

WEIL-McLAIN

WMBP

Brazed Plate
Heat Exchangers



- For Radiant Heating... Snow Melting... Domestic Hot Water... Much More
- Stainless Steel Construction
- Weil-McLain Quality & Sales Support

WEIL-McLAIN



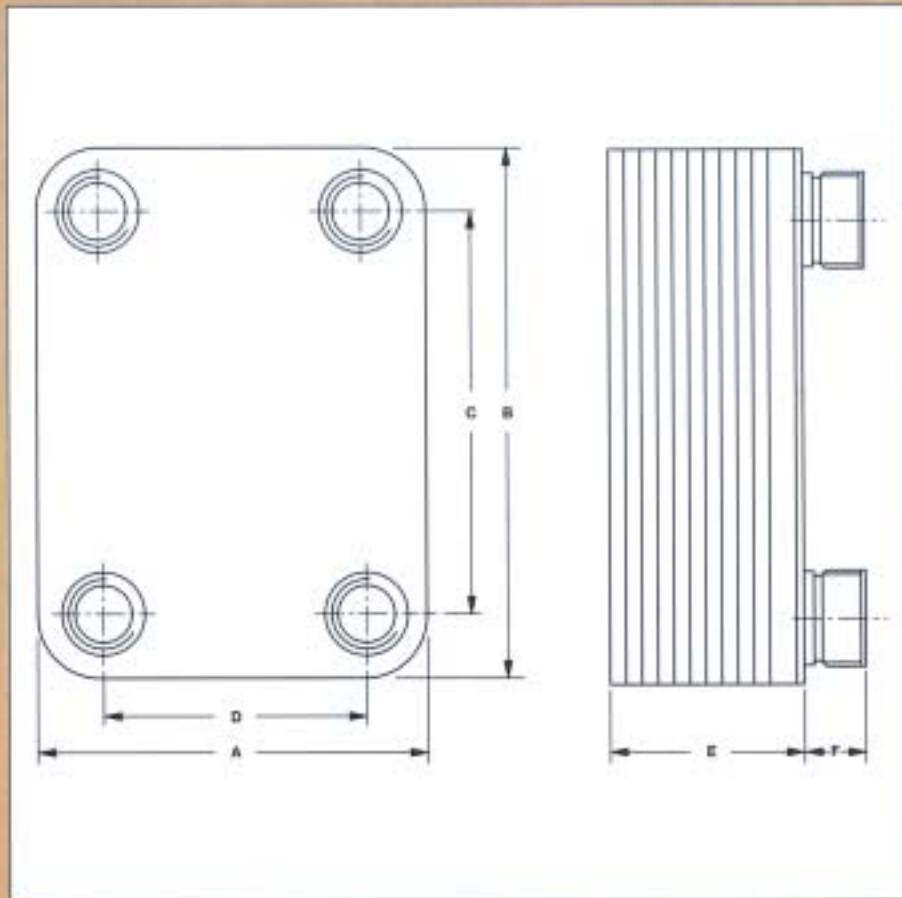
Heat Exchangers

Weil-McLain Model WMBP brazed plate heat exchangers are available in seventeen standard sizes. These compact, light weight units are designed for a wide variety of applications including snow melting, radiant heating and domestic hot water.

WMBP pattern-embossed plates are made of high quality acid-resistant 316 stainless steel with 99.9% pure copper brazing. Plates are vacuum brazed together with every second plate inverted to create contact points between all plates forming a compact, pressure resistant heat exchanger. Other features include:

- **High Efficiency** - Plates are designed to create two separate channels for counterflow movement resulting in high turbulence and maximum heat transfer.
- **Non-Corrosive** - Stainless steel plates and copper brazing assure corrosion resistance.
- **Self Cleaning** - Turbulent flow, even at low velocities, creates a self-cleaning design to resist scaling.
- **Maximum working pressure: 450 PSI; maximum working temperature: 365°F.**
- **Backed by Weil-McLain for the best value in product quality, sales, service and technical support.**

