

# Nickel Brazed Plate Heat Exchanger for Fuel Cell Systems

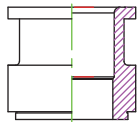


## General Information

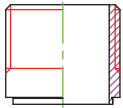
Clean energy is the way of the future. Kaori latest heat transfer solution has been given leading advantage in the Fuel Cell industry. Thanks to Kaori innovative design and customized solutions, several fuel cell industry leaders are enjoying pair with Kaori to develop the next generation of renewable energy systems with compactness. To increase the overall efficiency of fuel cells systems, high performance and top quality heat exchangers are vital role to provide better thermal management (cooling) system, heat recovery, humidity control and reforming reactions processes.

To meet the industry goal of high reliability, simplification and cost reduction, Kaori develops 3 different series and 9 different sizes of heat exchanger with special plate design fulfill wide availability and low to high temperature requirements. The optimal BPHEs design fits perfect balance of pressure drop, capacity and cost.

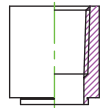
## Connectors



Soldered  
Ø13.0mm

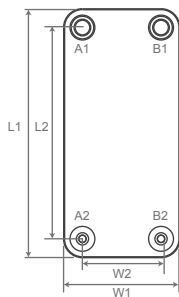


1-1/4"  
Male Thread



PT 3/4"  
Female Thread

## Dimensions



Model	L1 (mm)	L2 (mm)	W1 (mm)	W2 (mm)
010	136	110	61	27
015	155	120	75	40
025	205	172	73	42
030	194	154	80	40
050/ 051	306	250	106	50
070	304	250	124	70
095/ 096	522	466	106	50
205/ 206	528	456	246	174
210	527	430	245	148

## System

PEMFC, SOFC, m-CHP(Combined Heat & Power), CCP(Combined Cooling & Power)

## Application

Residential, Space Heating, Industrial Processes, Stationary Application, Vehicle Transportation, Automotive, Renewable Power Generation.

## Specifications

Type	K Series	
Model	K025, K030, K050, K070, K205, K210 (Primary/ Secondary)	
Brazing Material	Nickel	
Max. Working Temperature (°C)	200	
Max. Working Pressure (bar)	10/ 10	
Min. Test Pressure (bar)	15/ 15	

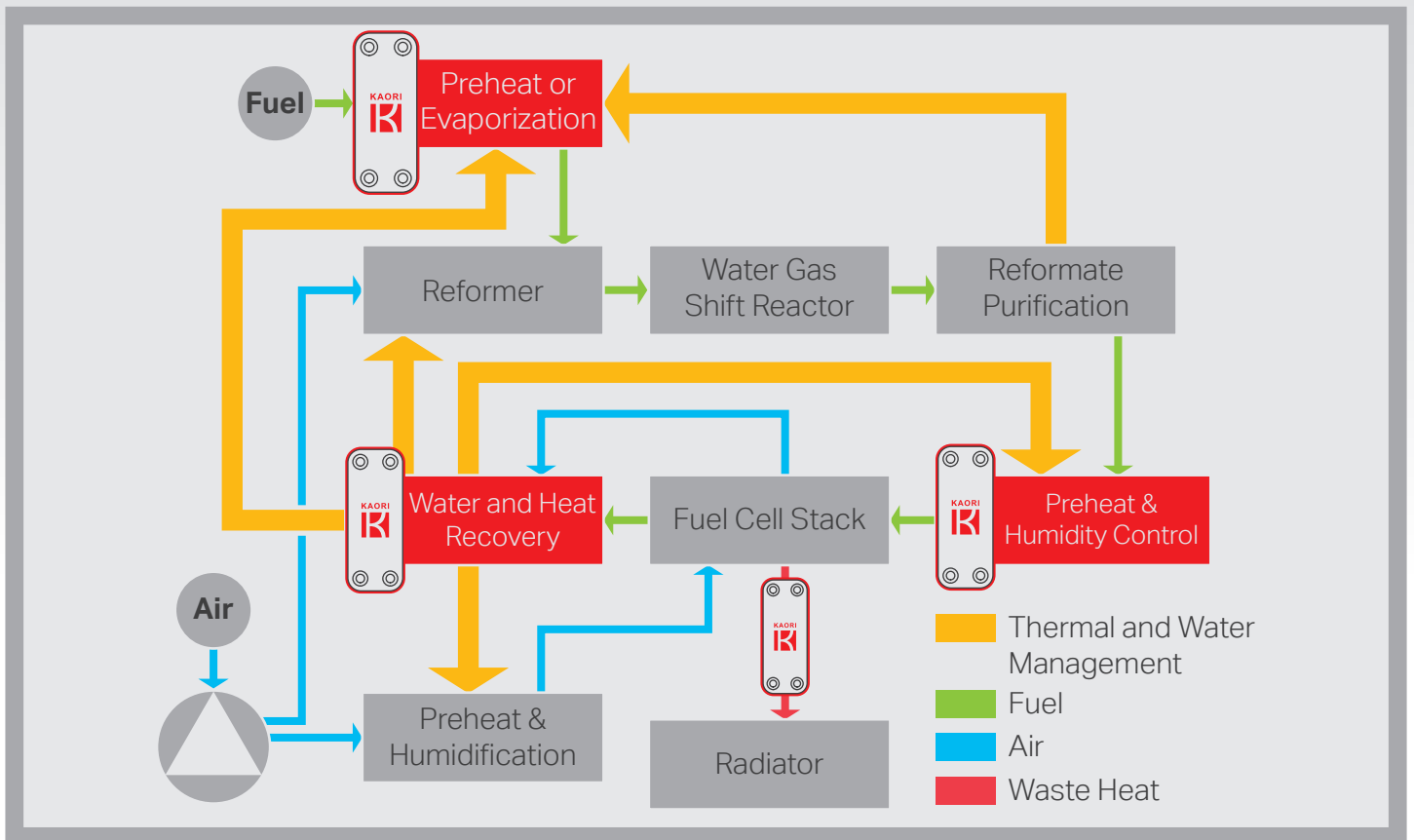
Type	H Series				
Model	H050, H095, H205 (Primary/ Secondary)			H051, H096, H206 (Primary/ Secondary)	
Brazing Material	Nickel			Nickel	
Max. Working Temperature (°C)	0~650	~700	~800	~900	0~550
Max. Working Pressure (bar)	10	7	3	2	10
Min. Test Pressure (bar)	15				15

