Brazed plate heat exchangers



Brazed heat exchangers
P series

The brazed plate heat exchangers (P 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 (up to -160/+ 200 °C)
- high max operating pressure (up to 30 bar for standard / up to 45 for special high pressure versionr)

Main applications

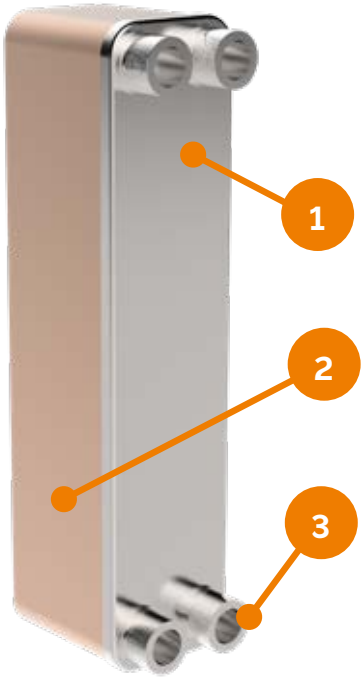
- heating/cooling of technical water or industrial fluids
- evaporation and condensation of refrigerant gas
- hydraulic separation of the circuit
- heat recuperation in domestic applications and industrial processes
- functioning with a wide range of compatible fluids
- mechanical and chemical resistance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

Brazed heat exchanger Range



Model	P4	P7	P15	P30
Plate surface (m^2)	0,02375	0,07	0,15	0,30
Nominal pressure	PN25	PN25	PN25	PN25
Standard coupling	1"	1"1/4	2"	2"1/2
PP (mm)	9+2,4xN*	9+2,57xN*	10+2,48xN*	11+2,90xN*
Ht (mm)	310	526	530	782
Lt (mm)	111	120	256	350
Z1 (mm)	250	473	439	655
Z2 (mm)	50	66	177	220
PC (mm)	24	27	27	27

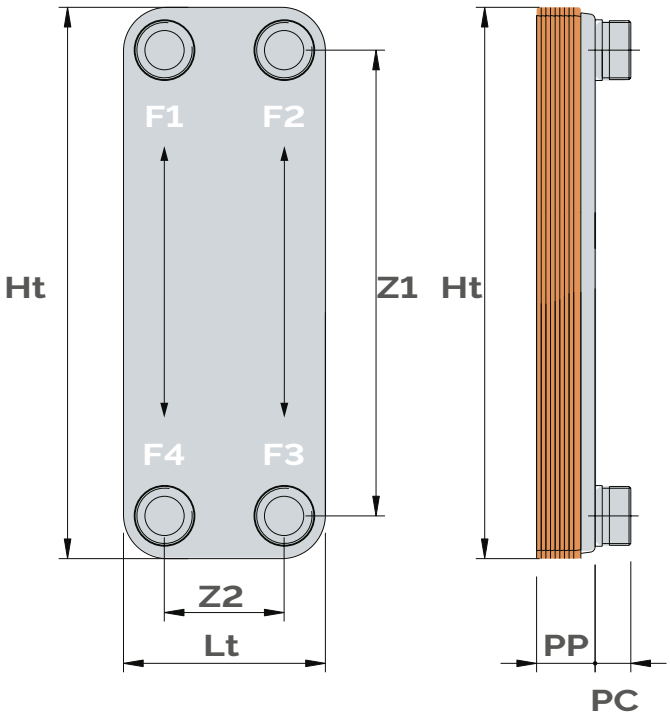
*Plate No.



Legend

1. Front plate
2. Brazing
3. Coupling

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



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Accessories
Insulation, Couplings

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

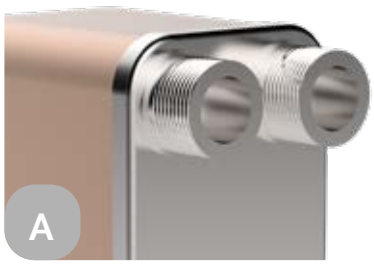


Model	Plates threshold	Code	Price
P4	up to 14 plates	843090016X	
	up to 20 plates	843090017X	
	up to 30 plates	843090018X	
	up to 40 plates	843090019X	
	up to 50 plates	843090020X	
	up to 60 plates	843090060X	
P7	up to 30 plates	843090050X	
	up to 50 plates	843090051X	
	up to 70 plates	843090052X	

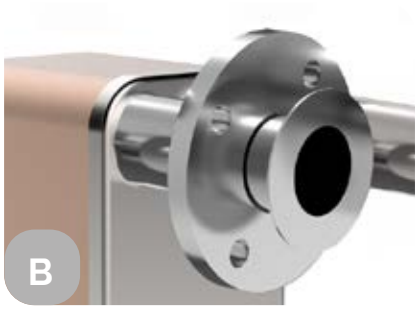
Serie P15 / P30: insulation kit made of sheets of precut adhesive elastomer, finishing tape and assembly instructions.



