TTZ - Symbiosis of Technology and Knowledge

The name TTZ GmbH & Co. KG stands for:
Zeesen Thermotechnology

Our rapidly growing company offers 30 years of expertise in manufacturing brazed plate heat exchangers of high quality. Thermodynamically optimised plate heat exchangers from TTZ are the result of our in-house research and development efforts and the use of cutting-edge technologies. TTZ combines intelligent plate heat exchanger design solutions with superior quality standards.

Thermotechnik Zeesen:
Intelligent heat transfer

Kompetenzen

- Over 30 years experience
- Standard and custom solutions
- Development projects
- Modular construction
- DIN EN ISO 9001 certified

2. Company philosophy

Thermotechnik Zeesen - a symbiosis of experience, technology and flexibility.

Relationships based on trust with business partners, customers and employees form the basis for shared success, respectful energy management and our joint responsibility for sustainability.

Thermotechnology as a matter of conviction.
That is the TTZ philosophy.

Die Philosophie

- Close customer relations and trust
- Technology and tradition
- Quality and experience
- Sustainability
- Innovation and flexibility

3. Brazed plate heat exchangers

TTZ is a specialist for brazed plate heat exchangers – for many good reasons:

Brazed plate heat exchangers facilitate efficient and economically sensible energy use in technical systems. They are equally suited for cooling and heating technology. With their high level of efficiency and broad range of specifications depending on application, our plate heat exchangers are truly all-rounders. TTZ specialised in brazed plate heat exchangers because they are currently the most efficient heat exchangers. In addition to our copper-brazed and non-copper brazed series, TTZ naturally also fills orders for customised devices and small series production.

Thermotechnik Zeesen is the specialist for brazed plate heat exchangers made in Germany.

Anwendungsbereiche

- Cooling technology
- Chemical plants
- Building services
- Heat pumps

4. Brazed plate heat exchangers ZC series

Copper soldered ZC series - Our classics

Copper brazed heat exchangers have been successful on the market and are highly versatile in their application. TTZ devices stand out due to high efficiency combined with compact size, excellent thermodynamic properties and their good value for money.

We offer copper brazed heat exchangers of high quality and a variety of designs. The devices can be optimised according to the customer needs.

Features

- High efficiency
- Compact size
- Pressure range: 0 to 40 bar
- Higher pressure levels on request
- Temperature range: -200 °C to +200 °C
- CE certified

5. Brazed plate heat exchangers ZD series

Non-copper brazed ZD series - Our specialists:
Top values in terms of chemical resistance, durability and health protection

Our ZD series devices were developed especially for applications in chemical plants and laboratories, i.e. for applications involving highly corrosive substances, such as hot oils.
ZD devices are durable and efficient.
Another advantage of our ZD devices compared to nickel-base brazed plate heat exchangers is the option of using them in the drinking water sector.
The health of consumers is protected as a result of the devices' low nickel content. State-of-the-art brazing prevents undesirable reactions to dissolved copper and nickel ions in drinking water.

Features

- 100 % high-grade steel
- Developed especially for
- corrosive substances
- Pressure range: 0 to 30 bar
- Higher pressure levels on request
- Temperature range: -200 °C to +350 °C
- CE certified

6.1. Brazed plate heat exchanger ZC22 asym

Z22Asym - specifically for water heating

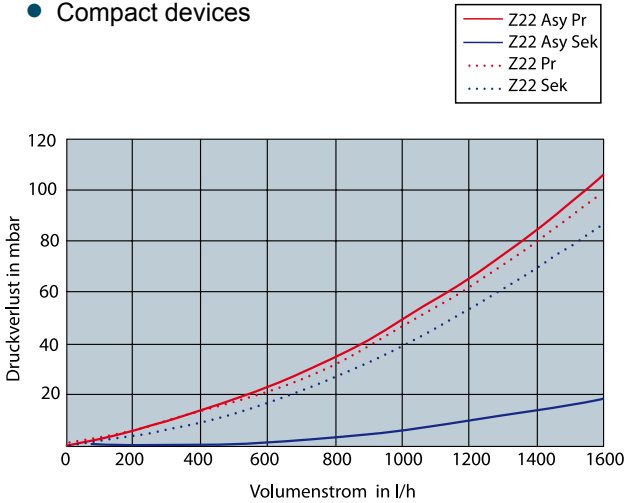
The asymmetric plate configuration combines maximum heat transfer with minimal secondary-side pressure drop.

When tested against traditional plate arrays, our Z22Asym displays comparable heating performance and a comparable drop in pressure on the primary side (district heating side). The secondary-side pressure drop amounts to only ¼ of the standard device.

