

**WATER-OIL HEAT EXCHANGERS
WITH BRAZED PLATES**

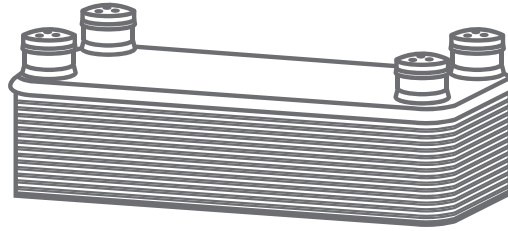


braced plate type oil coolers

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WATER-OIL HEAT EXCHANGERS WITH BRAZED PLATES



The maximum working pressure is 30 bar. The working temperature is included between -160° and $+225^{\circ}\text{C}$. The maximum difference between the temperatures of the fluids is 100°C . For each type of exchanger, the thermic performance's curves, as a function of the oil rate, show the heat quantity in kW or in kcal/h that the exchanger is able to dissipate for each degree of difference between the inlet temperatures of water and oil.

The performance diagrams have been calculated with a ratio between the oil and the water flow rates of 2/1; for higher ratios, therefore for lower water consumptions, it is necessary to multiply the factors obtained from the curves by the following K_a coefficients.

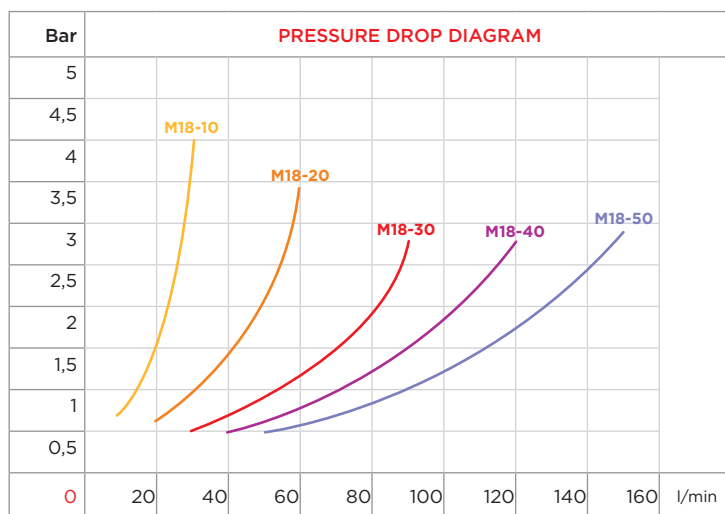
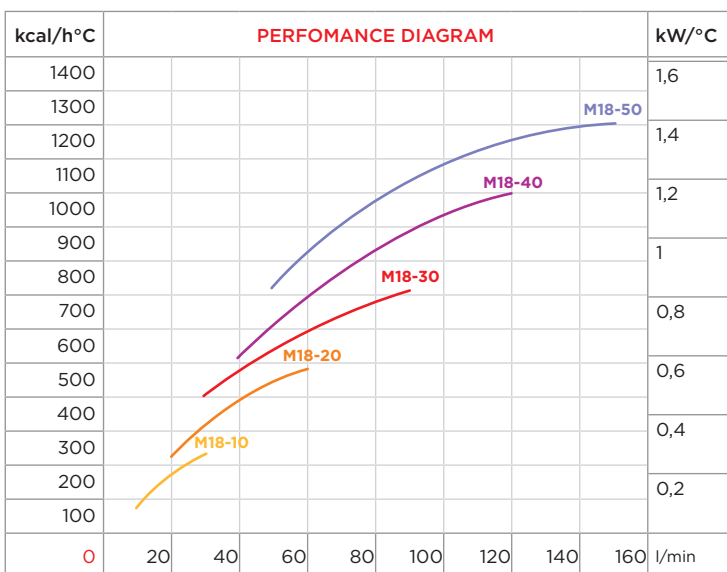
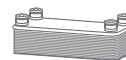
Ratio	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1
K_a	1	0,92	0,85	0,75	0,7	0,65	0,6	0,55	0,5

The pressure drop and performance diagrams are valid for oil ISO VG46; for different types of oil, it is necessary to multiply the value obtained from the curves for the K_c coefficients, by the performance diagrams, and K_p by the pressure drop diagrams.