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.

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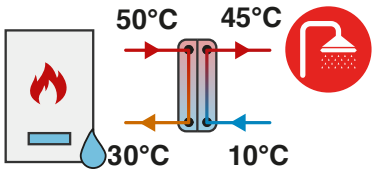
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Tables for fast selection - BRAZED

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	30 bar	H_2O
COLD side	Domestic Hot Water	10°C	45°C	30 bar	H_2O



								Packaging	
Power	Hot side		Cold		Model*	Plates number*	Code	Price	Dimensions	Weight
kW	l/h	kPa	l/h	kPa					cm	kg
20	868	2	494	1	P4	30	821020837X		43x22x24	4
25	1085	3	617	1	P4	30	821020837X		43x22x24	4
30	1302	3	741	1	P4	40	821020840X		43x22x24	5
35	1519	3	864	1	P4	40	821020840X		43x22x24	5
40	1736	3	988	1	P4	50	821020842X		43x22x24	6
50	2170	11	1235	4	P7	30	821020852X		43x22x24	6
60	2604	15	1482	5	P7	30	821020852X		43x22x24	8
75	3255	13	1852	4	P7	40	821020854X		60x80x26	11
85	3690	17	2099	6	P7	40	821020854X		60x80x26	11
100	4341	15	2469	5	P7	50	821020856X		60x80x31	15
120	5209	15	2963	5	P7	60	821020857X		60x80x31	15
150	6511	14	3704	5	P7	80	821020859X		60x80x31	15
180	7813	27	4445	9	P15	30	821020864X		60x80x37	19
210	9115	21	5186	8	P15	40	821020865X		60x80x37	19
240	10417	27	5927	10	P15	40	821020865X		60x80x29	28
270	11720	22	6667	8	P15	50	821020866X		60x80x29	28
300	13022	27	7408	10	P15	50	821020866X		60x80x31	32

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

Alternative solution with gasketed heat exchangers: see pag. 38

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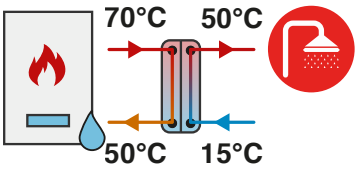
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Tables for fast selection - BRAZED

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	30 bar	H_2O
COLD side	Domestic Hot Water	15°C	50°C	30 bar	H_2O



								Packaging	
Power	Hot side		Cold		Model*	Plates number*	Code	Price	Dimensions	Weight
kW	l/h	kPa	l/h	kPa					cm	kg
20	875	9	495	3	P4	14	821020831X		43x22x24	3
25	1094	13	618	4	P4	14	821020831X		43x22x24	4
30	1312	18	742	5	P4	14	821020831X		43x22x24	5
35	1531	12	866	4	P4	20	821020834X		43x22x24	5
40	1750	15	989	5	P4	20	821020834X		43x22x24	6
50	2187	11	1237	4	P4	30	821020837X		43x22x24	6
60	2625	15	1484	5	P4	30	821020837X		43x22x24	8
75	3281	13	1855	5	P4	40	821020840X		60x80x26	11
85	3718	17	2103	6	P4	40	821020840X		60x80x26	11
100	4375	15	2474	6	P4	50	821020842X		60x80x26	11
120	5250	30	2968	10	P7	40	821020854X		60x80x31	15
150	6562	30	3711	10	P7	50	821020856X		60x80x31	15
180	7874	23	4453	8	P7	70	821020858X		60x80x37	19
210	9187	25	5195	9	P7	80	821020859X		60x80x37	19
240	10499	25	5937	10	P15	40	821020865X		60x80x29	28
270	11812	21	6679	8	P15	50	821020866X		60x80x29	28
300	13124	25	7421	10	P15	50	821020866X		60x80x31	32