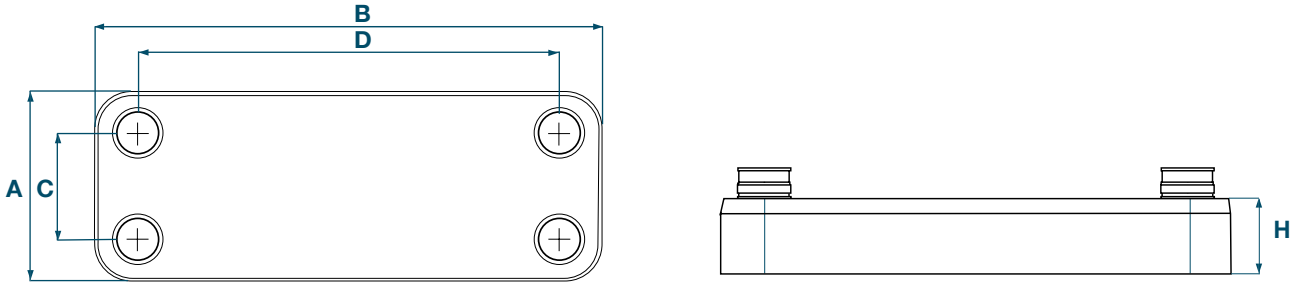
See figure alongside depicting the Z22 and Z22Asym under identical loading conditions.

Benefits

- Minor pressure drop on hot water side
- Suitable for smaller pumps
- Reduced energy consumption
- Fewer plates
- Compact devices



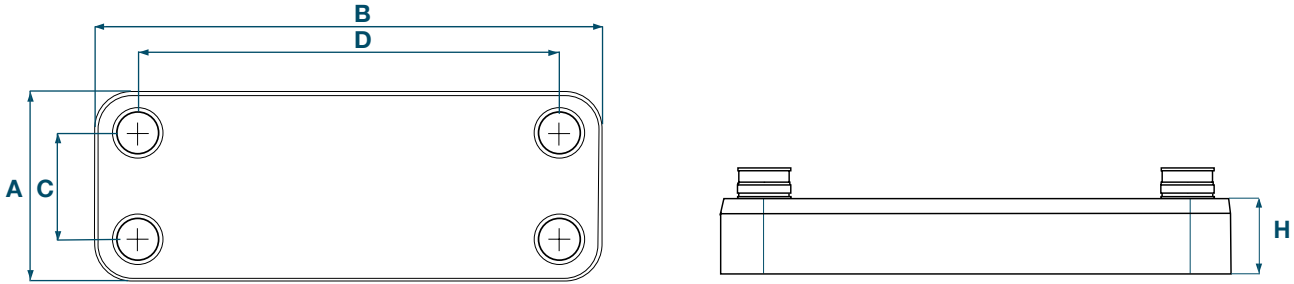
6.2. Brazed plate heat exchangers ZC2+ZD2



PHE	Maximum number of plates	Heat exchanger area	Primary volume	Secondary volume	Volume flow	Weight	Dimensions				
							A	B	C	D	H
		[m²]	[l]	[l]	[m³/h]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
ZC2/ZD2	50	0,71	0,79	0,83	15	4,8	90	237	70	188	133

All figures refer to the maximum number of plates.

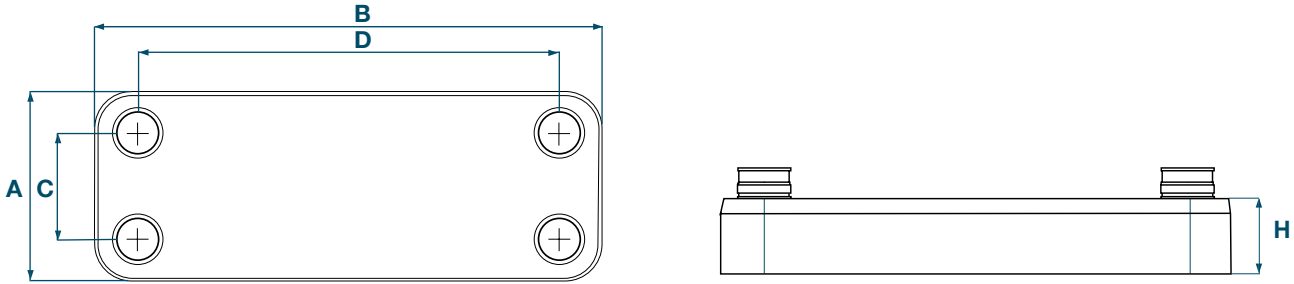
6.3. Brazed plate heat exchangers ZC22+ZD22



PHE	Maximum number of plates	Heat exchanger area	Primary volume	Secondary volume	Volume flow	Weight	Dimensions				
							A	B	C	D	H
		[m²]	[l]	[l]	[m³/h]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
ZC22/ZD22	50	1,06	1,13	1,18	15	5,2	90	328	41	278	133

All figures refer to the maximum number of plates.

