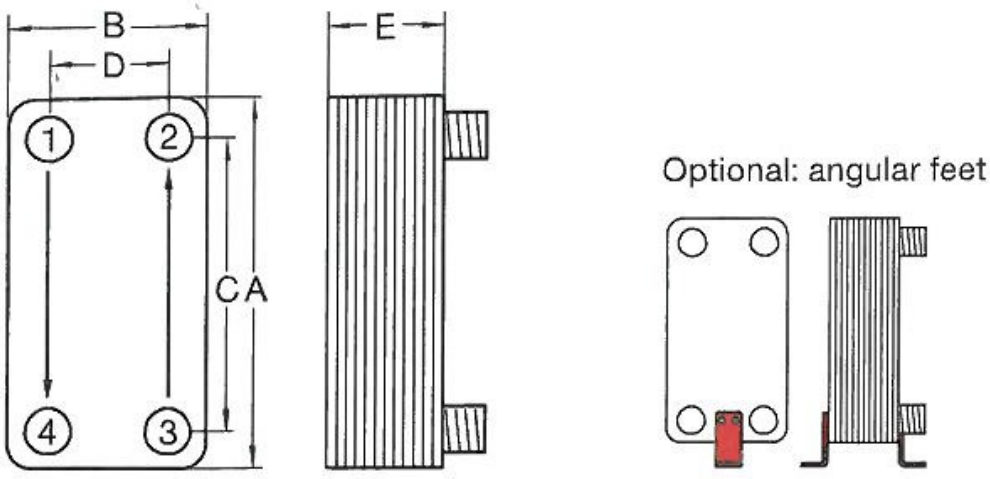
SERIES GPL, GPLB, GPLS & GPLK

This series of brazed plate heat exchangers was designed for universal applications with media of low viscosity. Their main feature is the balanced ratio of high heat transfer rates to minimal pressure drops. Importantly, though, at low volume flows the thermodynamically optimised V-corrugation of the plates generates a highly turbulent flow, resulting in an optimum use of the heat transfer area available.

GPL and GPLK overview -



1: hot side IN
2: cold side OUT
3: cold side IN
4: hot side OUT

Connections may be changed at each side as long as counter flow is continued.

Type		Dimensions								Volume
Solder		Overall			Dist. (connection)		Connection (standard)	No. of plates (N) (max)	Empty weight (kg)	Volume / channel (ltr. / Channel)
Copper	Nickel	A (mm)	B (mm)	E (mm)	C (mm)	D (mm)				
GPL 2	NPL 2	230	89	12+2,3xN	182	43	G 3/4"	50	0.06xN+1,1	0,03
GPL 3	NPL 3	325	89	12+2,3xN	279	43	G 3/4"	50	0.08xN+1,3	0,045
GPL 4	NPL 4	171	124	12+2,3xN	120	73	G 1"	100	0.06xN+1,2	0,03
GPL 5	NPL 5	332	124	12+2,3xN	281	73	G 1"	100	0.12xN+1,6	0,065
GPL 6	NPL 6	529	124	12+2,3xN	478	73	G 1"	100	0.24xN+2,0	0,1
GPL 7	NPL 7	529	269	14+2,4xN	460	200	G 2"	150	0.60xN+5,5	0,23
GPL 8		529	269	14+2,4xN	421	161	G 2 1/2"	260	0,54xN+10	0,22
GPL 9		798	269	14+2,4xN	690	161	G 2 1/2"	260	0,8xN+11,5	0,4
GPL 10		870	383	23+2,4xN	723	237	DN 100	360	1,25xN+39,5	0,6
GPLK 10		206	73	8-2.27x(N-1)	172	42	G 1/2"	60	0,81+0,04x(N-1)	0,025
GPLK 20		194	80	10+2,25xN	154	40	G 3/4"	60	0.8-0.05xN	0,025
GPLK 30		311	73	10+2,3xN	278	40	G 3/4"	60	0,84+0,07xN	0,04
GPLK 35		466	74	10+2,3xN	432	40	G 3/4"	60	1,37-0.113xN	0,063
GPLK 40		306	106	10+2,4xN	250	50	G 1"	100	1,3+0,135xN	0,055
GPLK 50		304	124	10+2,4xN	250	70	G 1"	100	1.6-0.15xN	0,065
GPLK 55		522	106	10+2,4xN	466	50	G 1"	120	3.1-0.22xN	0,095
GPLK 60		504	124	10+2,4xN	444	64	G 1"	120	3.5 0.24xN	0,107
GPLK 70		528	245	11,5+2,4xN	456	174	G 2"	160	7.2-0.52xN	0,232
GPLK 80		527	246	11+2,35xN	430	148	G 2 1/2"	140	8.5-0.49xN	0,289

N = number of plates

Limitation -

Copper brazed plate heat exchangers GPLK should not be used for the following media:

- Amonia.
- High chloride media.
- Silicone oils.
- Deionates.
- Seawater.

Special design series GPLS -

This is the standard safety plate heat exchanger with the double wall. One double wall element consists of two brazed plates. The individual elements are not brazed at the circumferential outer wall so that leakage can escape at all sides of the unit.

