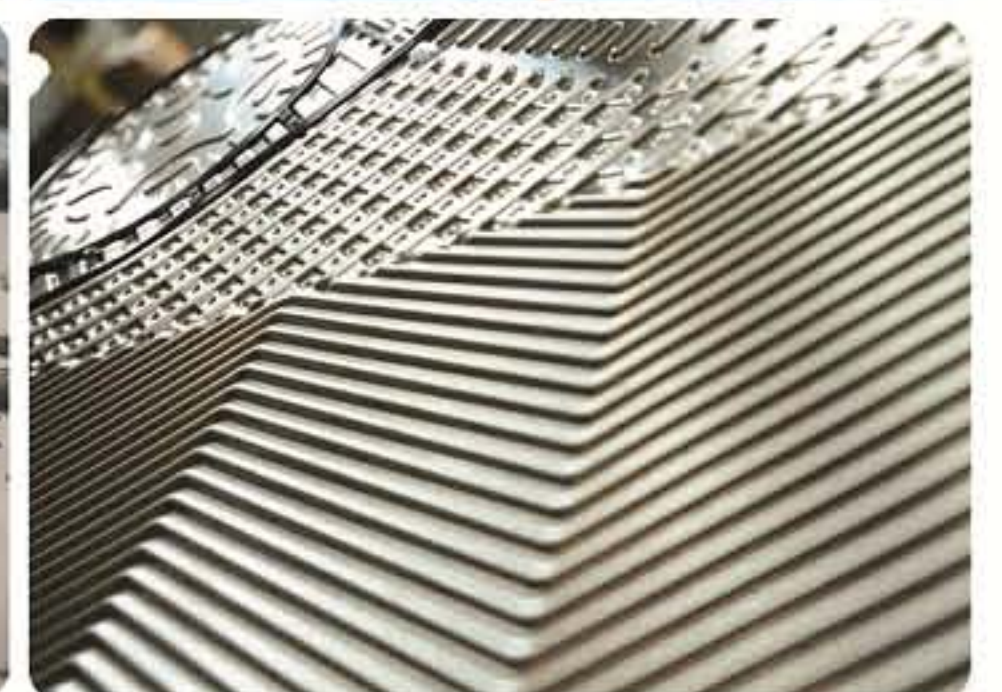


- Brazen Plate Heat Exchanger
- Gasket Plate Heat Exchanger
- Aircross Plate Heat Exchanger

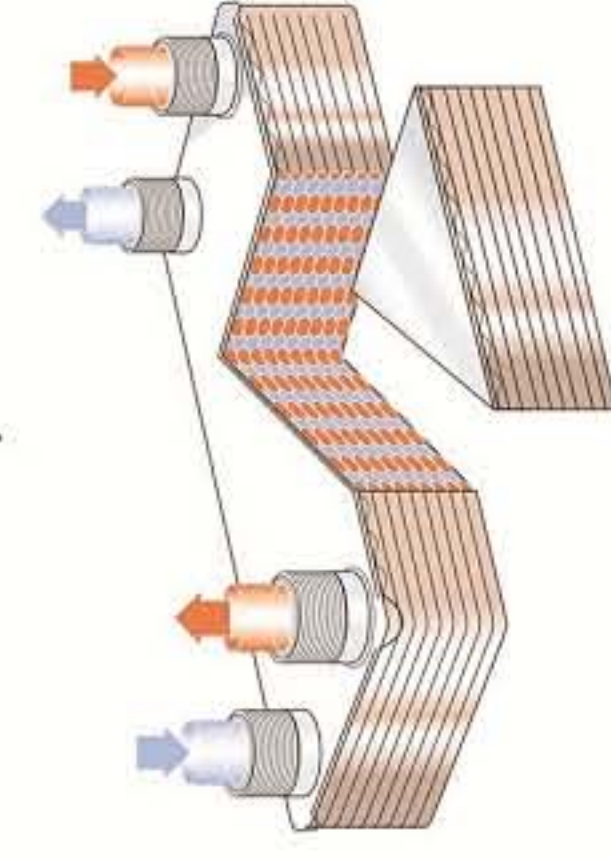


**Baode**  
Heat Exchanger

-Plate Heat Exchanger Professional

**Working principles**

The heating surface consists of thin corrugated metal plates stacked on top of each other.