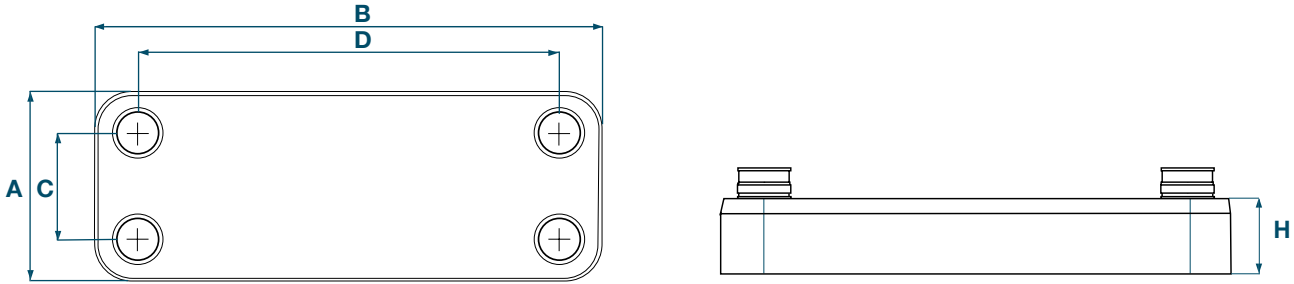
6.4. Brazed plate heat exchangers ZC24 + ZD24



PHE	Maximum number of plates	Heat exchanger area	Primary volume	Secondary volume	Volume flow	Weight	Dimensions				
							A	B	C	D	H
		[m²]	[l]	[l]	[m³/h]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
ZC24/ZD24	50	1,56	1,61	1,68	15	10,3	90	458	41	408	133

All figures refer to the maximum number of plates.

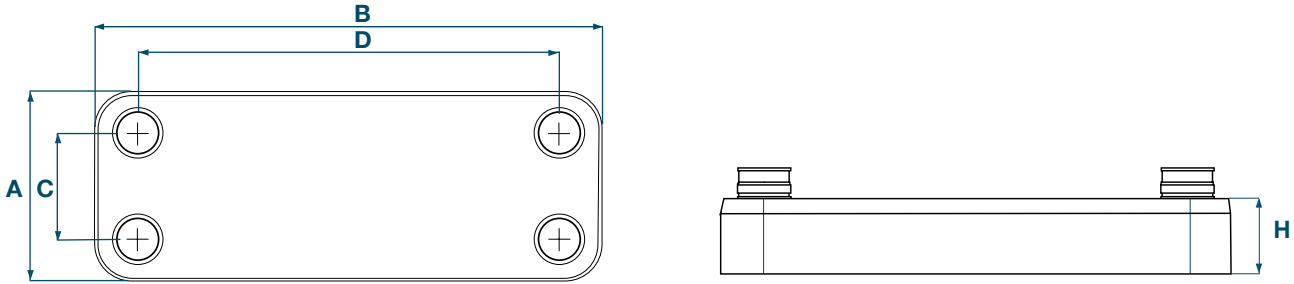
6.5. Brazed plate heat exchangers ZC4 + ZD4



PHE	Maximum number of plates	Heat exchanger area	Primary volume	Secondary volume	Volume flow	Weight	Dimensions				
							A	B	C	D	H
		[m²]	[l]	[l]	[m³/h]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
ZC4/ZD4	50	0,66	0,79	0,83	19	4,5	125	173	70	120	133

All figures refer to the maximum number of plates.

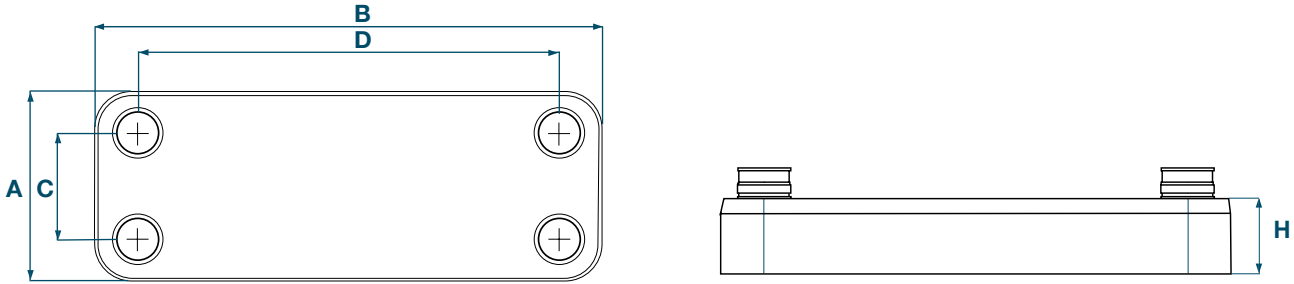
6.6. Brazed plate heat exchangers ZC42 + ZD42