BRAZED PLATE HEAT EXCHANGERS



DIMENSIONS

Model No.	Threaded Connections (inch) N.P.T.	Dimensions - inches						Empty Weight lbs.
		A	B	C	D	E	F	
WMBP1-14E*	3/4	2 1/2	8	6 1/2	1 1/2	1 1/2	3/4	3
WMBP1-20E*	3/4	2 1/2	8	6 1/2	1 1/2	2	3/4	4
WMBP1-30E*	3/4	2 1/2	8	6 1/2	1 1/2	3	3/4	5
WMBP3-14	1	4 1/2	6 1/2	4 1/2	2 1/2	1 1/2	3/4	5
WMBP3-20	1	4 1/2	6 1/2	4 1/2	2 1/2	2	3/4	6
WMBP3-40	1	4 1/2	6 1/2	4 1/2	2 1/2	4	3/4	8
WMBP4-10	1	4 1/2	12 1/2	11	2 1/2	1 1/2	3/4	7
WMBP4-14	1	4 1/2	12 1/2	11	2 1/2	1 1/2	3/4	8
WMBP4-24	1	4 1/2	12 1/2	11	2 1/2	2 1/2	3/4	10
WMBP4-30	1	4 1/2	12 1/2	11	2 1/2	3	3/4	12
WMBP4-50	1	4 1/2	12 1/2	11	2 1/2	4 1/2	3/4	17
WMBP7-20	2	10 1/2	20 1/2	18 1/2	7 1/2	2 1/2	2 1/2	39
WMBP7-24	2	10 1/2	20 1/2	18 1/2	7 1/2	2 1/2	2 1/2	44
WMBP7-30	2	10 1/2	20 1/2	18 1/2	7 1/2	3	2 1/2	52
WMBP7-40	2	10 1/2	20 1/2	18 1/2	7 1/2	3 1/2	2 1/2	65
WMBP7-50	2	10 1/2	20 1/2	18 1/2	7 1/2	4 1/2	2 1/2	78
WMBP7-60	2	10 1/2	20 1/2	18 1/2	7 1/2	5 1/2	2 1/2	82

*WMBP1-14E, 20E & 30E - Max. working pressure: 150 PSI.
All other units - Max. working pressure: 450 PSI; Max. working temp.: 365°F.

TYPICAL SNOW MELT APPLICATIONS

Model No.	Boiler			Snow Melt	
	Input BTU/Hr.	GPM	Pressure Drop - PSI	GPM	Pressure Drop - PSI
WMBP1-14E	25,000	2.5	0.7	1.7	0.3
WMBP1-14E	30,000	3.1	1.0	2.1	0.4
WMBP1-14E	35,000	3.6	1.4	2.4	0.5
WMBP1-14E	40,000	4.0	1.9	2.8	0.6
WMBP1-14E	45,000	4.7	2.4	3.1	0.8
WMBP1-14E	50,000	5.2	2.9	3.4	0.9
WMBP1-14E	60,000	6.3	4.3	4.1	1.4
WMBP1-14E	70,000	7.4	5.9	4.8	1.9
WMBP1-30	80,000	8.4	2.2	5.5	0.9
WMBP3-20	90,000	9.4	1.5	6.1	0.5
WMBP3-20	100,000	10.5	1.8	6.7	0.6
WMBP3-20	125,000	13.1	3.0	8.4	1.0
WMBP3-20	150,000	15.7	4.3	10.1	1.5
WMBP3-40	175,000	18.4	1.2	11.8	0.5
WMBP3-40	200,000	21.0	1.6	13.5	0.7
WMBP3-40	225,000	23.6	2.0	15.2	0.8
WMBP3-40	250,000	26.2	2.5	16.9	1.0
WMBP3-40	275,000	28.8	3.0	18.5	1.2
WMBP7-24	300,000	31.5	2.1	20.2	0.7
WMBP7-30	350,000	36.7	4.1	23.6	1.5
WMBP7-40	400,000	42.0	3.0	27.0	1.1
WMBP7-40	450,000	47.2	3.9	30.4	1.4
WMBP7-40	500,000	52.5	4.8	33.8	1.8