Channels are formed between the plates and corner ports are arranged so that the two media flow through alternate channels, always in counter-current flow. The media are kept in the unit by a brazed seal around the edge of the plates. The contact points of the plates are also brazed to withstand the pressure of the media handled.

**Standard design**

The plate pack is covered by cover plates. Connections are located in the front or rear cover plate. The channel plates are corrugated to improve heat transfer efficiency and to make them rigid.



**Standard materials**

Cover plates: Stainless steel AISI 316 / AISI 304  
 Connections: Stainless AISI 316 / AISI 304  
 Plates: Stainless steel AISI 316 / AISI 304

**Advantages of BHE**

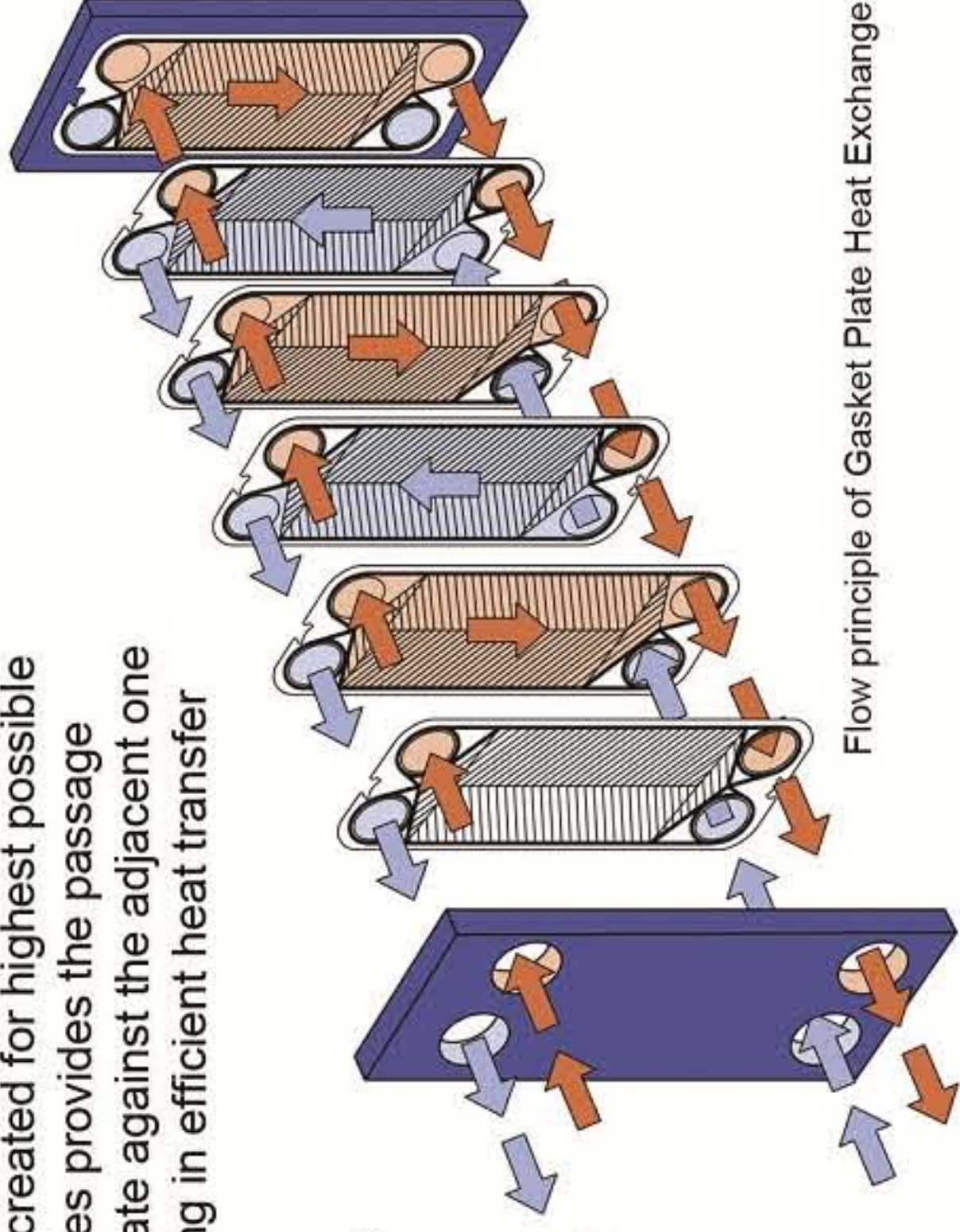
- The high heat transfer efficiency of the BHE makes it extremely compact and also easy to install in places where space is limited.
- The unit has no gaskets and is therefore suitable in applications where temperature and/or pressure is high e.g. in district heating.
- The BAODE supply system reassures that, no matter where you are on the globe, the BHE units are available with a short delivery time

