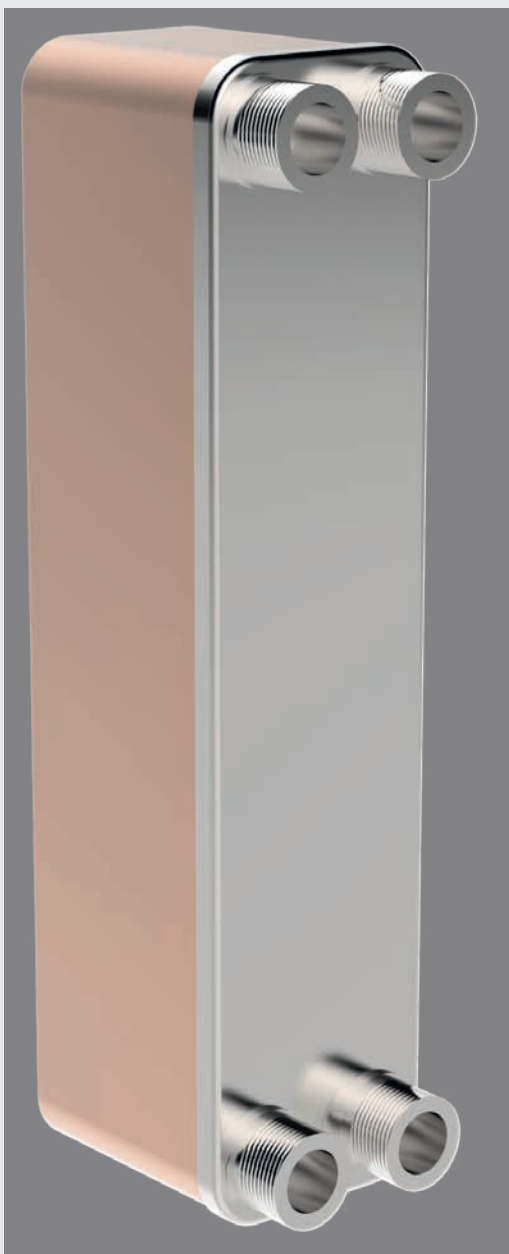


Brazed plate heat exchangers



industrial

Brazed heat exchangers

P and WP series

The brazed plate heat exchangers (P and WP series) are used in heating, cooling and heat recuperation systems. The quality of the parts and the brazing process, which is carried out with care, make a trustworthy product. The plate design makes it possible to reach higher heat exchange performances and lower pressure loss. Moreover, the product has an elevated resistance to high temperatures and pressure.

Our brazed plate heat exchangers can be used with many kinds of fluids in various combinations (ex: water/water, water/oil, water/steam, steam/oil, Freon/water, etc.)

Advantages

- compact design
- reasonable weight
- high heat exchange efficiency
- high temperature range (-160/+ 195 °C)
- high max operating pressure (30 bar)

Main applications

- heating/cooling of technical water or industrial fluids
- evaporation and condensation of refrigerant gas
- hydraulic separation of the circuit
- heat recuperation in domestic applications and industrial processes
- functioning with a wide range of compatible fluids
- mechanical and chemical resistance of the materials

