



Thermal Systems/

Plate Heat Exchanger

Fluid / Fluid Coolers

B-Line

**be different.
make a difference.**

Brazed Plate Heat Exchangers

B-Line



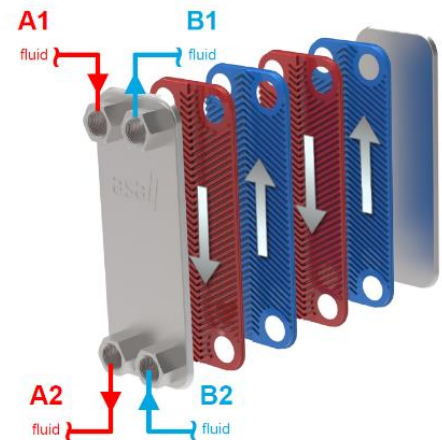
Design

The asa B plate heat exchanger is designed for maximum heat transfer, using profiled plates of acid proof stainless steel. The plates form channels through which oil and water pass (alternating every other channel). At the front and back side of the plate package there are cover plates. The cooler plates are brazed together at all outer and inner points of contact. The cooler can be installed in charge-pump circuits as well as in return lines with high pressure variations. This product is also suitable for water, air and gas.

Advantages

The benefits of plate heat exchangers are:

- **High corrosion resistant**
All plates use stainless steel material. Brazing material is copper. This material offers a high corrosion resistance against a variety of fluids.
- **Resistant to high pressures**
Thanks to the brazing process, plate heat exchangers are pressure resistant up to 435 psi.
- **High thermal efficiency**
The design of the plates is made in a way to achieve highest thermal transfer in counter flow arrangement.
- **High working temperature**
Brazed Plate Heat Exchanger's steel material structure offers a high working temperature range up to 437 F°.
- **Compactness**
Brazed Plate Heat Exchangers are much lighter in weight and smaller in size, if compared to conventional shell tube heat exchangers. This advantage makes Brazed Plate Heat Exchanger easier to install and replace.
- **Low maintenance**
The high cooling performance keeps the fluids in its best operation conditions, increases the period to fluid change and other maintenance processes.



Applications



Brazed Plate Heat Exchangers

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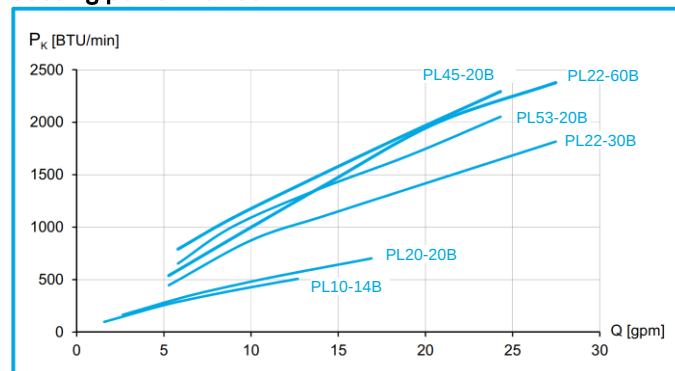
General Data

max. working temperature	+437°F
test pressure	653 PSI
max. pressure	435 PSI
chevron plates	steel 1.4401
cover plates	steel 1.4306
connectors	steel 1.4306
solder	copper
bracket	powder coated steel