**BHE Application**

- heating and hot water production
- radiant floor heating
- snow melting equipment
- refrigerant evaporators
- sub-coolers and condensers
- oil coolers plus many other refrigerant-to-liquid, liquid-to-liquid and air-to-liquid applications.

**Working principles**

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 Gasket Plate Heat Exchanger

**STANDARD MATERIALS**  
 Frame plate: Carbon steel / Stainless  
 Nozzles : Carbon steel / Stainless  
 Metal lined: Stainless steel, Titanium  
 Rubber lined: Nitrile, EPDM  
 Plates: Stainless steel 316 L/ 304 / Ti

**D**

**X**

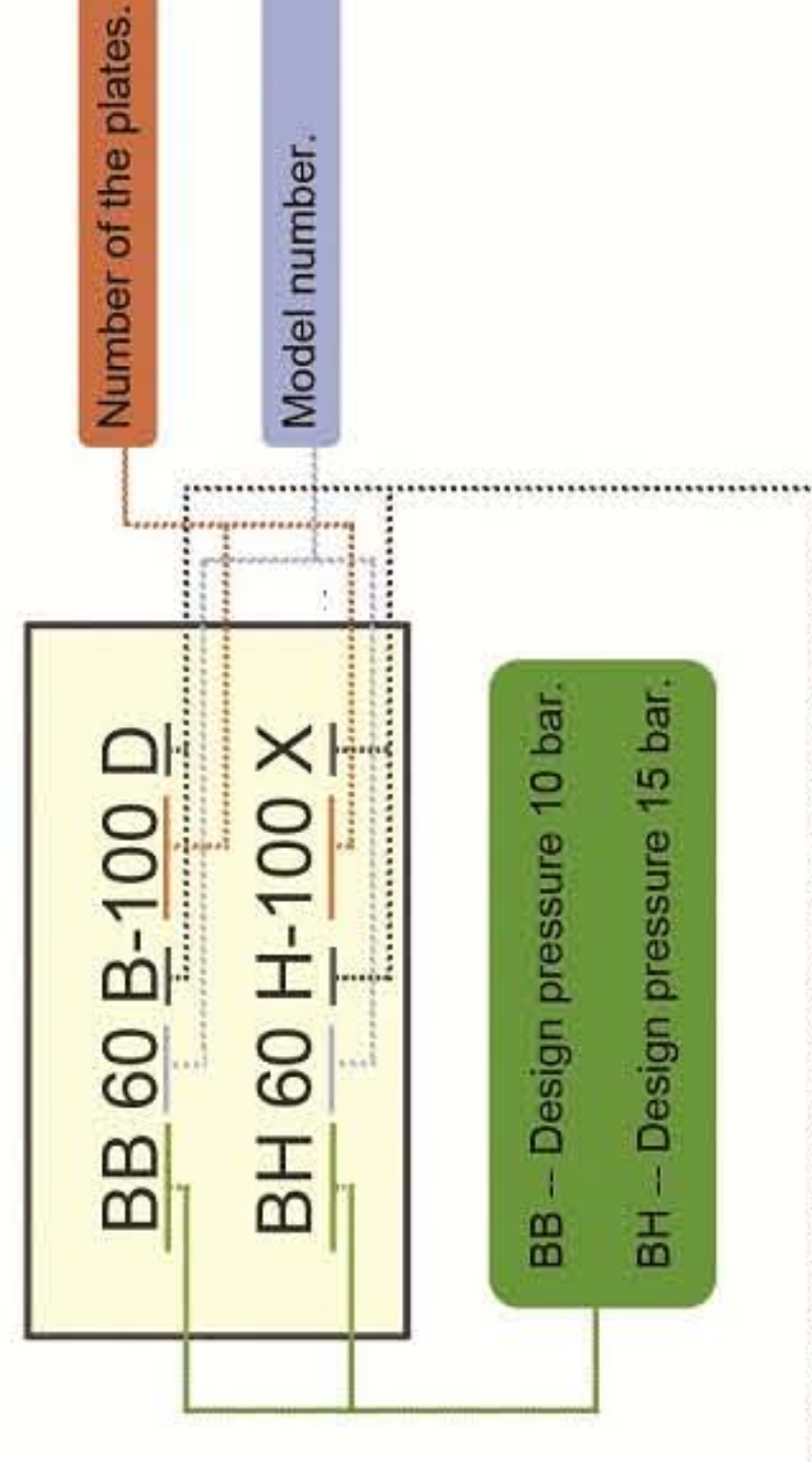
**Thermal Length**  
 In order to regulate the pressure drop, the two traditional thermal lengths are available (D , X)