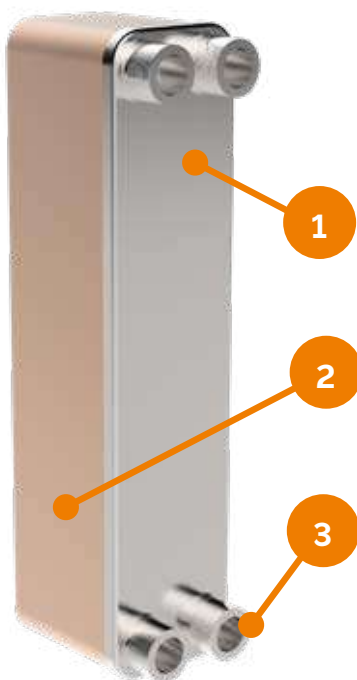


Brazed heat exchanger Range



Model	WP4	P4	P7	P15	P30
Plate surface (m²)	0,03	0,02375	0,07	0,15	0,30
Nominal pressure	PN16	PN30	PN30	PN30	PN30
Standard coupling	1"	1"	1 1/4"	2"	2 1/2"
PP (mm)	13+2,3xN*	9+2,4xN*	9+2,57xN*	10+2,48xN*	11+2,90xN*
Ht (mm)	335	310	526	530	782
Lt (mm)	124	111	120	256	350
Z1 (mm)	281	250	473	439	655
Z2 (mm)	73	50	66	177	220
PC (mm)	20	24	27	27	27

*Plate No.

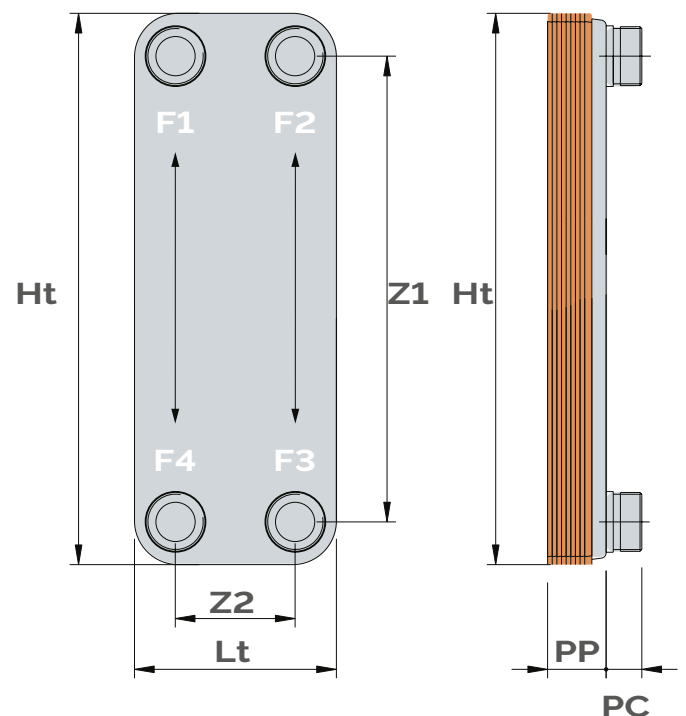


Legend

1. Front plate
2. Brazing
3. Coupling

Couplings

Primary: Inlet F1
Primary: Outlet F4
Secondary: Inlet F3
Secondary: Outlet F2



Accessories

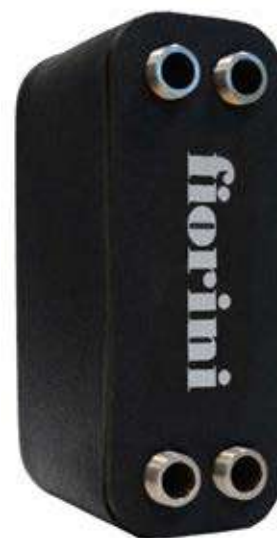
Insulation, Couplings

WP4, P4, P7 Serie: PE insulation thermoformed removable with velcro strips.

Model	Plates threshold	Code	Price
WP4	up to 14 plates	843090066X	
	up to 20 plates	843090067X	
	up to 30 plates	843090068X	
	up to 40 plates	843090069X	
	up to 50 plates	843090070X	
P4	up to 14 plates	843090016X	
	up to 20 plates	843090017X	
	up to 30 plates	843090018X	
	up to 40 plates	843090019X	
	up to 50 plates	843090020X	
	up to 60 plates	843090060X	
P7	up to 30 plates	843090050X	
	up to 50 plates	843090051X	
	up to 70 plates	843090052X	

Serie P15 / P30: insulation kit made of sheets of precut adhesive elastomer, finishing tape and assembly instructions.