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

Alternative solution with gasketed heat exchangers: see pag. 39

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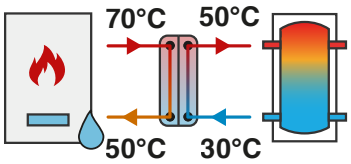
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Tables for fast selection - BRAZED

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	30 bar	H_2O
COLD side	Domestic Hot Water	30°C	50°C	30 bar	H_2O



								Packaging	
Power	Hot side		Cold		Model*	Plates number*	Code	Price	Dimensions	Weight
kW	l/h	kPa	l/h	kPa					cm	kg
20	875	8,7	868	7	P4	14	821020831X		43x22x24	3
25	1094	13	1085	11	P4	14	821020831X		43x22x24	3
30	1312	18	1302	15	P4	14	821020831X		43x22x24	3
35	1531	12	1519	10	P4	20	821020834X		43x22x24	4
40	1750	15	1736	13	P4	20	821020834X		43x22x24	4
50	2187	10	2170	10	P4	30	821020837X		43x22x24	4
60	2625	15	2604	14	P4	30	821020837X		43x22x24	4
75	3281	13	3255	13	P4	40	821020840X		43x22x24	5
85	3718	17	3690	16	P4	40	821020840X		43x22x24	5
100	4375	15	4341	15	P4	50	821020842X		43x22x24	6
120	5250	20	5209	19	P7	50	821020856X		43x22x24	6
150	6562	17	6511	16	P7	70	821020858X		60x80x31	15
180	7874	19	7813	18	P7	80	821020859X		60x80x37	19
210	9187	20	9115	20	P15	40	821020865X		60x80x37	19
240	10499	17	10417	17	P15	50	821020866X		60x80x29	28
270	11812	15	11720	16	P15	60	821020867X		60x80x29	28
300	16124	18	13022	19	P15	60	821020867X		60x80x31	32

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

Alternative solution with gasketed heat exchangers: see pag. 40

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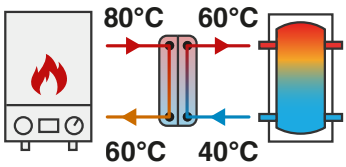
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Tables for fast selection - BRAZED

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	30 bar	H_2O
COLD side	Domestic Hot Water	40°C	60°C	30 bar	H_2O



								Packaging	
Power	Hot side		Cold		Model*	Plates number*	Code	Price	Dimensions	Weight
kW	l/h	kPa	l/h	kPa					cm	kg
20	879	9	871	7	P4	14	821020831X		43x22x24	3
25	1098	13	1089	10	P4	14	821020831X		43x22x24	3
30	1318	18	1307	14	P4	14	821020831X		43x22x24	3
35	1538	11	1525	10	P4	20	821020834X		43x22x24	3
40	1757	15	1743	13	P4	20	821020834X		43x22x24	4
50	2197	10	2178	9	P4	30	821020837X		43x22x24	4
60	2636	14	2614	13	P4	30	821020837X		43x22x24	4
75	3295	13	3268	12	P4	40	821020840X		43x22x24	5
85	3735	16	3703	16	P4	40	821020840X		43x22x24	5
100	4394	15	4357	15	P4	50	821020842X		43x22x24	5
120	5272	19	5228	18	P7	50	821020856X		43x22x24	6
150	6590	16	6535	16	P7	70	821020858X		43x22x24	8
180	7908	18	7843	18	P7	80	821020859X		60x80x37	19
210	9226	20	9150	20	P7	90	821020860X		60x80x37	19
240	10545	17	10457	17	P15	50	821020866X		60x80x29	28
270	11863	15	11764	15	P15	60	821020867X		60x80x29	28
300	13180	18	13071	19	P15	60	821020867X		60x80x31	32

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

Alternative solution with gasketed heat exchangers: see pag. 41

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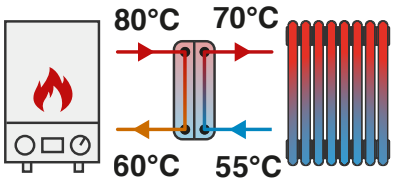
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Tables for fast selection - GASKETED

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	30 bar	H_2O
COLD side	Radiators	55°C	70°C	30 bar	H_2O