Difference between B & H  
 B plate has the small corrugated paths, H has the big corrugated paths.

**B**

**H**

**Gasket PHE Code Explanation**



Particulars required for quotation To enable Baode to make a specific quotation, enquiries should be accompanied by the following particulars

- flow rates or heat load required
- temperature program
- physical properties of liquids in question
- desired working pressure
- maximum permitted pressure drop.

## Brazed plate heat exchanger specification data

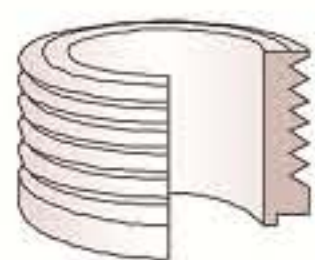
Model	BL14	BL20	BL26	BL26C	BL50	BL95
Width, A [mm]	78	76	111	124	111	191
Height, B [mm]	206	310	310	304	525	616
Length, E [mm]	9+2.3n	9+2.3n	10+2.36n	13+2.4n	10+2.35n	11+2.35n
Horizontal port distance, C [mm]	42	42	50	70	50	92
Vertical port distance, D [mm]	172	282	250	250	466	519
Max pressure [mpa]	3	3	3	3/4.5	3/4.5	3/4.5
Max flowrate [M3/h]	3.6	3.6	8.1	8.1	12.7	39
Weight [kg]	0.6+0.06n	1.0+0.08n	1.3+0.12n	2.2+0.16n	2.6+0.19n	7.+0.36n

Model	BL120	BL190	BL200	BL600	BL100	BL210
Width, A [mm]	246	307	321	429	248	322
Height, B [mm]	528	696	738	1398	495	739
Length, E [mm]	13+2.36n	13+2.75n	13+2.7n	22+2.78n	10+2.15n	13+2.55n
Horizontal port distance, C [mm]	174	179	188	220	157	205.2
Vertical port distance, D [mm]	456	567	603	1190	405	631
Max pressure [mpa]	3	3	2.1	1.5	3/4.5	3/4.5
Max flowrate [M3/h]	42	100	100	300	42	100
Weight [kg]	7.2+0.52n	12.5+0.72n	13+0.75n	31.8+1.73n	6.5+0.37n	13+0.78n