Model	Plates threshold	Code	Price
P15	from 30 up to 80 plates	843090053X	
	from 81 up to 140 plates	843090054X	
	from 141 up to 200 plates	843090055X	
P30	from 30 up to 80 plates	843090056X	
	from 81 up to 140 plates	843090057X	



threaded standard



free flange upon request

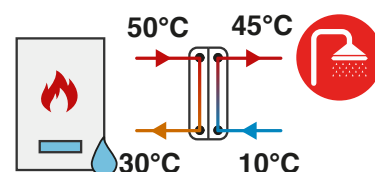
All brazed heat exchangers comes with threaded couplings. Upon request, additional couplings and free flange couplings.

Tables for fast selection - BRAZED

INSTANTANEOUS DHW with LOW temperature source

Project conditions

Circuit	Source - endpoint	T _{IN}	T _{OUT}	P _{MAX}	Fluid
HOT side	Water heater	50°C	30°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O
COLD side	Domestic Hot Water	10°C	45°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O



Power kW	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
	L/h	kPa	L/h	kPa					Dimensions cm	Weight kg
20	868	1	494	0	WP4	20	821021102X		43x22x24	4
25	1085	2	617	1	WP4	20	821021102X		43x22x24	4
30	1302	1	740	0	WP4	30	821021103X		43x22x24	5
35	1519	2	864	1	WP4	30	821021103X		43x22x24	5
40	1736	1	988	0	WP4	40	821021104X		43x22x24	6
50	2170	2	1235	1	WP4	40	821021104X		43x22x24	6
60	2604	2	1482	1	WP4	50	821021105X		43x22x24	8
75	3260	23	1850	7	P7	30	821020852X		60x80x26	11
85	3690	29	2100	9	P7	30	821020852X		60x80x26	11
100	4340	15	2470	5	P7	50	821020856X		60x80x31	15
120	5210	21	2960	7	P7	50	821020856X		60x80x31	15
150	6510	31	3700	11	P7	50	821020856X		60x80x31	15
180	7810	24	4440	8	P7	70	821020858X		60x80x37	19
210	9120	32	5190	11	P7	70	821020858X		60x80x37	19
240	10420	27	5930	10	P15	40	821020865X		60x80x29	28
270	11720	33	6670	12	P15	40	821020865X		60x80x29	28
300	13020	27	7410	10	P15	50	821020866X		60x80x31	32
						*Accessories see pag. 49 (See Model and plates number)				

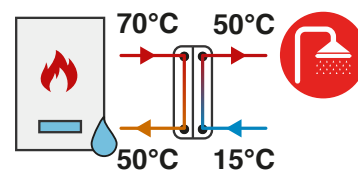
Alternative solution with gasketed heat exchangers: see pag. 38

Tables for fast selection - BRAZED

INSTANTANEOUS DHW with HIGH temperature source

Project conditions

Circuit	Source - endpoint	T _{IN}	T _{OUT}	P _{MAX}	Fluid
HOT side	Water heater	70°C	50°C	16 bar (W/P4) 30 bar (P4-P7-P15-P30)	H ₂ O
COLD side	Domestic Hot Water	15°C	50°C	16 bar (W/P4) 30 bar (P4-P7-P15-P30)	H ₂ O