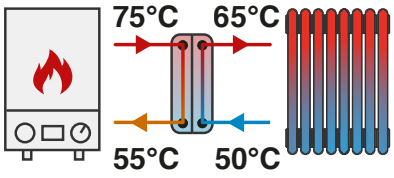


Power	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
									Dimensions	Weight
kW	l/h	kPa	l/h	kPa					cm	kg
15	659	2	876	4	P4	20	821020834X		43x22x24	3
25	1098	3	1460	4	P4	30	821020837X		43x22x24	3
35	1538	2	2044	4	P4	50	821020842X		43x22x24	4
50	2197	10	2920	15	P7	30	821020852X		43x22x24	5
75	3295	8	4379	13	P7	50	821020856X		43x22x24	6
100	4394	10	5839	16	P7	60	821020857X		43x22x24	8
115	5053	10	6415	16	P7	70	821020858X		60x80x37	19
130	5712	8	7591	14	P7	90	821020860X		60x80x37	19
150	6590	10	8759	17	P15	40	821020865X		60x80x29	28
180	7908	10	10510	16	P15	50	821020866X		60x80x29	28
200	8787	12	11678	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	30 bar	H_2O
COLD side	Radiators	50°C	65°C	30 bar	H_2O



Power	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
									Dimensions	Weight
kW	l/h	kPa	l/h	kPa					cm	kg
15	658	3	874	4	P4	20	821020834X		43x22x24	3
25	1096	2	1457	3	P4	40	821020840X		43x22x24	3
35	1534	2	2039	4	P4	50	821020842X		43x22x24	4
50	2192	10	2913	15	P7	30	821020852X		43x22x24	5
75	3288	8	4370	13	P7	50	821020856X		43x22x24	6
100	4384	10	5827	16	P7	60	821020857X		43x22x24	8
115	5042	10	6701	16	P7	70	821020858X		60x80x37	19
130	5699	8	7575	14	P7	90	821020860X		60x80x37	19
150	6576	11	8740	17	P15	40	821020865X		60x80x29	28
180	7891	10	10488	17	P15	50	821020866X		60x80x29	28
200	8768	12	11654	20	P15	50	821020866X		60x80x31	32

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

Alternative solution with gasketed heat exchangers: see pag. 42

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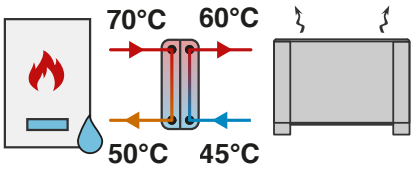
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Tables for fast selection - GASKETED

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	30 bar	H_2O
COLD side	Radiators / Fan Coil	45°C	60°C	30 bar	H_2O

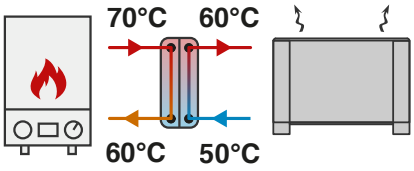


Power	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
									Dimensions	Weight
kW	l/h	kPa	l/h	kPa					cm	kg
15	656	11	872	12	P7	10	821020848X		43x22x24	3
25	1094	6	1454	9	P7	20	821020850X		43x22x24	3
35	1531	12	2035	16	P7	20	821020850X		43x22x24	4
50	2187	10	2908	15	P7	30	821020852X		43x22x24	5
75	3281	8	4361	13	P7	50	821020856X		43x22x24	6
100	4375	10	5815	16	P7	60	821020857X		60x80x31	15
115	5031	8	6687	13	P7	80	821020859X		60x80x37	19
130	5687	14	7560	23	P15	30	821020864X		60x80x37	19
150	6562	18	8723	29	P15	30	821020864X		60x80x29	28
180	7874	15	10467	25	P15	40	821020865X		60x80x31	32
200	8749	18	11630	30	P15	40	821020865X		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	30 bar	H_2O
COLD side	Radiators / Fan Coil	50°C	60°C	30 bar	H_2O



Power	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
									Dimensions	Weight
kW	l/h	kPa	l/h	kPa					cm	kg
15	1315	18	1310	14	P4	14	821020831X		43x22x24	3
25	2192	10	2183	9	P4	30	821020837X		43x22x24	4
35	3069	19	3056	17	P4	30	821020837X		43x22x24	5
50	4384	15	4366	15	P4	50	821020842X		43x22x24	6
75	6576	29	6548	27	P7	50	821020856X		60x80x37	19
100	8768	28	8731	26	P7	70	821020858X		60x80x29	28
115	10083	29	10041	28	P7	80	821020859X		60x80x29	28
130	11398	29	11351	28	P15	40	821020865X		60x80x31	32
150	13152	25	13097	25	P15	50	821020866X		60x80x34	36
180	15782	25	15716	26	P15	60	821020867X		60x80x36	40
200	17536	24	17463	24	P15	70	821020868X		60x80x36	40