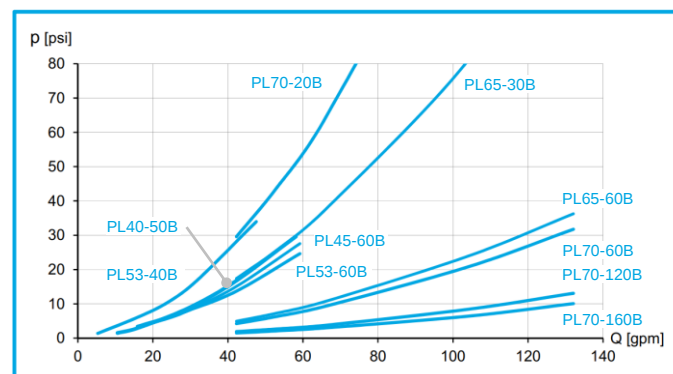
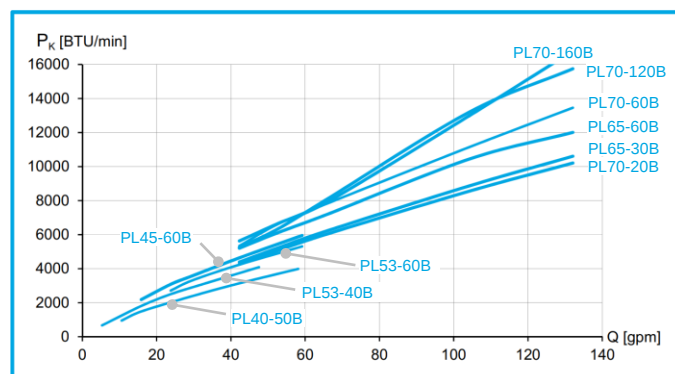
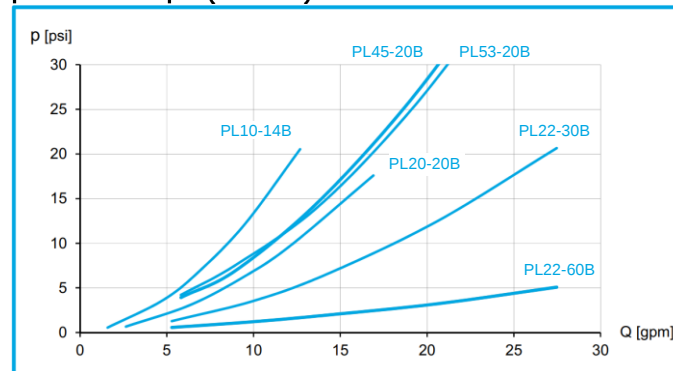
The shown performance curves are created at an oil / water ratio of 2:1 with hydraulic oil ISO VG 32 at an oil inlet temperature of 140°F and a water entrance of 68°F. Please contact us for other technical parameters to select the optimal cooler for you.

Overview

cooling performance



pressure drops (oil side)

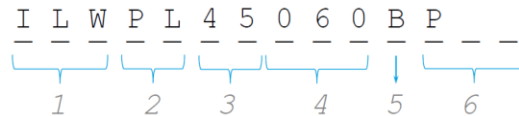


Brazed Plate Heat Exchangers

B-Line



Order Code



1 Product Category

I	Industrial Application
L	Heat exchanger
W	Oil/Water cooling

2 Product Series

PL	Plate-Heat-Exchanger
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3 Size

10	10
20	20
22	22
40	40
45	45
53	53
65	65
70	70

4 Number of plates

060	e.g. 60 plates (all available standard combinations listed in below table)*
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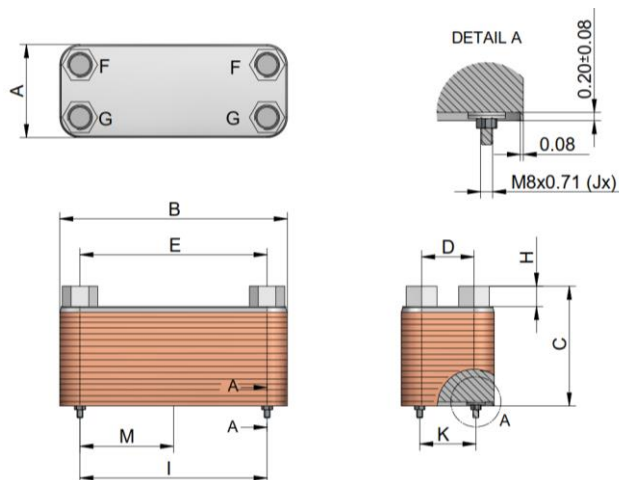
*...any other configuration is on request

5 Series

B	B Generation
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6 Index / Customized

PU00	mounting brackets
KU00	standard sales kit
KU01	special / customized specifications; to be advised by asa