Power kW	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
	L/h	kPa	L/h	kPa					Dimensions cm	Weight kg
20	875	3	495	1	WP4	14	821021101X		43x22x24	3
25	1094	2	618	1	WP4	20	821021102X		43x22x24	4
30	1312	1	742	0	WP4	30	821021103X		43x22x24	5
35	1531	2	866	1	WP4	30	821021103X		43x22x24	5
40	1750	1	990	0	WP4	40	821021104X		43x22x24	6
50	2187	2	1237	1	WP4	40	821021104X		43x22x24	6
60	2625	2	1484	1	WP4	50	821021105X		43x22x24	8
75	3280	22	1860	7	P7	30	821020852X		60x80x26	11
85	3720	27	2100	9	P7	30	821020852X		60x80x26	11
100	4370	36	2470	12	P7	30	821020852X		60x80x26	11
120	5250	20	2970	7	P7	50	821020856X		60x80x31	15
150	6560	30	3710	10	P7	50	821020856X		60x80x31	15
180	7870	23	4450	8	P7	70	821020858X		60x80x37	19
210	9190	31	5190	11	P7	70	821020858X		60x80x37	19
240	10500	25	5940	9	P15	40	821020865X		60x80x29	28
270	11810	31	6680	12	P15	40	821020865X		60x80x29	28
300	13120	25	7420	10	P15	50	821020866X		60x80x31	32
						*Accessories see pag. 49 (See Model and plates number)				

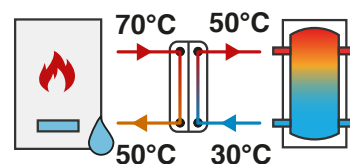
Alternative solution with gasketed heat exchangers: see pag. 39

Tables for fast selection - BRAZED

DHW with STORAGE TANK and HIGH temperature source

Project conditions 1

Circuit	Source - endpoint	T _{IN}	T _{OUT}	P _{MAX}	Fluid
HOT side	Water heater	70°C	50°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O
COLD side	Domestic Hot Water	30°C	50°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O



Power kW	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
	L/h	kPa	L/h	kPa					Dimensions cm	Weight kg
20	875	3	868	2	WP4	14	821021101X		43x22x24	3
25	1094	6	1085	4	WP4	14	821021101X		43x22x24	3
30	1312	9	1302	6	WP4	14	821021101X		43x22x24	3
35	1531	5	1519	4	WP4	20	821021102X		43x22x24	4
40	1750	7	1736	5	WP4	20	821021102X		43x22x24	4
50	2187	13	2170	9	WP4	20	821021102X		43x22x24	4
60	2625	20	2604	15	WP4	20	821021102X		43x22x24	4
75	3281	12	3256	10	WP4	30	821021103X		43x22x24	5
85	3719	16	3690	14	WP4	30	821021103X		43x22x24	5
100	4375	12	4341	10	WP4	40	821021104X		43x22x24	6
120	5250	19	5209	17	WP4	40	821021104X		43x22x24	6
150	6560	30	6510	28	P7	50	821020856X		60x80x31	15
180	7870	23	7810	23	P7	70	821020858X		60x80x37	19
210	9190	31	9120	30	P7	70	821020858X		60x80x37	19
240	10500	25	10420	25	P15	40	821020865X		60x80x29	28
270	11810	31	11720	32	P15	40	821020865X		60x80x29	28
300	13120	25	13020	26	P15	50	821020866X		60x80x31	32
						*Accessories see pag. 49 (See Model and plates number)				

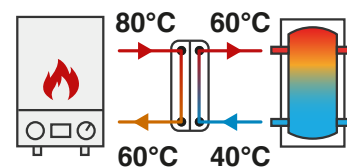
Alternative solution with gasketed heat exchangers: see pag. 40

Tables for fast selection - BRAZED

DHW with STORAGE TANK and HIGH temperature source

Project conditions 2

Circuit	Source - endpoint	T _{IN}	T _{OUT}	P _{MAX}	Fluid
HOT side	Water heater	80°C	60°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O
COLD side	Domestic Hot Water	40°C	60°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O