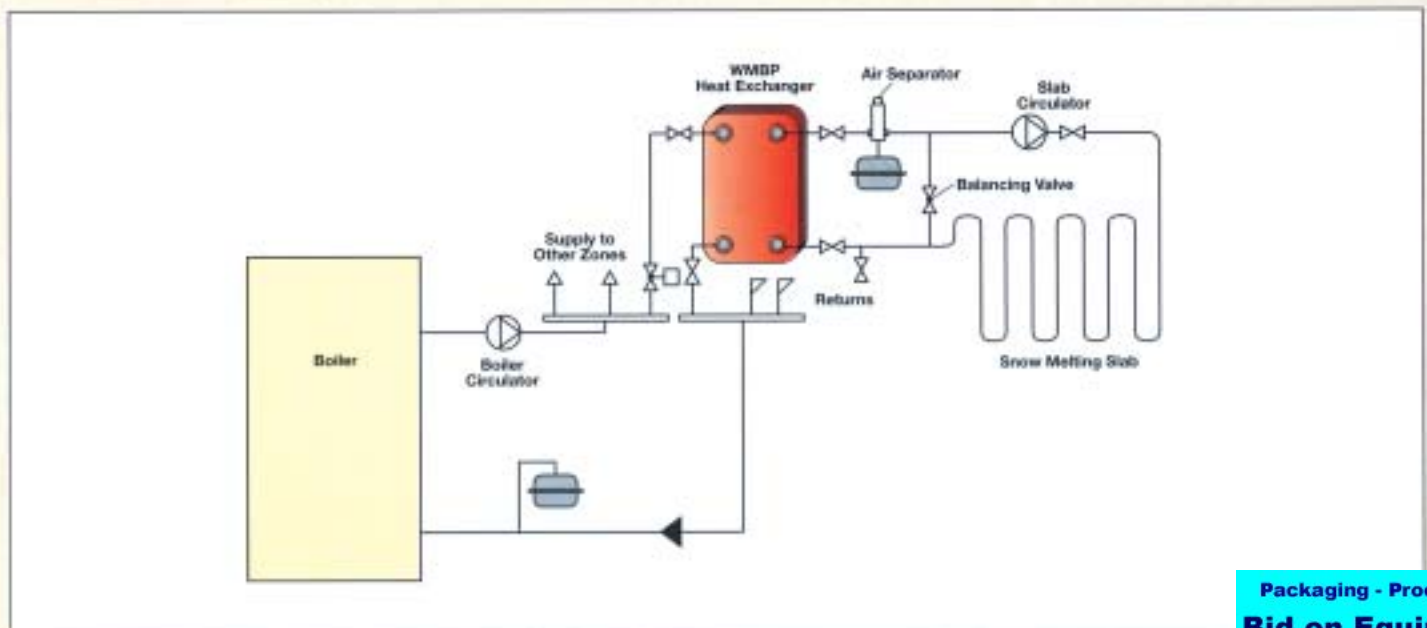
CONDITIONS: System - 30° temp. rise (100° to 130°). Boiler - 20° temp. drop (180° to 160°); 30% glycol.

TYPICAL RADIANT HEATING APPLICATIONS

Model No.	Boiler			Radiant System	
	Input BTU/Hr.	GPM	Pressure Drop - PSI	GPM	Pressure Drop - PSI
WMBP1-14E	25,000	2.6	0.5	2.5	0.4
WMBP1-14E	30,000	3.1	0.8	3.0	0.6
WMBP1-14E	35,000	3.6	1.1	3.5	0.9
WMBP1-14E	40,000	4.1	1.4	4.0	1.1
WMBP1-14E	45,000	4.6	1.8	4.5	1.4
WMBP1-14E	50,000	5.2	2.3	5.0	1.7
WMBP1-14E	55,000	5.7	2.8	5.5	2.1
WMBP1-14E	60,000	6.2	3.4	6.0	2.5
WMBP1-14E	65,000	6.7	4.0	6.5	2.9
WMBP1-14E	70,000	7.2	4.6	7.0	3.4
WMBP3-20	100,000	10.3	1.6	10.1	1.3
WMBP3-20	125,000	12.9	2.6	12.6	2.1
WMBP3-20	150,000	15.5	3.8	15.2	3.0
WMBP3-20	175,000	18.8	5.2	17.7	4.1
WMBP3-20	200,000	20.6	6.9	20.2	5.5
WMBP3-20	225,000	23.6	8.8	22.7	7.0