The GPLB series -

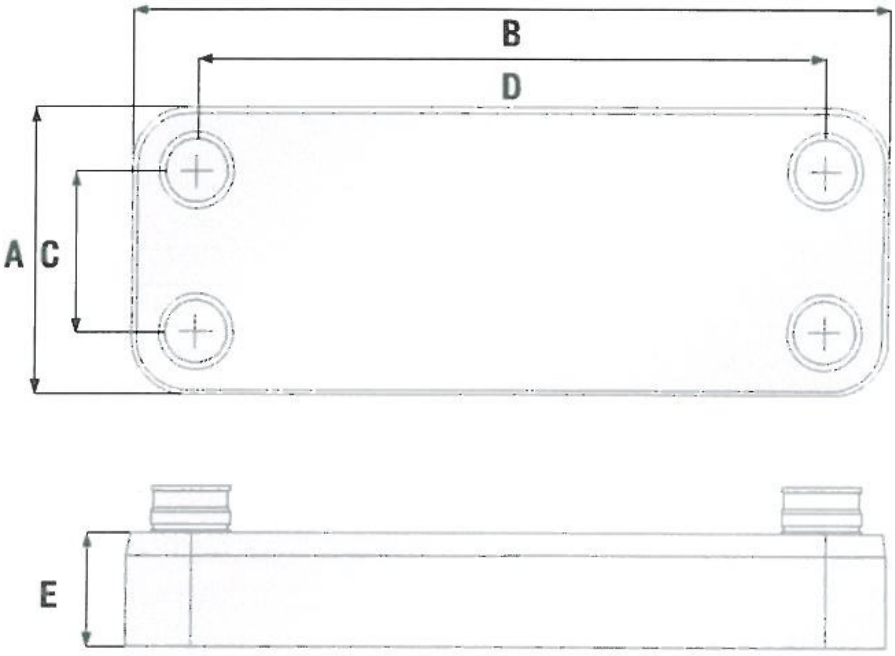
The new GPLB complete our yet existing wide range of brazed plate heat exchangers. The devices are made of 100 % stainless steel. Along with the copper and nickel brazed devices the GPLB distinguish themselves through exceptional quality, superior thermodynamic performance and long-life cycle.

Applications for GPLB are manifold, they can even be used with highly corrosive media or heat-transfer oil in special applications such as in chemical plants or laboratories.

Its main field of application is HVACR (heating, ventilation, air conditioning and refrigeration). The brazed plate heat exchangers guarantee maintenance-free operation as system separation in cycles such as distant heating, solar engineering and heat pumps as well as in floor heating or domestic water heating.

These stainless steel brazed plate heat exchangers are suitable for drinking water. The special state of the art brazing method of our GPLB prevents from undesired reactions to copper or nickel ions dissolved in the water, thus limiting the contents of these non-ferrous metals in drinking water.

Dimensions -



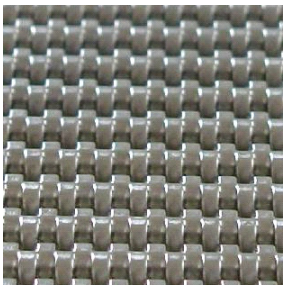
Model	Max. number of plates	Heat ex-change sur-face area	Content / volume primary	Content / volume secondary	Max. volume flow	Weight	Dimensions				
							A	B	C	D	E
		(m²)	(ltr.)	(ltr.)	(m³/h)	(kg)	(mm)	(mm)	(mm)	(mm)	(mm)
GPLB 2	50	0.80	0.88	1.10	15	5.0	90	237	41	188	133
GPLB 25	50	1.68	1.80	1.90	15	9.4	90	459	41	408	133
GPLB 4	50	0.78	0.90	0.95	19	4.6	125	173	70	120	133
GPLB 5	100	3.40	4.60	3.70	20	17.0	125	335	70	278	253
GPLB 6	100	5.65	5.80	5.90	20	28.0	125	532	70	475	253
GPLB 7	150	18.00	20.00	20.00	70	86.0	271	532	184	444	375

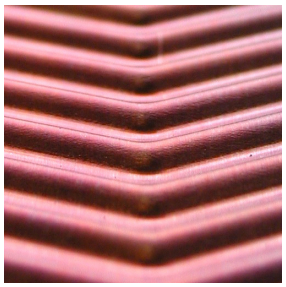
Standard Connections -

Model	GPLB 2	GPLB 25	GPLB 4	GPLB 5	GPLB 6	GPLB 7
Male threads	G 1"	G 1"	G 1"	G 1½"	G 1½"	G 2"
Female threads	G 1"	G 1"	G 1"	G 1½"	G 1½"	G 2"
Soldered connection	28 mm	28 mm	35 mm	35 mm	35 mm	54 mm
Rotalock connection	1" - 14UNS	1" - 14UNS	1¼" 12UNF	1¼" 12UNF	1¼" 12UNF	2¼" 12UNF
DIN-flange						DN50 / PN40

Applications -

- HVAC.
- Tap water.
- Heat pumps.
- Solar technology.
- District heating.
- Combined heating and power stations.
- Chemical plants.
- Refrigeration engineering.





Technical Data -

- 100% stainless steel.
- Operating pressures max.: 25 bar / 30 bar (standard), higher pressures available on request.
- Operating temperatures max.: - 200 °C to + 350 °C (standard).
- CE-certified.

Required data for the best brazed plate heat exchanger design -

FRIGOTHERM uses state-of-the-art computer selection software which enables the team to supply customers with the optimal model size. The data required by FRIGOTHERM to make the optimal model size selection can be found in the GET A QUOTE section of the FRIGOTHERM website - simply click on PLATE HEAT EXCHANGERS, complete the form electronically and submit it to the FRIGOTHERM team. If you still require further assistance, please do not hesitate to contact us - we will be pleased to assist you.