Power kW	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
	L/h	kPa	L/h	kPa					Dimensions cm	Weight kg
20	879	3	871	2	WP4	14	821021101X		43x22x24	3
25	1098	6	1089	4	WP4	14	821021101X		43x22x24	3
30	1318	9	1308	6	WP4	14	821021101X		43x22x24	3
35	1538	14	1525	9	WP4	14	821021101X		43x22x24	3
40	1758	7	1743	5	WP4	20	821021102X		43x22x24	4
50	2197	12	2179	9	WP4	20	821021102X		43x22x24	4
60	2636	20	2614	15	WP4	20	821021102X		43x22x24	4
75	3295	12	3268	10	WP4	30	821021103X		43x22x24	5
85	3735	16	3704	13	WP4	30	821021103X		43x22x24	5
100	4394	25	4357	20	WP4	30	821021103X		43x22x24	5
120	5272	19	5228	16	WP4	40	821021104X		43x22x24	6
150	6590	19	6536	18	WP4	50	821021105X		43x22x24	8
180	7910	23	7840	22	P7	70	821020858X		60x80x37	19
210	9230	30	9150	29	P7	70	821020858X		60x80x37	19
240	10540	25	10460	25	P15	40	821020865X		60x80x29	28
270	11860	31	11760	31	P15	40	821020865X		60x80x29	28
300	13180	25	13070	25	P15	50	821020866X		60x80x31	32
						*Accessories see pag. 49 (See Model and plates number)				

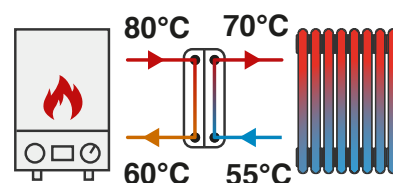
Alternative solution with gasketed heat exchangers: see pag. 41

Tables for fast selection - GASKETED

HEATING with HIGH temperature endpoints

Project conditions 1

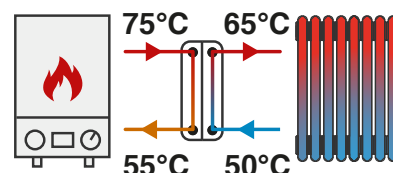
Circuit	Source - endpoint	T _{IN}	T _{OUT}	P _{MAX}	Fluid
HOT side	Water heater	80°C	60°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O
COLD side	Radiators	55°C	70°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O



Power kW	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
	L/h	kPa	L/h	kPa					Dimensions cm	Weight kg
15	659	2	876	2	WP4	14	821021101X		43x22x24	3
25	1098	6	1460	8	WP4	14	821021101X		43x22x24	3
35	1538	5	2044	8	WP4	20	821021102X		43x22x24	4
50	2197	4	2920	7	WP4	30	821021103X		43x22x24	5
75	3295	5	4379	10	WP4	40	821021104X		43x22x24	6
100	4394	7	5839	13	WP4	50	821021105X		43x22x24	8
115	5050	10	6710	16	P7	70	821020858X		60x80x37	19
130	5710	13	7590	20	P7	70	821020858X		60x80x37	19
150	6590	10	8760	17	P15	40	821020865X		60x80x29	28
180	7910	15	10510	24	P15	40	821020865X		60x80x29	28
200	8790	12	11680	20	P15	50	821020866X		60x80x31	32
						*Accessories see pag. 49 (See Model and plates number)				

Project conditions 2

Circuit	Source - endpoint	T _{IN}	T _{OUT}	P _{MAX}	Fluid
HOT side	Water heater	75°C	55°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O
COLD side	Radiators	50°C	65°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O



Power kW	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
	L/h	kPa	L/h	kPa					Dimensions cm	Weight kg
15	658	2	874	2	WP4	14	821021101X		43x22x24	3
25	1096	6	1457	8	WP4	14	821021101X		43x22x24	3
35	1534	5	2039	8	WP4	20	821021102X		43x22x24	4
50	2192	4	2913	7	WP4	30	821021103X		43x22x24	5
75	3288	6	4370	10	WP4	40	821021104X		43x22x24	6
100	4384	7	5827	13	WP4	50	821021105X		43x22x24	8
115	5040	10	6700	16	P7	70	821020858X		60x80x37	19
130	5700	13	7570	20	P7	70	821020858X		60x80x37	19
150	6580	11	8740	17	P15	40	821020865X		60x80x29	28
180	7890	15	10490	24	P15	40	821020865X		60x80x29	28
200	8770	12	11650	20	P15	50	821020866X		60x80x31	32
						*Accessories see pag. 49 (See Model and plates number)				