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

Alternative solution with gasketed heat exchangers: see pag. 43

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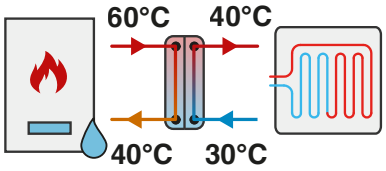
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Tables for fast selection - BRAZED

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	30 bar	H_2O
COLD side	Radiating floor / Fan Coil	30°C	40°C	30 bar	H_2O

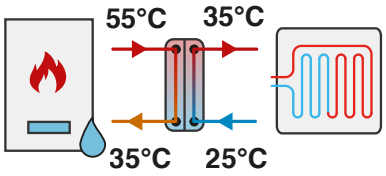


Power	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
									Dimensions	Weight
kW	l/h	kPa	l/h	kPa					cm	kg
15	654	5	1300	15	P4	14	821020831X		43x22x24	3
25	1089	7	2166	20	P4	20	821020834X		43x22x24	4
35	1525	6	3033	18	P4	30	821020837X		43x22x24	5
50	2178	4	4333	15	P4	50	821020842X		43x22x24	6
75	3268	6	6499	21	P7	60	821020857X		60x80x37	19
100	4357	8	8666	28	P7	70	821020858X		60x80x29	28
115	5011	8	9966	29	P7	80	821020859X		60x80x31	32
130	5664	8	11265	30	P15	40	821020865X		60x80x31	32
150	6535	7	12999	26	P15	50	821020866X		60x80x34	36
180	7843	7	15598	27	P15	60	821020867X		60x80x36	40
200	8714	7	17331	26	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	30 bar	H_2O
COLD side	Radiating floor	25°C	35°C	30 bar	H_2O



Power	Hot side		Cold		Model*	Plates number*	Code	Price	Packaging	
									Dimensions	Weight
kW	l/h	kPa	l/h	kPa					cm	kg
15	652	5	1298	15	P4	14	821020831X		43x22x24	3
25	1087	7	2163	20	P4	20	821020834X		43x22x24	4
35	1522	6	3028	19	P4	30	821020837X		43x22x24	5
50	2174	4	4325	16	P4	50	821020842X		43x22x24	6
75	3261	9	6488	29	P7	50	821020856X		60x80x37	19
100	4349	8	8650	28	P7	70	821020858X		60x80x29	28
115	5001	9	9948	29	P7	80	821020859X		60x80x31	32
130	5653	6	11246	21	P15	50	821020866X		60x80x31	32
150	6523	7	12976	27	P15	50	821020866X		60x80x34	36
180	7828	8	15571	28	P15	60	821020867X		60x80x36	40
200	8697	7	17301	26	P15	70	821020868X		60x80x36	40

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

Alternative solution with gasketed heat exchangers: see pag. 44

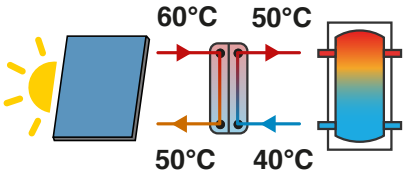
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Tables for fast selection - GASKETED

HEATING with Thermal Solar

0,3	Source - endpoint	T_{IN}	T_{OUT}	P_{MAX}	Fluid
HOT side	Solar panel	60°C	50°C	30 bar	Glic. 30%
COLD side	Heating / Domestic Hot Water	40°C	50°C	30 bar	H_2O



								Packaging	
Power	Hot side		Cold		Model*	Plates number*	Code	Price	Dimensions	Weight
kW	l/h	kPa	l/h	kPa					cm	kg
20	1746	15	1739	13	P4	20	821020834X		43x22x24	5
35	3056	19	3044	18	P4	30	821020837X		43x22x24	6
50	4366	16	4349	15	P4	50	821020842X		60x80x37	19
75	6548	17	6523	16	P7	70	821020858X		60x80x29	28
100	8731	18	8697	18	P15	40	821020865X		60x80x31	32

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

The solar thermal makes it roughly 0.8 kW/m^2.
Example 10 Fiorini collectors H2500 (pag. 284) is equal to 25m^2= 20kW

Alternative solution with gasketed heat exchangers: see pag. 46



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