## Regular Connections for models

Model	Screw Thread Connection												Solder Connection For Gas																							
	NPT/BSP Male thread						NPT/BSP Female Thread						φ6.8	φ9.6	φ12.8	φ15.9	φ16.1	φ19.2	φ22.3	φ25.3	φ28.7	φ32	φ35.3	φ38.5	φ42.2	φ51	φ54.1	φ63.7	φ66.9	φ76.3	φ79.5	φ101				
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 3/8"	1 1/2"	1 5/8"	2"	2 1/8"	2 1/2"	2 5/8"	3"	3 1/8"	4"			
BL14	●	●							●	●					●	●	●	●	●	●																
BL20	●	●							●	●					●	●	●	●	●	●																
BL26	●	●	●	●	●				●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
BL26C	●	●	●	●	●				●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
BL50	●	●	●	●	●				●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
BL95			●	●	●	●	●				●	●	●	●																						
BL100			●	●	●	●	●				●	●	●	●																						
BL120			●	●	●	●	●				●	●	●	●																						
BL190			●	●	●	●	●	●			●	●	●	●																						
BL200			●	●	●	●	●	●			●	●	●	●																						
BL210			●	●	●	●	●	●			●	●	●	●																						
BL600					●	●	●				●																									

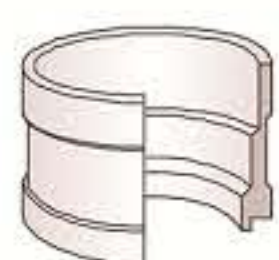
## Connection Types



Externally threaded



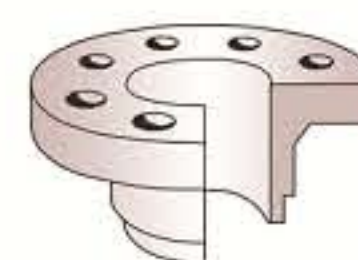
Internally threaded



Soldering



Victaulic



DNC Flanges

## Material

Plate material	AISI 316L / AISI 304 Stainless
Connection material	304 Stainless
Brazing material	Pure Copper / Nickel

## Third-Party Approvals

Europe, Pressure Equipment rective (PED 97/23/EC)  
 USA and Canada, Unerwriters Laboratories (UL)  
 Water Regulations Advisory Scheme (WRAS)



Underwriters Laboratories



WRAS APPROVED PRODUCT



## Baode Condenser Selection Form

Capacity (KW)	T <sub>dew</sub> 35°C Water 25/30°C		T <sub>dew</sub> 40°C Water 30/35°C		T <sub>dew</sub> 50°C Water 40/45°C		T <sub>dew</sub> 60°C Water 50/55°C		Water Flowrate M3/h
	Model		Model		Model		Model		
	BL26	BL50C	BL95B	BL26	BL50C	BL95B	BL26	BL50C	
2.5	12	12	12	12	12	12	14	14	0.43
3.8	16	16	16	18	18	18	18	18	0.60
5.0	18	20	20	22	22	22	22	22	0.86
7.5	26	28	28	30	30	30	32	32	1.28
10.0	34	36	36	40	40	40	42	42	1.71
12.5	42	46	46	48	48	48	52	52	3.14
15.0	48	54	54	58	58	58	62	62	2.58
17.5	56	62	62	66	66	66	70	70	3.00
20.0	64	70	70	74	74	74	78	78	3.43
22.5	72	78	78	82	82	82	86	86	3.85
25.0	80	86	86	90	90	90	94	94	4.28
27.5	88	94	94	98	98	98	102	102	4.71
30.0	96	102	102	106	106	106	110	110	5.14
32.5	104	110	110	114	114	114	118	118	5.57
35.0	112	118	118	122	122	122	126	126	6.01
37.5	120	126	126	130	130	130	134	134	6.42
40.0	128	134	134	138	138	138	142	142	6.85
42.5	136	142	142	146	146	146	150	150	7.28
45.0	144	150	150	154	154	154	158	158	7.71
47.5	152	158	158	162	162	162	166	166	8.14
50.0	160	166	166	170	170	170	174	174	8.56
62.5	184	190	190	194	194	194	198	198	10.70
75.0	208	214	214	218	218	218	222	222	12.86
87.5	232	238	238	242	242	242	246	246	15.00
100.0	256	262	262	266	266	266	270	270	17.13
125.0	296	302	302	306	306	306	310	310	21.41
150.0	336	342	342	346	346	346	350	350	25.69
175.0	376	382	382	386	386	386	390	390	29.97
200.0	416	422	422	426	426	426	430	430	34.25