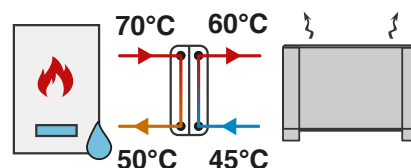
Alternative solution with gasketed heat exchangers: see pag. 42

Tables for fast selection - GASKETED

HEATING with HIGH temperature endpoints

Project conditions 3

Circuit	Source - endpoint	T _{IN}	T _{OUT}	P _{MAX}	Fluid
HOT side	Water heater	70°C	50°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O
COLD side	Radiators / Fan Coil	45°C	60°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O

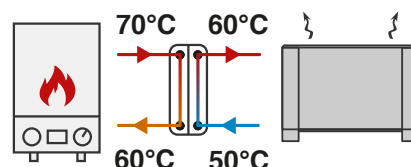


Power kW	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	Weight kg
	L/h	kPa	L/h	kPa					Dimensions cm	
15	656	2	872	2	WP4	14	821021101X		43x22x24	3
25	1094	6	1454	8	WP4	14	821021101X		43x22x24	3
35	1531	5	2035	8	WP4	20	821021102X		43x22x24	4
50	2187	4	2907,5	7	WP4	30	821021103X		43x22x24	5
75	3281	6	4361	10	WP4	40	821021104X		43x22x24	6
100	4370	14	5820	22	P7	50	821020856X		60x80x31	15
115	5030	10	6690	16	P7	70	821020858X		60x80x37	19
130	5690	13	7560	20	P7	70	821020858X		60x80x37	19
150	6560	10	8720	18	P15	40	821020865X		60x80x29	28
180	7870	10	10470	17	P15	50	821020866X		60x80x31	32
200	8750	12	11630	20	P15	50	821020866X		60x80x31	32

*Accessories see pag. 49 (See Model and plates number)

Project conditions 4

Circuit	Source - endpoint	T _{IN}	T _{OUT}	P _{MAX}	Fluid
HOT side	Water heater	70°C	60°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O
COLD side	Radiators / Fan Coil	50°C	60°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O



Power kW	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	Weight kg
	L/h	kPa	L/h	kPa					Dimensions cm	
15	1315	9	1310	6	WP4	14	821021101X		43x22x24	3
25	2192	18	2182	13	WP4	20	821021102X		43x22x24	4
35	3069	10	3056	8	WP4	30	821021103X		43x22x24	5
50	4384	12	4366	10	WP4	40	821021104X		43x22x24	6
75	6580	17	6550	16	P7	70	821020858X		60x80x37	19
100	8770	18	8730	18	P15	40	821020865X		60x80x29	28
115	10080	23	10040	23	P15	40	821020865X		60x80x29	28
130	11400	19	11350	19	P15	50	821020866X		60x80x31	32
150	13150	18	13100	18	P15	60	821020867X		60x80x34	36
180	15780	20	15720	20	P15	70	821020868X		60x80x36	40
200	17540	24	17460	24	P15	70	821020868X		60x80x36	40

*Accessories see pag. 49 (See Model and plates number)

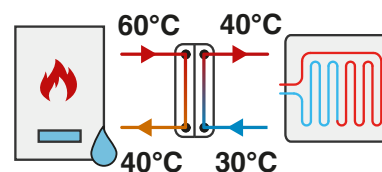
Alternative solution with gasketed heat exchangers: see pag. 43

Tables for fast selection - BRAZED

HEATING with LOW temperature endpoints

Project conditions 1

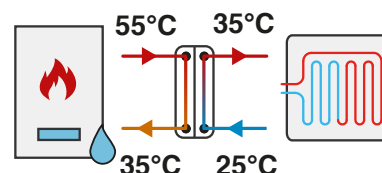
Circuit	Source - endpoint	T _{IN}	T _{OUT}	P _{MAX}	Fluid
HOT side	Water heater	60°C	40°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O
COLD side	Radiating floor / Fan Coil	30°C	40°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O