Oil type	ISO VG22	ISO VG32	ISO VG46	ISO VG68	ISO VG100	ISO VG150	ISO VG200
K_c	1,1	1,05	1	0,9	0,8	0,7	0,5
K_p	0,7	0,75	1	1,3	1,7	2,3	3,3

The exchangers with plates can be used with other types of fluids, but these must be compatible with copper, which is the metal used for the brazing of the plates.

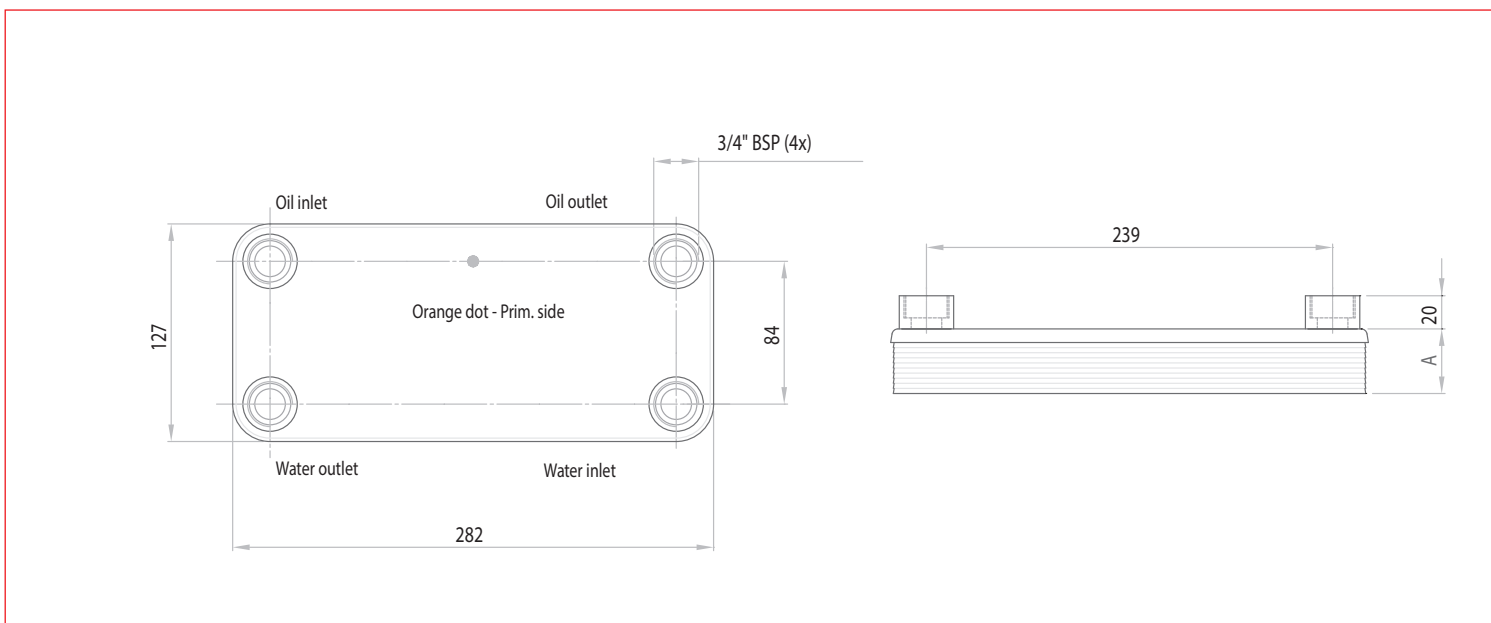
For each use, with the exception of oil cooling, it is recommended to consult our Technical Department.



