

GBS Series – Brazed Plate Heat Exchangers

Strong types, variable sizes

You attach great importance to flexible sizes and sophisticated technology? Then the GBS plate heat exchangers from the EcoBraze product line by GEA PHE Systems should be your choice. These brazed all-rounders are ideally suited for applications of any size – pressure-resistant up to 30 bar at $\pm 200^{\circ}\text{C}$! This brings quality, economic efficiency and excellent thermal performance to your operations.

Eleven sizes can be used worldwide in the following fields:

- Heating / service water systems
- Floor heating
- Supercoolers and condensers
- Economizers
- Refrigerant evaporators
- Oil coolers and many more industrial applications

To sum it up: The GBS Series enables a wide range of applications at an excellent price/performance ratio.



Features and benefits



Safety Chamber™

Our patented Safety Chamber™ absorbs the stress from thermal shock and pressure pulsations that would damage other brazed plate heat exchangers. When overloaded, encapsulated contact points around the ports take up the forces and stretch, protecting against internal leaks and premature failure. A GEA PHE Systems exclusive safety factor.



Delta Injection™ for Advanced Evaporator - AE line

A GEA PHE Systems patented Delta Injection™ refrigerant distribution system is specially developed for evaporator applications. It provides precise metering of refrigerant to the channels, guaranteeing the highest evaporator performance. The Delta Injection™ is fully integrated into the stainless steel heat-transfer plate.



Robust Plate Design

This special plate design by GEA PHE Systems, the Rolled Edge Lock System™, guarantees a consistent braze joint at the plate overlap and makes for stronger and more leak-proof heat exchanger. The contact points, extended and larger in design, result in stronger braze joints between the plates, thus guaranteeing high heat exchanger strength.



Full-Flow System™

Originally developed for the nickel brazed plate heat exchangers (NP Series), every new plate design is now equipped with the Full-Flow System™. This unique flow system insures continuous flow around the port area to prevent freezing and also feeds the working fluid equally over the channel to guarantee maximum use of the heat transfer area. Additional protection and performance from GEA PHE Systems.

GBS Series – Technical data

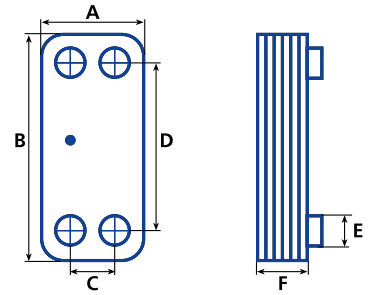
Plate material: Stainless steel AISI 316 / 1.4401

Brazing material: Copper

Performance: Up to 30 bar at $\pm 200^{\circ}\text{C}$

Third party approval: PED (CE), TÜV, further certifications upon request

Features:



Stainless steel, copper-brazed	Advanced Evaporator - AE	A	B	C	D	E	F N = Number of plates	Mass N = Number of plates	Volume	Max. water flow rate	Max. number of plates
Type		Standard dimensions (mm)						(kg)	(Liter/Chanel)	(m ³ /h)	
GBS 100	-	74	204	40	170	15	7.7+2.30xN	0.70+0.050xN	0.025	4	50
GBS 200	-	90	231	43	182	20	10.65+2.35xN	1.10+0.060xN	0.030	6	50
GBS 220	-	90	328	43	279	20	10.65+2.35xN	1.30+0.080xN	0.046	6	50
GBS 240	-	90	464	43	415	20	10.7+2.30xN	2.04+0.140xN	0.070	6	50
GBS 300	-	124	173	73	120	25	13.0+2.35xN	1.20+0.060xN	0.030	10	50
GBS 400	- AE	124	335	73	281	25	13.0+2.30xN	1.60+0.130xN	0.065	10	100
GBS 500	- AE	124	532	73	478	25	9.7+2.25xN	1.76+0.210xN	0.100	10	100
GBS 700	- AE	271	532	200	460	40	11.15+2.35xN	9.60+0.540xN	0.230	27	150
GBS 800	- AE	271	532	161	421	65	13.5+2.35xN	10.0+0.540xN	0.221	70	260
GBS 900	- AE	271	802	161	690	65	11.15+2.35xN	11.5+0.800xN	0.399	70	260
GBS 1000	- AE	386	875	237	723	100	15.65+2.35xN	39.5+1.250xN	0.600	160	360

GEA PHE Systems – Competence in Heat Transfer

With emphasis on the highest quality standards and constant innovations, GEA PHE Systems continues to expand its market position: Within the GEA Process Equipment Division, GEA Ecoflex together with GEA ViEX, GEA WTT, GEA PHE Systems NA and GEA EcoServe forms GEA PHE Systems, the Center of Competence and Service Center for gasketed, fully welded and brazed plate heat exchangers of GEA Group:

- HVAC
- Refrigeration
- Sugar
- Chemical
- Paper
- Food
- Power
- Marine
- General Industry
- Renewable Energy

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