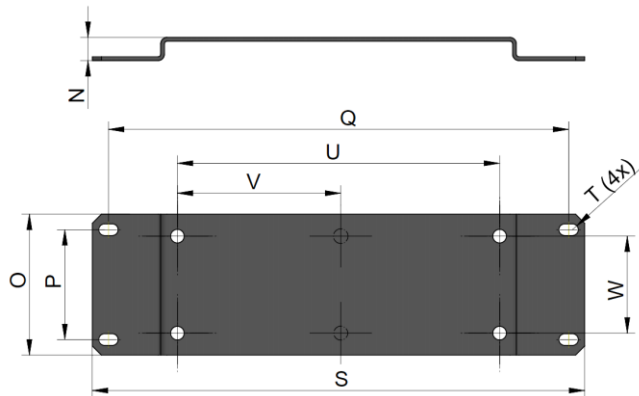


Dimensions

order number	description	A	B	C	D	E	F	G	H	I	J	K	M	weight
		[in]	[in]	[in]	[in]	[in]			[in]	[in]	#bolt	[in]	[in]	[lbs]
ILWPL10014BKU00	ASA – PL 10-14 B	3.07	8.19	2.76	1.65	6.77	3/4-16 UNF	NPT 1/2"	1.06	4.72	2	-	-	4
ILWPL20020BKU00	ASA – PL 20-20 B	3.07	8.19	3.27	1.65	6.77	1 1/16-12 UNF	NPT 3/4"	1.06	5.91	2	-	-	6
ILWPL22030BKU00	ASA – PL 22-30 B	4.17	12.05	4.21	1.97	9.84	1 5/16-12 UNF	NPT 3/4"	1.06	9.84	4	1.57	-	13
ILWPL22060BKU00	ASA – PL 22-60 B	4.17	12.05	6.89	1.97	9.84	1 5/16-12 UNF	NPT 3/4"	1.06	9.84	4	1.57	-	20
ILWPL40050BKU00	ASA – PL 40-50 B	4.88	11.97	6.18	2.76	9.84	1 5/16-12 UNF	NPT 1"	1.06	9.84	4	2.95	-	20
ILWPL45020BKU00	ASA – PL 45-20 B	4.17	20.59	3.35	1.97	18.35	1 5/16-12 UNF	NPT 1"	1.06	17.72	4	2.36	-	15
ILWPL45060BKU00	ASA – PL 45-60 B	4.17	20.59	6.93	1.97	18.35	1 5/16-12 UNF	NPT 1"	1.06	17.72	4	2.36	-	33
ILWPL53020BKU00	ASA – PL 53-20 B	4.65	20.67	3.35	2.48	18.50	1 5/16-12 UNF	NPT 1"	1.06	17.72	4	2.95	-	20
ILWPL53040BKU00	ASA – PL 53-40 B	4.65	20.67	5.12	2.48	18.50	1 5/16-12 UNF	NPT 1"	1.06	17.72	4	2.95	-	29
ILWPL53060BKU00	ASA – PL 53-60 B	4.65	20.67	6.89	2.48	18.50	1 5/16-12 UNF	NPT 1"	1.06	17.72	4	2.95	-	40
ILWPL65030BKU00	ASA – PL 65-30 B	7.13	23.98	5.00	3.62	20.43	1 7/8-12 UNF	NPT 1 1/2"	1.06	21.26	6	4.72	10.63	44
ILWPL65060BKU00	ASA – PL 65-60 B	7.13	23.98	8.31	3.62	20.43	1 7/8-12 UNF	NPT 1 1/2"	1.06	21.26	6	4.72	10.63	68
ILWPL70020BKU00	ASA – PL 70-20 B	9.69	20.79	3.50	6.85	17.95	1 7/8-12 UNF	NPT 1 1/2"	1.06	16.54	6	5.91	8.27	40
ILWPL70060BKU00	ASA – PL 70-60 B	9.69	20.79	7.13	6.85	17.95	1 7/8-12 UNF	NPT 1 1/2"	1.06	16.54	6	5.91	8.27	86
ILWPL70120BKU00	ASA – PL 70-120 B	9.69	20.79	12.60	6.85	17.95	1 7/8-12 UNF	NPT 1 1/2"	1.06	16.54	6	5.91	8.27	154
ILWPL70160BKU00	ASA – PL 70-160 B	9.69	20.79	16.22	6.85	17.95	1 7/8-12 UNF	NPT 1 1/2"	1.06	16.54	6	5.91	8.27	201

This data sheet and the corresponding technical drawings serve solely as a general guideline and a technical overview of our products. Please contact us for additional information. We always try to keep the technical data up to date. However, due to constant development, no guarantee can be given for the correctness of the information (or printing errors). This applies to general properties such as dimensions, colors and weight. Any cooling performances and general technical values indicated in this catalogue are measured at a test benches according to asa testing procedures or calculated based on such tests and may therefore deviate from values obtained by test procedures from other manufacturers. The performance can vary by around +/- 15%. All information and calculation values are provided to the best of our knowledge, they do not represent intrinsic product properties and it is strongly recommended that the product is tested under the actual operating conditions. All drawings shown here are to be understood as schematic representations. For exact dimensions and the applicable tolerances, please ask for the corresponding scale drawings. Any form of liability is excluded for the information included in this datasheet. asa GmbH reserves the right to modify the product without any separate notification. This refers to both technical data and the product itself. Furthermore, it is herewith specified that the datasheet and the corresponding scale drawings are not a substitute for the assembly, installation and operating instructions.