## Baode Evaporator Selection Form

Capacity (KW)	T <sub>dew</sub> 2°C Water 12/7°C		T <sub>dew</sub> 3°C Water 12/7°C		T <sub>dew</sub> 5°C Water 15/10°C		T <sub>dew</sub> 10°C Water 20/15°C		Water Flowrate M3/h
	Model		Model		Model		Model		
	BL26	BL50D	BL95A	BL26	BL50D	BL95A	BL26	BL50D	
2.5	16	16	18	18	14	14	14	14	0.43
3.8	20	20	22	22	18	18	18	18	0.60
5.0	24	24	28	28	24	24	24	24	0.86
7.5	34	34	40	40	34	34	32	32	1.28
10.0	44	44	52	52	42	42	40	40	1.71
12.5	54	54	64	64	52	52	50	50	3.14
15.0	64	64	76	76	62	62	60	60	2.58
17.5	74	74	88	88	72	72	70	70	3.00
20.0	84	84	100	100	82	82	80	80	3.43
22.5	94	94	112	112	92	92	90	90	3.85
25.0	104	104	124	124	102	102	100	100	4.28
27.5	114	114	136	136	112	112	110	110	4.71
30.0	124	124	152	152	122	122	120	120	5.14
32.5	134	134	164	164	132	132	130	130	5.57
35.0	144	144	176	176	142	142	140	140	6.01
37.5	154	154	192	192	152	152	150	150	6.42
40.0	164	164	208	208	162	162	160	160	6.85
42.5	174	174	224	224	172	172	170	170	7.28
45.0	184	184	240	240	182	182	180	180	7.71
47.5	194	194	256	256	192	192	190	190	8.14
50.0	204	204	272	272	202	202	200	200	8.56
62.5	228	228	312	312	222	222	220	220	10.70
75.0	252	252	352	352	242	242	240	240	12.86
87.5	276	276	392	392	262	262	260	260	15.00
100.0	300	300	432	432	282	282	280	280	17.13
125.0	340	340	492	492	322	322	320	320	21.41
150.0	380	380	552	552	362	362	360	360	25.69
175.0	420	420	612	612	402	402	400	400	29.97
200.0	460	460	672	672	442	442	440	440	34.25