PHE	Maximum number of plates	Heat exchanger area	Primary volume	Secondary volume	Volume flow	Weight	Dimensions				
							A	B	C	D	H
		[m²]	[l]	[l]	[m³/h]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
ZC42/ZD42	100	3,15	3,38	3,45	20,0	17,0	125	334	70	278	255

All figures refer to the maximum number of plates.
Our devices ZC42 und ZD42 are available as H and L embossings.

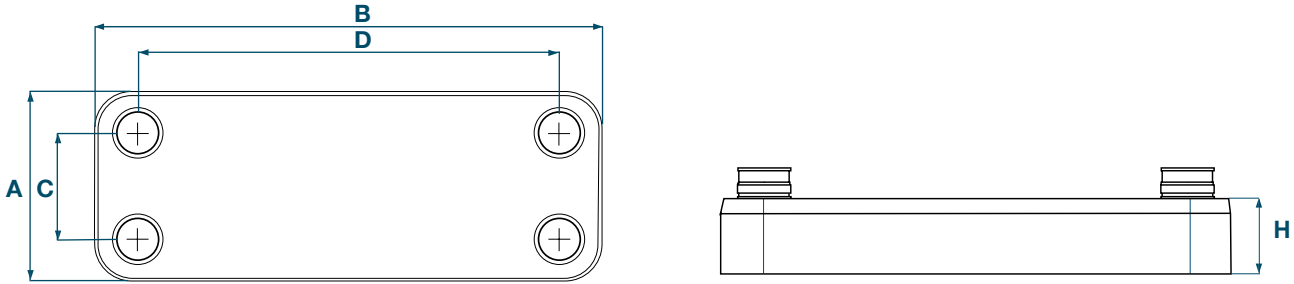
6.7. Brazed plate heat exchangers ZC43 + ZD43



PHE	Maximum number of plates	Heat exchanger area	Primary volume	Secondary volume	Volume flow	Weight	Dimensions				
							A	B	C	D	H
		[m²]	[l]	[l]	[m³/h]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
ZC43/ZD43	100	5,4	5,54	5,65	20,0	27,6	125	532	70	475	255

All figures refer to the maximum number of plates.
Our devices ZC43 und ZD43 are available as H and L embossings.

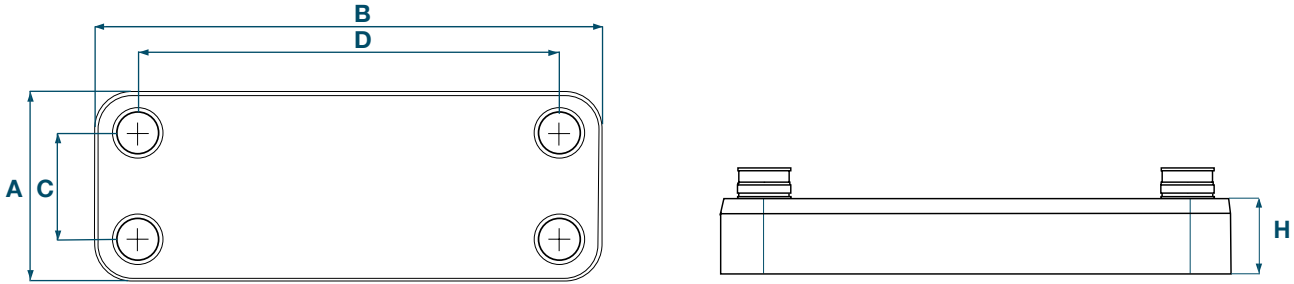
6.8. Brazed plate heat exchangers ZC6 + ZD6



PHE	Maximum number of plates	Heat exchanger area	Primary volume	Secondary volume	Volume flow	Weight	Dimensions				
							A	B	C	D	H
		[m²]	[l]	[l]	[m³/h]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
ZC6/ZD6	150	16,8	18,80	19,05	50	84,8	271	532	184	444	375

All figures refer to the maximum number of plates.
Our devices ZC6 und ZD6 are available as H and L embossings.