Mounting brackets



Dimensions

order number	description	N	O	P	Q	S	T slot hole	U	V	W	weight
		[in]	[in]	[in]	[in]	[in]		[in]	[in]	[in]	[lbs]
ILWPZMON10U00	Mounting plate PL 10-	0.71	2.28	1.30	8.98	9.96	0.35 x 0.59	4.72	-	-	0.9
ILWPZMON20U00	Mounting plate PL 20-	0.71	2.76	1.97	10.04	11.02	0.35 x 0.59	5.91	-	-	1.1
ILWPZMON22U00	Mounting plate PL 22-	0.71	2.91	1.97	13.78	14.76	0.35 x 0.59	9.84	-	1.57	1.5
ILWPZMON40U00	Mounting plate PL 40-	0.71	4.29	3.35	14.06	15.04	0.35 x 0.59	9.84	-	2.95	2.2
ILWPZMON53U00	Mounting plate PL 53-	0.71	4.21	3.35	21.85	22.83	0.35 x 0.59	17.72	-	2.95	3.3
ILWPZMON65U00	Mounting plate PL 65-	0.71	6.30	4.72	25.20	26.77	0.43 x 0.79	21.26	10.63	4.72	5.7
ILWPZMON70U00	Mounting plate PL 70-	0.71	10.00	9.06	21.73	22.83	0.43 x 0.79	16.54	8.27	5.91	7.7

Order number with mounting brackets

cooler number with mounting brackets	included
ILWPL10014BPU00	ILWPZMON10U00
ILWPL20020BPU00	ILWPZMON20U00
ILWPL22030BPU00	ILWPZMON22U00
ILWPL22060BPU00	
ILWPL40050BPU00	
ILWPL45020BPU00	ILWPZMON40U00
ILWPL45060BPU00	
ILWPL53020BPU00	
ILWPL53040BPU00	
ILWPL53060BPU00	
ILWPL65030BPU00	ILWPZMON53U00
ILWPL65060BPU00	
ILWPL70020BPU00	
ILWPL70060BPU00	ILWPZMON65U00
ILWPL70120BPU00	
ILWPL70160BPU00	
ILWPL70160BPU00	



Please contact us for details or get further information at www.asahydraulik.com or support@asahydraulik.com. Please read the manual before operation.



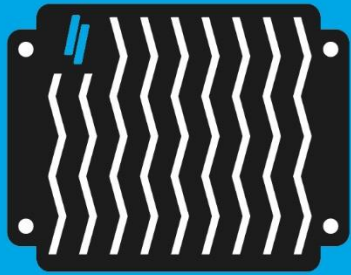
Company

asa stands for innovations and reliable solutions that are already being used by our customers in various mobile and stationary applications. With over 40 years of experience in thermal systems, connection technology, and fluid control, we have become a global leader in advanced fluid power solutions. Our experience fosters progress to grant you competitive pricing, consistent product performance, and exceptional reliability.

History

1980-1990

- Hydraulic components distribution, service and system integration
- Manufacture of valves and components
- Heat exchanger Shell & Tube platform "Silver ST80"



Thermal Management Systems

Our heat exchangers are designed and produced with an innovative spirit and a passion for technology, ensuring highest performance and quality.

- Bar & Plate: oil and water/glycol coolers
- Tube & Fin: coolant cooler, silent pump, electronics cooler
- Shell & Tube

1990 - 2000

- Specializing on heat exchanger market
- Manufacture first modular cooler system in plate & bar "OKO" (2 brazing lines)
- Foundation of asa hydraulic of America Inc./ USA



Ventilation & Drive

We offer a broad range of ventilation solutions. The installation space influences the choice of the most suitable airflow technology, thus ensuring the optimal configuration for volume flow, efficiency and noise reduction.

- Ventilation: adjustable fan blade systems
- Six phase sensorless VR-motor
- Electronic fan speed control, temperature control

2000 - 2010

- Foundation of asa Products Pty Ltd / Australia
- Foundation of asa Hydraulik Technology
- Patents:
 - AUC - 1st flexible connectors
 - ABP - 1st intergated bypass tube
 - ATT - asa extruded profil



Fluid Controls

The asa gerotor pumps meet the demands of modern fluid power systems, while our centrifugal water pump units are designed primarily to create compact, cost-efficient cooling circuits for electric devices, such as battery packs and electric motors.

- Gerotor pumps
- Centrifugal water pumps

2010 - 2020

- New R&D Center / Austria
- Manufacture of water/oil pumps
- Foundation of asa heat exchanger Pvt. Ltd / India
- Patents:
 - x-changer "Fusion of heat exchanger & ventilation"
 - Multiaxial silent absorber



Connection Technology

Our connection product collection fills technological gaps in various markets and applications.

- Silent absorbers
- Multi-axle vibration absorbers
- Expansion joints
- Hybrid SAE/DIN shut-off valves

2020 - today

- New technology of six phase sensorless VR-motors
- Manufacture ST heat exchanger
- Manufacture X wings (new lead fins)
- Foundation of asahydraulic do Brasil Pvt. Ltd / Brazil
- Patents:
 - META - microchannel with flexible lead fins
 - AHM - hybrid shell tube heat exchanger

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