Power kW	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
	L/h	kPa	L/h	kPa					Dimensions cm	Weight kg
15	654	2	1300	6	WP4	14	821021101X		43x22x24	3
25	1089	2	2166	10	WP4	20	821021102X		43x22x24	4
35	1525	2	3033	8	WP4	30	821021103X		43x22x24	5
50	2178,5	1	4333	7	WP4	40	821021104X		43x22x24	6
75	3270	5	6500	16	P7	70	821020858X		60x80x37	19
100	4360	5	8670	19	P15	40	821020865X		60x80x29	28
115	5010	5	9970	16	P15	50	821020866X		60x80x31	32
130	5660	6	11270	20	P15	50	821020866X		60x80x31	32
150	6540	5	13000	19	P15	60	821020867X		60x80x34	36
180	7540	6	15600	21	P15	70	821020868X		60x80x36	40
200	8710	7	17330	25	P15	70	821020868X		60x80x36	40
						*Accessories see pag. 49 (See Model and plates number)				

Project conditions 2

Circuit	Source - endpoint	T _{IN}	T _{OUT}	P _{MAX}	Fluid
HOT side	Water heater	55°C	35°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O
COLD side	Radiating floor	25°C	35°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O

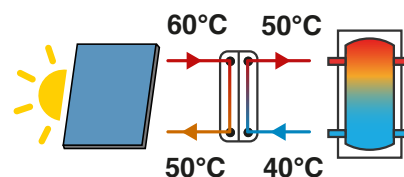


Power kW	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
	L/h	kPa	L/h	kPa					Dimensions cm	Weight kg
15	652	2	1298	6	WP4	14	821021101X		43x22x24	3
25	1087	2	2163	10	WP4	20	821021102X		43x22x24	4
35	1522	2	3028	8	WP4	30	821021103X		43x22x24	5
50	2174	2	4325	11	WP4	40	821021104X		43x22x24	6
75	3260	5	6490	17	P7	70	821020858X		60x80x37	19
100	4350	5	8650	19	P15	40	821020865X		60x80x29	28
115	5000	5	9950	17	P15	50	821020866X		60x80x31	32
130	5650	6	11250	21	P15	50	821020866X		60x80x31	32
150	6520	5	12980	20	P15	60	821020867X		60x80x34	36
180	7830	6	15570	21	P15	70	821020868X		60x80x36	40
200	8700	7	17300	26	P15	70	821020868X		60x80x36	40
						*Accessories see pag. 49 (See Model and plates number)				

Alternative solution with gasketed heat exchangers: see pag. 44

Tables for fast selection - GASKETED HEATING with Thermal Solar

Circuit	Source - endpoint	T _{IN}	T _{OUT}	P _{MAX}	Fluid
HOT side	Solar panel	60°C	50°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	Glic. 30%
COLD side Heating / Domestic Hot Water		40°C	50°C	16 bar (WP4) 30 bar (P4-P7-P15-P30)	H ₂ O



Power kW	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
	L/h	kPa	L/h	kPa					Dimensions cm	Weight kg
20	1807	3	1740	2	WP4	30	821021103X		43x22x24	5
35	3162	6	3044	4	WP4	40	821021104X		43x22x24	6
50	4520	10	4350	8	P7	70	821020858X		60x80x37	19
75	6770	13	6520	11	P15	40	821020865X		60x80x29	28
100	9030	15	8700	12	P15	50	821020866X		60x80x31	32
*Accessories see pag. 49 (See Model and plates number)										

The solar thermal makes it roughly 0.8 kW/m².
Example 10 Fiorini collectors H2500 (pag. 254) is equal to 25m²= 20kW

Alternative solution with gasketed heat exchangers: see pag. 46