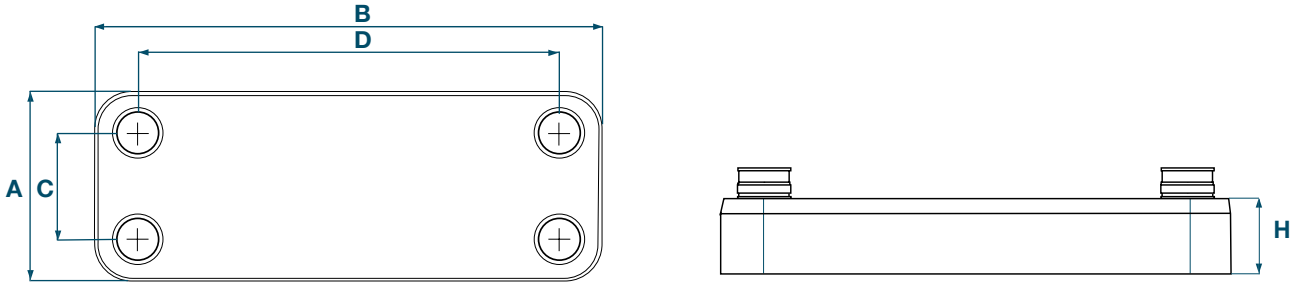
6.9. Brazed plate heat exchangers ZC61 + ZD61



PHE	Maximum number of plates	Heat exchanger area	Primary volume	Secondary volume	Volume flow	Weight	Dimensions				
							A	B	C	D	H
		[m²]	[l]	[l]	[m³/h]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
ZC61/ZD61	150	16,8	18,80	19,05	80	82,2	271	532	179	439	375

All figures refer to the maximum number of plates.
Our devices ZC42 und ZD42 are available as H and L embossings.

6.10. Brazed plate heat exchangers ZC62



PHE	Maximum number of plates	Heat exchanger area	Primary volume	Secondary volume	Volume flow	Weight	Dimensions				
							A	B	C	D	H
		[m²]	[l]	[l]	[m³/h]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
ZC62 /ZD62	150	26	28,6	29	120	120,9	271	800	161	690	375

All figures refer to the maximum number of plates.
Our devices ZC62 und ZD62 are available as H and L embossings.

7. Survey ZC + ZD

PHE	Maximum number of plates	Heat exchanger area	Primary volume	Secondary volume	Volume flow	Weight	Dimensions				
							A	B	C	D	H
		[m²]	[l]	[l]	[m³/h]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
ZC2 / ZD2	50	0,71	0,79	0,83	15	4,8	90	238	41	188	133
ZC22 / ZD22	50	1,06	1,13	1,18	15	5,2	90	328	41	278	133
ZC24 / ZD24	50	1,56	1,61	1,68	15	10,3	90	458	41	408	133
ZC4 / ZD4	50	0,66	0,79	0,83	19	4,5	125	173	70	120	133
ZC42 / ZD42	100	3,15	3,38	3,45	20	17,0	125	334	70	278	255
ZC43 / ZD43	100	5,4	5,54	5,65	20	27,6	125	532	70	475	255
ZC6 / ZD6	150	16,8	18,80	19,05	50	84,8	271	532	184	444	375
ZC61 / ZD61	150	16,8	18,80	19,05	80	82,2	271	532	179	439	375
ZC62/ ZD62	150	26	28,6	29	120	120,9	271	800	161	690	375

All figures refer to the maximum number of plates.

8. Connectors and ports ZC and ZD

Connectors and ports ZC and ZD						
PHE	External thread [inch]	Internal thread [inch]	Solder connection [mm]			Flange
ZC2 / ZC22; ZC24; ZD2; ZD22; ZD24	½ ¾ 1	½ ¾ 1	6,4 13,0 18,3	10,3 14,3 22,3	12,3 16,3 28,3	DIN2635 DN25 | PN40
ZC4; ZC42; ZC43; ZD4; ZD42; ZD43;	¾ 1 1 ¼	½ ¾ 1	8,4 13,0 22,3	10,3 15,3 28,3	12,3 15,3 35,1	DIN2635 DN40 | PN40
ZC6; ZD6	2 2½	½ 2	28,3	35,1	54,05	DIN2635 DN25 | PN40 DIN2635 DN40 | PN40 DIN2635 DN50 | PN40
ZC61; ZD61			54,05			DIN2635 DN50 | PN40
ZC62; ZD62			70,3			Compac DN65

Further sizes and connections are available on request.

Contact

Technical distribution

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2014 | 15