIAL

Plates -SS304, SS316, SS316L, TA1, Ti-Pd.

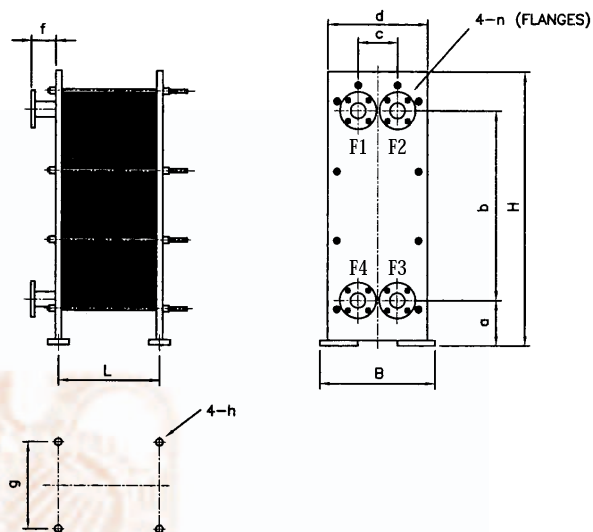
Gasket -NBR, EPDM, Viton, Silicon.

DESIGN PRESSURE

6, 10, 16 bar.

DESIGN TEMPERATURE

110, 150, 180, 230 deg C



Model	Dimension in mm										Max flow	Max Area
	B	H	a	b	c	d	f	g	h	n	m ³ /h	m ²
CPE006	230	458	65	336	102	220	30	190	Ø10	32	10	5
CPE01A	310	720	-	564	152	310	-	272	Ø18	45	45	7.6
CPE01B	380	900	150	625	130	330	80	280	Ø24	40	50	6.8

CPE02 -CPE065

MATERIAL

Plates -SS304, SS316, SS316L, TA1, Ti-Pd.

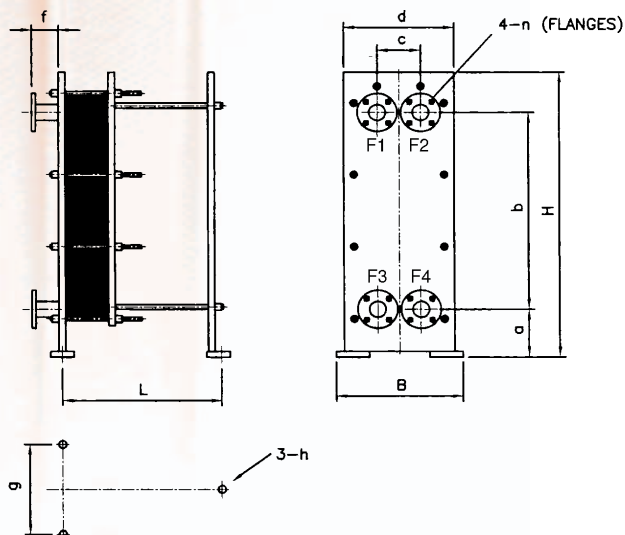
Gasket -NBR, EPDM, Viton, Silicon.

DESIGN PRESSURE

6, 10, 16 bar.

DESIGN TEMPERATURE

110, 150, 180, 230 deg C



Model	Dimension in mm										Max flow	Max Area
	B	H	a	b	c	d	f	g	h	n	m ³ /h	m ²
CPE02A	550	1274	200	840	192	-	100	470	Ø16	65	60	30
CPE02B	365	1000	100	762	175	355	80	295	Ø16	70	80	30
CPE035	540	1400	175	1040	220	500	100	420	Ø26	100	150	50
CPE05A	610	1600	224	1200	300	610	-	480	-	125	600	80
CPE05B	620	1780	300	1280	280	620	100	420	Ø26	125	600	150
CPE065	660	1974	229	1471	290	640	160	510	Ø26	150	650	200



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CPE07 -CPE16

MATERIAL

Plates - SS304, SS316, SS316L, TA1, Ti-Pd.

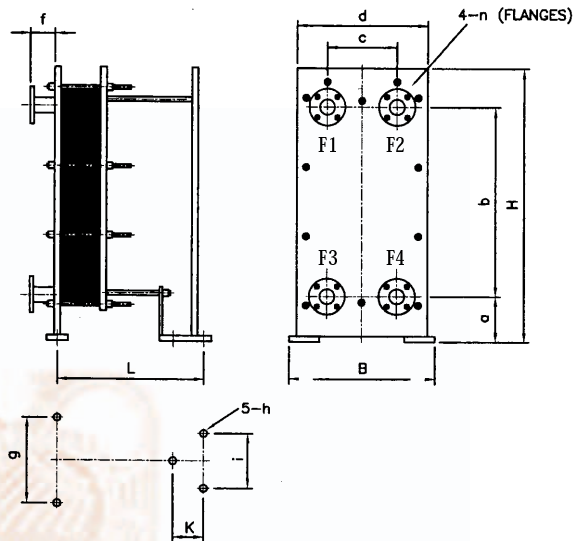
Gasket -NBR, EPDM, Viton, Silicon.

DESIGN PRESSURE

6, 10, 16 bar.