Type	Z Series	
Model	Z015 (Primary/ Secondary)	
Brazing Material	Nickel	
Max. Working Temperature (°C)	200	
Max. Working Pressure (bar)	10/ 10	
Min. Test Pressure (bar)	15/ 15	



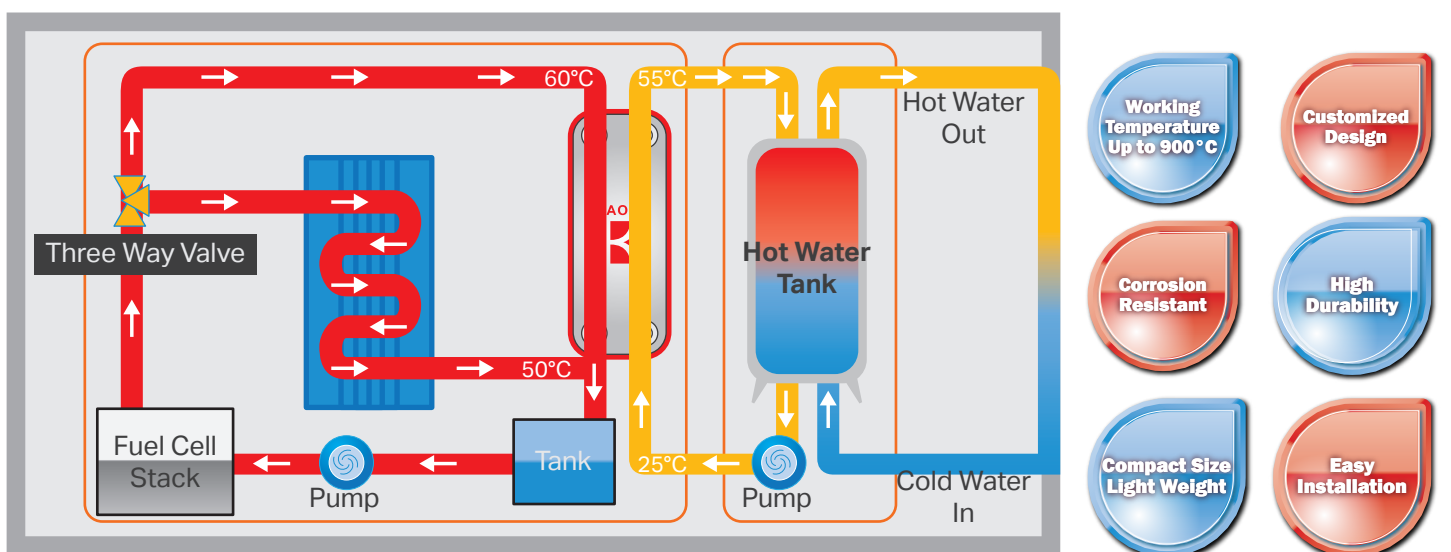
## Thermal and Water Management of Fuel Cell System

- 1) BPHE for heat recovery from fuel cell stack to produce hot water
- 2) BPHE for heat recovery for the burner in the reformer
- 3) BPHE for fuel reformation in the reformer



## BPHE for Cost-Effective Fuel Cell Systems

Heat recovery from fuel cell stack to produce hot water.



This information is intended to serve as a reference and is not subject to guarantee. Precise inquiries are necessary for accurate information regarding performance specifications and suitability under specific working conditions.

Responsibility rests on purchasers to decide whether products are appropriate for use before purchasing. Kaori is not liable for corrosion of products and/or other equipment from use of products. Kaori reserves the right to make changes to this information without prior notice.