# Gasket plate heat exchanger specification data

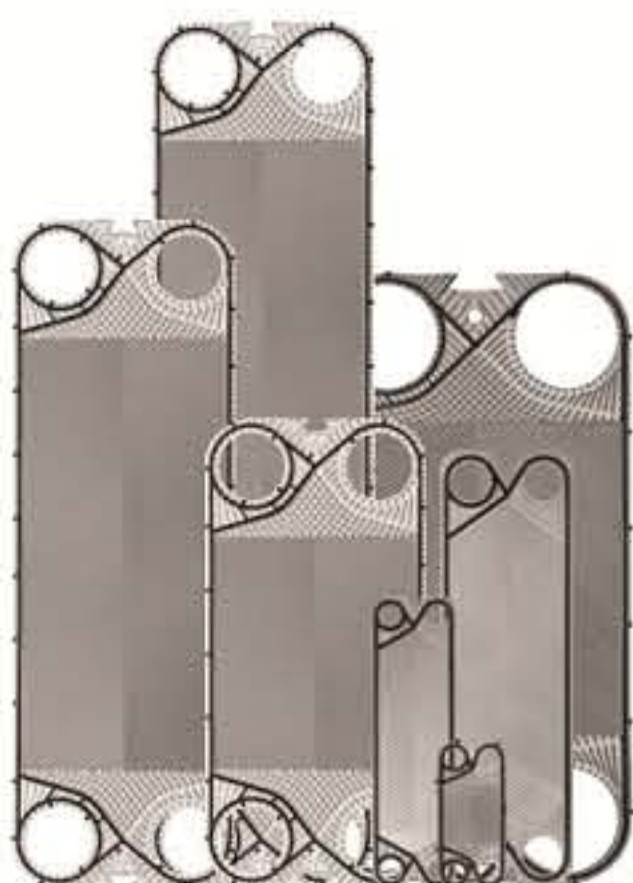
Small	BH30B		BB60/BH60		SH60		BB100/BH100		LB100		BB150/BH150	
	Model	BH30B	BB60/BH60		SH60		BB100/BH100		LB100		BB150/BH150	
Cross Reference Alfa Laval	M3	M6/M6M		TS6M		M10B/M10M		TL10		M15B/M15M		
Height, H (mm)	480	920	940	704	704	1084	1084	1885	1923	1885	1885	
Width, W (mm)	180	320	330	400	410	470	470	480	480	610	650	
Min standard length, L (mm)	400	500	500	530	540	700	700	850	850	1150	1150	
Max standard length, L (mm)	650	1500	1500	1430	1440	2300	2300	2350	3250	2050	3250	
Vertical port distance, VC (mm)	357	640	640	380	380	719	719	1338	1338	1294	1294	
Horizontal port distance, HC (mm)	60	140	140	203	203	225	225	225	225	298	298	
Max temperature [C]	180	180	180	180	180	180	180	180	180	180	180	
Max pressure [bar]	10	10	16	10	16	10	16	10	16	10	16	
Flange size	Pipe 1 1/4"	DN50/ 2"	DN50/ 2"	DN65/2"	DN65/2"	DN100/4"	DN100/4"	DN100/4"	DN100/4"	DN150/6"	DN150/6"	
Max flow rate [kg/s]	4	16		20		50		50		80		

Large	SH200		BH200		BH250		BH300	
	Model	SH200	BH200		BH250		BH300	
Cross Reference Alfa Laval	TS20M	M20M, T20B, T20M		MX25B		M30M		
Height, H (mm)	1405	2150		2595		2920		
Width, W (mm)	740	750		920		1190		
Min standard length, L (mm)	900	1250		1550		1650		
Max standard length, L (mm)	2700	3350		3350		5200		
Vertical port distance, VC (mm)	696	1478		1939		1842		
Horizontal port distance, HC (mm)	363	353		439		596		
Max temperature [C]	180	180		180		180		
Max pressure [bar]	10/16	10/16		10/16		10/16		
Flange size	DN200 / 8"	DN200 / 8"		DN200/ DN250 / 8" / 10"		DN300 / 12"		
Max flow rate [kg/s]	190	225		250		497		



## Plates replacement for different brands

Cross reference brand	Model	Theta	Cross reference brand	Model	Theta
Alfa Laval	M3	H/L	Tranter	GC26	H
Alfa Laval	M6B	H/L	Tranter	GX26	L
Alfa Laval	M6M	H/L	Tranter	GX42	L
Alfa Laval	M10B	H/L	Tranter	GX51	L
Alfa Laval	M10M	H/L	Tranter	GC51	H
Alfa Laval	M15B	H/L	Tranter	GX18	L
Alfa Laval	M15M	H/L			
Alfa Laval	M20M	H/L	Vicarb	V13	H/L
Alfa Laval	MX25B	H/L			
Alfa Laval	M30B	H/L	APV	N35	H/L
Alfa Laval	TS6M	H/L	APV	H17H	H/L
Alfa Laval	TS20M	H/L			
Alfa Laval	T20B	H/L	Sondex	S65	H
Alfa Laval	TL10B	H/L	Sondex	S81	H/L
Alfa Laval	P16	H	Sondex	S121	H/L
Alfa Laval	P26	H/L			
Alfa Laval	P36	L	GEA	VT04	H
Alfa Laval	AK20	H/L	GEA	VT10	H