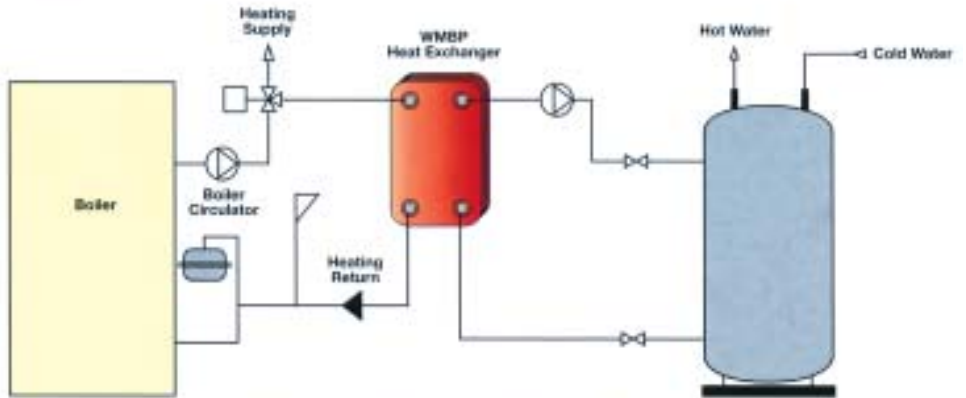
CONDITIONS: System - 20° temp. rise (100° to 120°). Boiler - 20° temp. drop (180° to 160°).

SNOW MELTING





DOMESTIC HOT WATER



Heat Exchanger with Storage Tank

Model No.	Boiler			Domestic Water		Ratings – GPH*	
	Input BTU/Hr.	Circ. Flow Rate GPM	Pressure Drop – PSI	GPM @ 90° Temp. Rise	Pressure Drop – PSI	1st Hour	Continuous Draw
WMBP1-14E	40,000	1.7	0.2	0.8	0.1	86	48
WMBP1-14E	45,000	1.9	0.3	1.0	0.1	98	60
WMBP1-14E	50,000	2.1	0.3	1.1	0.1	104	66
WMBP1-14E	55,000	2.3	0.4	1.2	0.1	110	72
WMBP1-14E	60,000	2.5	0.5	1.3	0.1	116	78
WMBP1-14E	70,000	2.9	0.7	1.5	0.1	128	90
WMBP1-14E	75,000	3.1	0.8	1.7	0.1	140	102
WMBP1-14E	80,000	3.3	0.9	1.8	0.2	146	108
WMBP1-14E	90,000	3.7	1.2	2.0	0.2	158	120
WMBP1-14E	100,000	4.2	1.4	2.2	0.2	170	132
WMBP1-14E	110,000	4.6	1.8	2.4	0.3	182	144
WMBP1-14E	120,000	5.0	2.1	2.6	0.4	194	156
WMBP1-14E	130,000	5.4	2.4	2.9	0.4	212	174
WMBP4-14	150,000	4.1	2.3	3.3	0.6	236	198
WMBP4-14	200,000	5.1	4.2	4.4	1.2	302	264
WMBP4-14	250,000	6.1	6.7	5.6	1.9	374	336

*Ratings based on 200° boiler water supply, 50 gal. storage tank, and 90° temp rise.

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In the interest of continual improvement in products and performance, Weil-McLain reserves the right to change specifications without notice.



Locate our Sales Offices by visiting our website:
www.weil-mclain.com

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