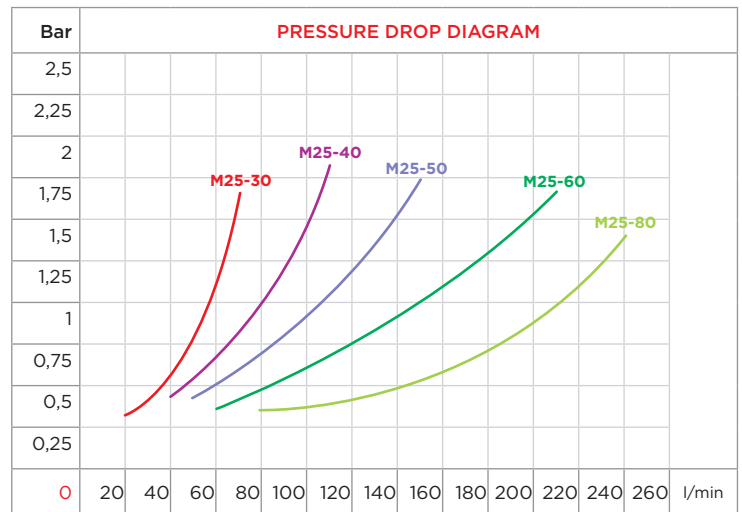
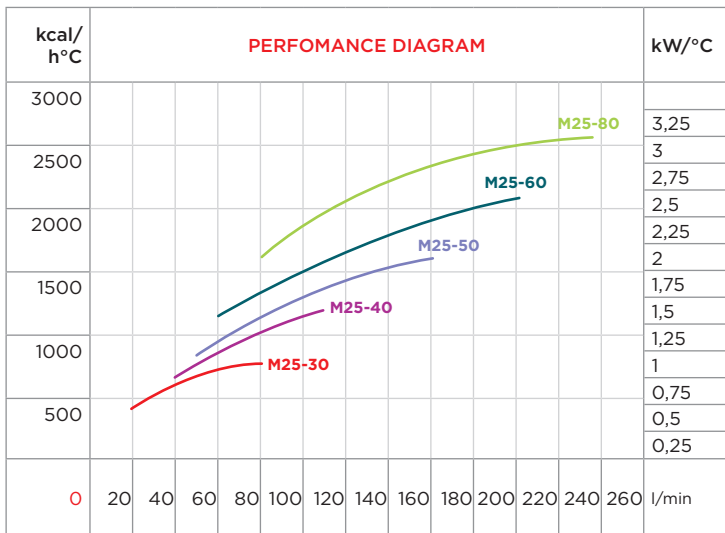
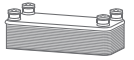
CORRECTION FACTOR

cSt	22	30	46	68	100	150	220
f	0,4	0,6	1	1,5	2,3	3,3	4,6

- Dimensions and technical characteristics are not binding



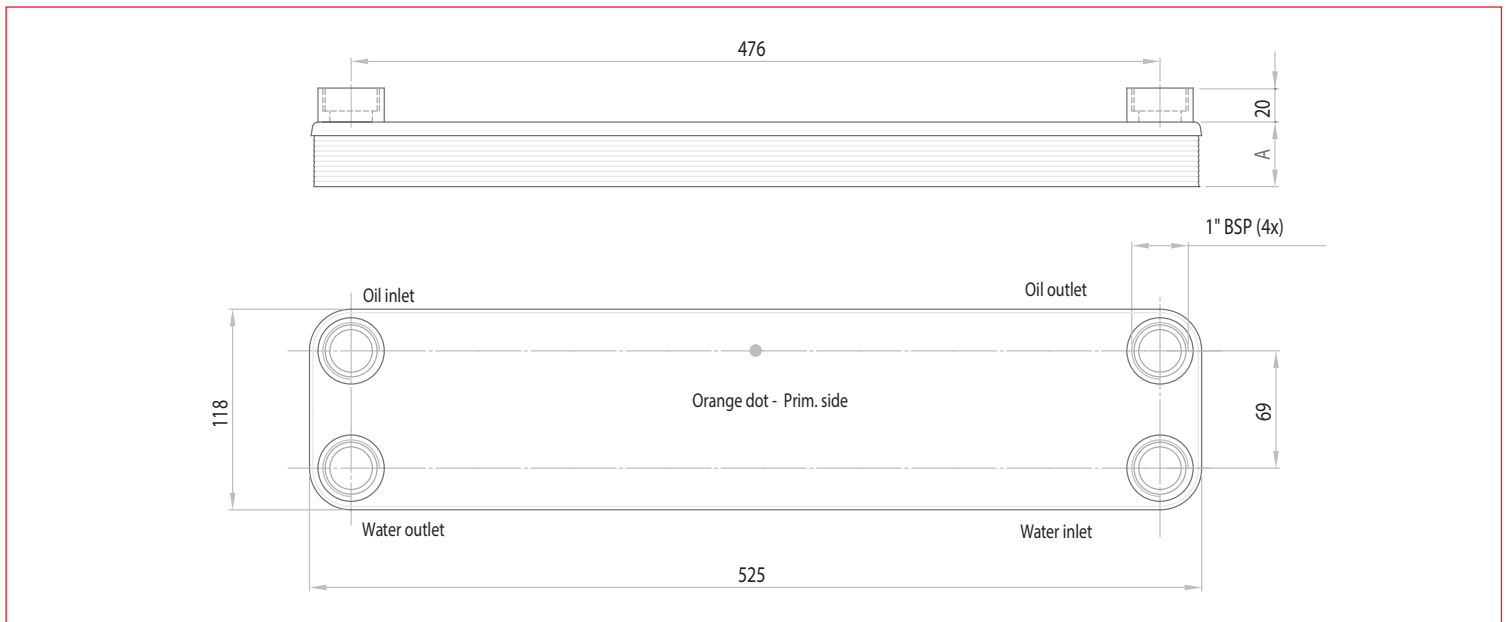
TYPE	SURFACE	OIL FLOW	COOLING CAPACITY	WEIGHT	DIMENSIONS
	m ²	l/min	kW/°C	kg	A
M18-10	0,195	10÷30	0,09÷0,27	2,5	28
M18-20	0,390	20÷60	0,25÷0,55	3,7	47
M18-30	0,585	30÷90	0,45÷0,83	4,8	66
M18-40	0,780	40÷120	0,60÷1,17	6,0	85
M18-50	0,975	50÷150	0,85÷1,40	7,2	104