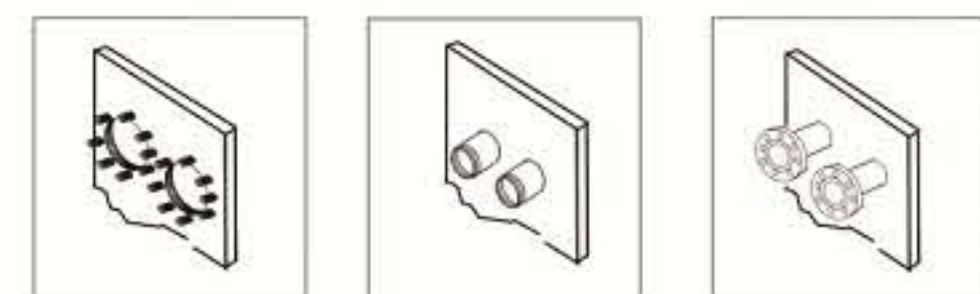
**X THETA      D THETA**

Plates are available in two thermal lengths (X/D)

\*Thickness available: 0.5mm, 0.6mm  
 \*Material available: 304 stainless, 316L stainless, Ti, Ni, Hastelloy, SMO 0254

Gasket		
Material	Applicable Temp	Applicable fluids
NBR	-15C to +135C	Water, Sea water, Mineral oil, Salinous water
EPDM	-25C to +180C	Hot water, Steam, Acid, Alkali
F26	-55C to +230C	Acid, Alkali
FTP	0C to +160C	High Concentrated acid, Alkali, High temperature oil, Steam

Three kinds of connection available



Studded connection with lining      Thread connection      Flange connection



## Company profile

BAODE Plate Heat Exchanger Co., Ltd. Is a Chinese company specialized in development. Production and global marketing of plate heat exchangers. Since the very start in 2004 BAODE has grown to one of the leading companies in China market and has developed a big range of plate heat exchangers for any task. Our main products are Brazed plate heat exchanger & Gasket plate heat exchanger. Our Braze plate heat exchanger include Copper brazed plate heat exchanger and Nickel brazed plate heat exchanger. Our mission is to help you to achieve the optimum solution with regards to performance efficiency, payback and energy conservation, whatever the application. This is based on a marketing orientation concept which makes us a highly valuable partner. Our combined experience in the plate heat exchanger industry, allow us giving the best technical recommendation for our customers.

### Brazed Plate heat exchanger:

- \* Compact structure and easy installation
  - Made of thin plates
  - High heat exchanging coefficient
  - Small liquid retardation
- \* Light in weight
  - 20%-30% of shell-tube heat exchanger
- \* Small consumption of water
  - only need 1/3 of shell-tube heat exchanger cooling water.
- \* Durability
  - Withstand high temperature 400 C and high pressure 45 bar
- \* Low scaling coefficient
  - High turbulence reduces scaling coefficient

### Gasket Plate heat exchanger

- \* High heating transferring coefficient
- \* High heat recovery rate
- \* Great flexibility
- \* Low flow stagnation
- \* Compact structure
- \* Easy maintenance

### Company Facts:

- Headquartered in Jiangyin, Wuxi, China
- Achieved ISO 9001:2001 QMS, CE and UL certification.
- More than 200 employees
- Our products export all over the world:

### Contact details:

Add: No33, Xicheng Road, Jiangyin, China  
 Postcode: 214431  
 Tel: +86 510 86020253  
 Fax: +86 510 86020233  
[www.bd-heatech.com](http://www.bd-heatech.com)  
[info@bd-heatech.com](mailto:info@bd-heatech.com)