DESIGN TEMPERATURE

110, 150, 180, 230 deg C



Model	Dimension in mm												Max flow	Max Area
	B	H	a	b	c	d	f	g	h	I	k	n	m ³ /h	m ²
CPE07	790	1830	-	1324	344	-	-	660	-	180	-	200	750	160
CPE08	720	2150	290	1550	350	700	240	580	Ø26	300	540	200	800	250
CPE10A	914	2162	-	1523	440	914	-	654	-	250	540	250	1000	250
CPE10B	920	2350	358	1650	425	870	240	770	Ø26	400	660	200	1000	300
CPE13	950	2580	400	1780	480	930	240	800	Ø26	460	660	250	1000	600
CPE16	1100	2900	480	1850	550	-	300	860	Ø26	460	660	300	1800	1000

Heat transfer	CPE006	
Area (m ²)	L (mm)	Weight (kg)
0.5	146	33
1.5	222	43
2.5	300	53
3.5	371	63
4.5	447	73

Heat transfer	CPE01A	
Area (m ²)	L (mm)	Weight (kg)
3	340	172
5	455	194
8	550	216
10	626	234

Heat transfer	CPE01B	
Area (m ²)	L (mm)	Weight (kg)
1	500	185
3	635	203
5	765	221
7	895	239
9	1035	257

Heat transfer	CPE02A	
Area (m ²)	L (mm)	Weight (kg)
6	592	400
10	742	500
15	1022	560
20	1022	630
25	1332	730
30	1332	830

Heat transfer	CPE02B	
Area (m ²)	L (mm)	Weight (kg)
1	237	273
3	311	291
5	385	309
7	459	327
9	533	345
11	593	363
13	639	381
15	685	399

Heat transfer	CPE035	
Area (m ²)	L (mm)	Weight (kg)
5	523	710
7	554	726
9	585	742
11	611	758
13	692	774
15	724	790
17	750	806
19	781	821
21	862	838
23	893	854
25	919	870
29	982	902

Heat transfer	CPE05A	
Area (m ²)	L (mm)	Weight (kg)
40	1155	-
60	1450	-
70	1600	-
80	1745	-

Heat transfer	CPE05B	
Area (m ²)	L (mm)	Weight (kg)
10	485	1380
30	665	1560
50	845	1740
70	1025	1920
90	1205	2100
110	1385	2280
130	1565	2460
150	1655	2550

Heat transfer	CPE065	
Area (m ²)	L (mm)	Weight (kg)
10	663	1425
30	843	1583
50	1029	1751
70	1215	1917
90	1401	2084
110	1581	2264
130	1767	2433
150	1953	2620
170	2139	2771
190	2325	2940

Heat transfer	CPE07	
Area (m ²)	L (mm)	Weight (kg)
50	738	1801
70	913	1987
90	1123	2182
110	1328	2370
130	1533	2558
150	1738	2746
160	1838	2840

Heat transfer	CPE08	
Area (m ²)	L (mm)	Weight (kg)
10	656	2160
30	824	2328
50	992	2496
70	1160	2664
90	1328	2832
110	1496	3000
130	1664	3168
150	1832	3336
170	2000	3504
190	2168	3672
210	2336	3840
230	2504	4008
250	2672	4176

Heat transfer	CPE10A	
Area (m ²)	L (mm)	Weight (kg)
60	1180	2960
80	1310	3130
100	1440	3250
120	1565	3400
150	1760	3700
180	1950	4000
200	2075	4350
230	2270	4500
250	2395	4750

Heat transfer	CPE10B	
Area (m ²)	L (mm)	Weight (kg)
10	650	2776
30	758	2928
50	872	3084
70	986	3242
90	1094	3388
110	1208	3543
130	1322	3699
150	1430	3864
170	1544	3938
190	1652	4159
210	1776	4270
230	1880	4462
250	1994	4547
270	2108	4732
290	2216	4910

Heat transfer	CPE13	
Area (m ²)	L (mm)	Weight (kg)
200	1560	4520
220	1650	4685
240	1740	4850
260	1830	5015
280	1920	5180
300	2010	5345
340	2190	5675
380	2370	6005
420	2550	6335
460	2730	6665
500	2910	6995
540	3090	7325
580	3270	7655
600	3360	7820

Heat transfer	CPE16	
Area (m ²)	L (mm)	Weight (kg)
480	2740	7230
560	3100	7910
640	3460	8590
720	3820	9270
800	4180	9950
880	4540	10630
960	4900	11310
1000	5080	11650



COMPANY PROFILE

Established in 1994, CHEVON is a leading manufacturer in the field of cooling equipment and specialises in Plate Heat Exchangers, Shell and Tube Heat Exchangers, Charged Air Coolers, Radiators, Oil Coolers and Air Conditioner Coils for Industrial, Marine, Locomotive, Pharmaceuticals, Food, Medical and Petro-chemical industries.

CHEVON designs and manufactures cooling equipment. The invaluable experience gained throughout the years assures the right equipment for the right application. During the design stage, the installation environment and condition of the equipment have been taken into consideration in order to ensure that the best engineering solutions are offered to our clients. The modern machinery and the four factories located at Singapore, Johore (Malaysia), Kuala Lumpur (Malaysia) and Wuhan (China) ensures good support to our clients.

With its well planned and effective Quality Management System (complying with ISO9001:2000 Standard), CHEVON assures its client of superior quality products with shortest possible delivery time. CHEVON also provides excellent after-sales service, which includes repair and servicing of the cooling equipment for clients.