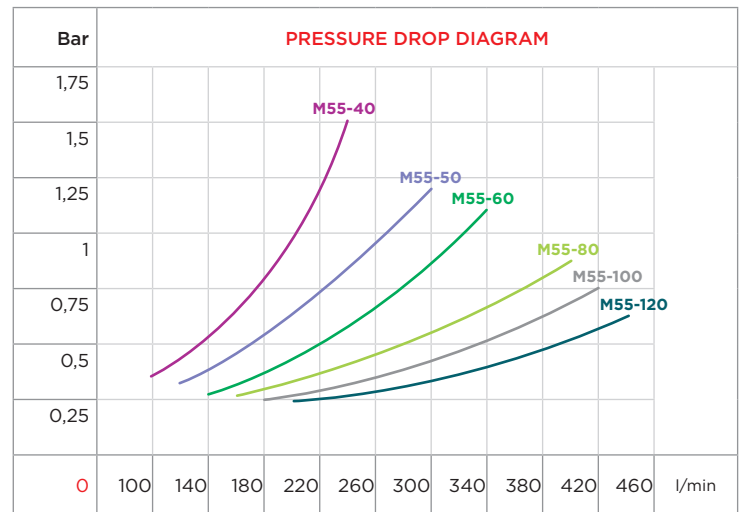
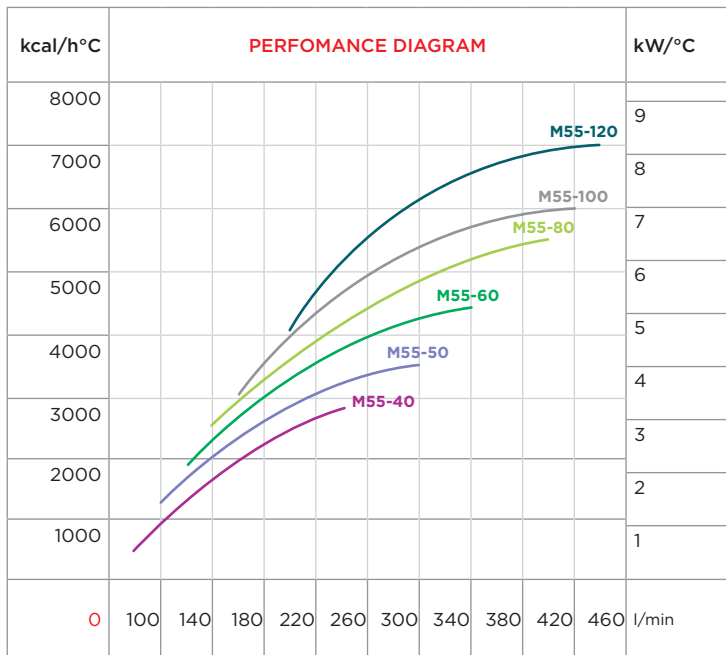
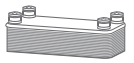
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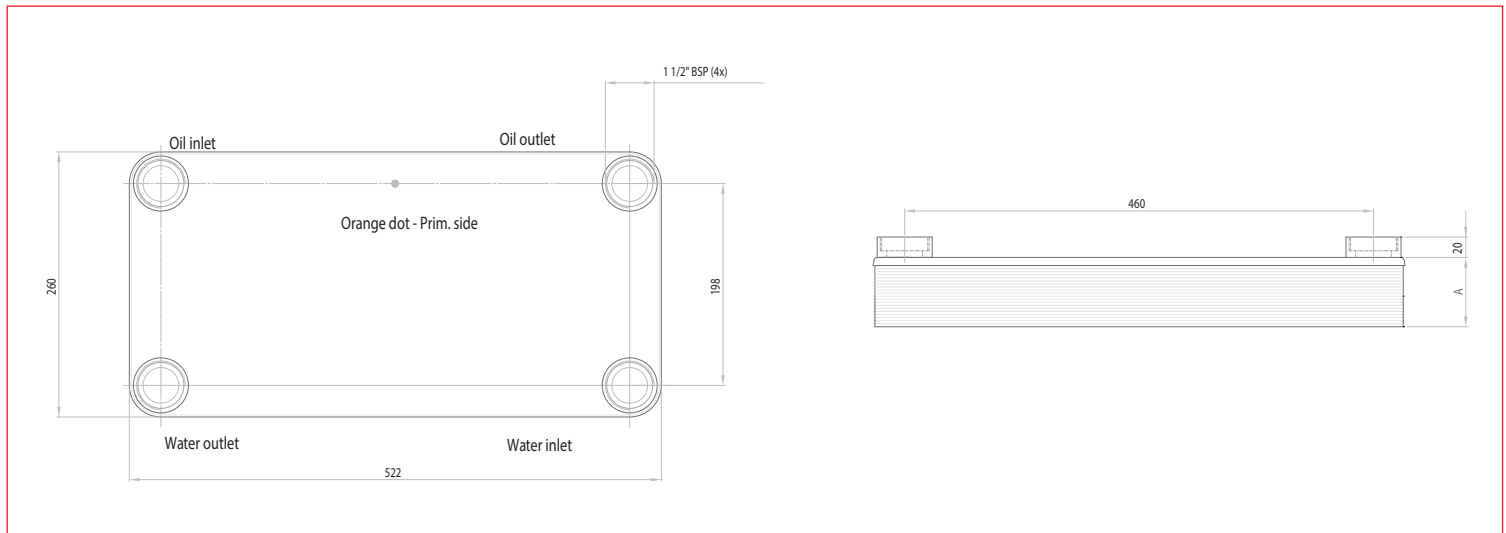
TYPE	SURFACE	OIL FLOW	COOLING CAPACITY	WEIGHT	DIMENSIONS
	m ²	l/min	kW/°C	kg	A
M25-30	1,05	20÷80	0,49÷0,91	8,3	87
M25-40	1,40	40÷120	0,80÷1,49	10,3	112
M25-50	1,75	50÷160	1,00÷2,00	12,3	138
M25-60	2,10	60÷200	1,30÷2,50	14,3	164
M25-80	2,80	80÷240	1,90÷3,00	18,3	215



CORRECTION FACTOR

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f	0,4	0,6	1	1,5	2,3	3,3	4,6

- Dimensions and technical characteristics are not binding



TYPE	SURFACE	OIL FLOW	COOLING CAPACITY	WEIGHT	DIMENSIONS
	m ²	l/min	kW/°C	kg	A
M55-40	2,8	80÷240	0,68÷3,24	25,7	115
M55-50	3,5	100÷300	1,47÷4,13	30,1	141
M55-60	4,2	120÷340	2,03÷5,20	34,5	167
M55-80	5,6	140÷400	2,77÷6,25	43,3	219
M55-100	7,0	160÷420	3,43÷7,00	52,1	271
M55-120	8,4	200÷440	4,41÷8,00	60,9	323