

# Aalborg MX heat exchanger

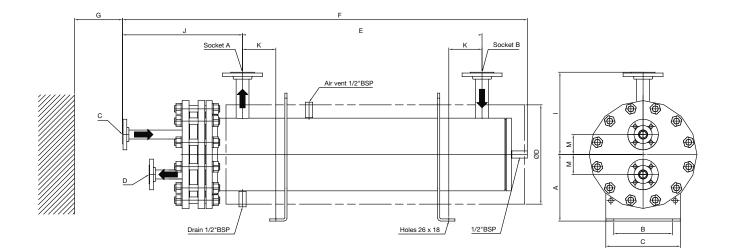
Compact oil preheater for main engines, burners and separators



Aalborg MX is a compact shell and tube heat exchanger with U-tubes, ideal for heating of oil or water. The heat exchanger uses either steam or thermal oil as heating medium. Its heat load capacities range from 10 kW to approx. 2,000 kW, with design conditions (shell/tube) either up to 16/16 bar 160/204°C or 32/19 bar 195/212°C.

The Aalborg MX heat exchanger is approved by all major marine classification societies and is CE/PED approved.





Accessories (optional):

Safety valve Drain/air valve Pressure gauge Thermometer

## Standard product range

### Dimensions

	MX 10	MX 15	MX 20	MX 25	MX 30	MX 40
А	200	200	250	250	250	300
В	130	220	220	220	220	300
С	170	270	280	280	280	350
ØD	220	270	325	380	425	510
Е	L-100	L-100	L-100	L-100	L-100	L-100
F	L+346	L+478	L+478	L+521	L+554	L+621
G	L-150	L-150	L-150	L-150	L-150	L-150
1	228	253	280	307	333	375
J	306*	328*	328*	351*	369*	421*
J	406**	428**	428**	451**	469**	521**
Κ	125	125	125	125	125	175
Μ	40	50	65	75	90	120

\* Flanges ≤ DN25 \*\* Flanges ≥ DN32

All dimensions are guiding only. Dimension drawing will be made upon request.

## Standard product range

## Heating surface/weight (m<sup>2</sup>/kg)

		$\sim$					
	L / Type	MX 10	MX 15	MX 20	MX 25	MX 30	MX 40
$\rightarrow$	600	0.72/60	2.02 / 97	3.88 / 135	6.92 / 175	10.33 / 322	
	800	0.95 / 65	2.64 / 107	5.04 / 150	8.93 / 210	13.26 / 345	
	1000	1.18/73	3.24 / 117	6.19 / 168	10.94 / 245	16.19 / 368	27.98 / 630
	1200	1.40 / 79	3.86 / 127	7.35 / 180	12.95 / 280	19.11 / 391	32.92 / 680
	1400	1.62 / 85	4.48 / 137	8.51 / 195	14.97 / 315	22.04 / 414	37.86 / 735
	1600	1.85 / 92	5.10 / 147	9.67 / 210	16.98 / 350	24.97 / 437	43.80 / 790
	1800	2.08 / 98	5.72 / 157	10.82 / 225	18.99 / 385	27.90 / 460	47.74 / 840

L=length of straight part of tubes. Design pressure shell/tubeside 16/16 bar or 32/19 bar. Design temperature shell/tubeside 160/204°C or 195/212°C. Flanges according to EN1092-1, DIN 86030, JIS 16K or SAE. Tubeside flange connections axial or with 90° elbows.

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## Mechanical and electronic regulation equipment for Aalborg MX steam and thermal oil heat exchangers

The regulation system for the Aalborg MX heat exchanger is supplied as a number of components sized according to the application and applies to either steam or thermal oil operation.

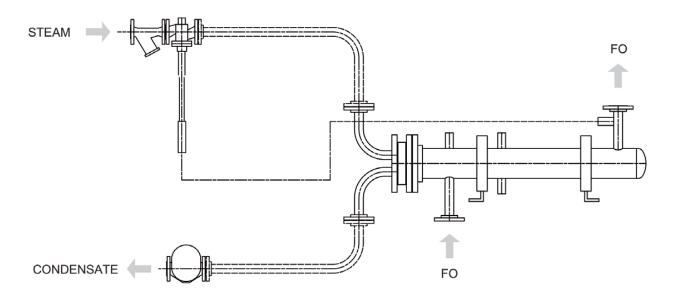
The control system is designed with a sensor in the outlet of the heated medium and a thermostat operating a valve.

The desired outlet temperature is set on the thermostat. Fluctuations in flow will result in changes of the measured temperature and thus the signal to the thermostat which in return will further open or close the steam valve or the thermal oil flow.

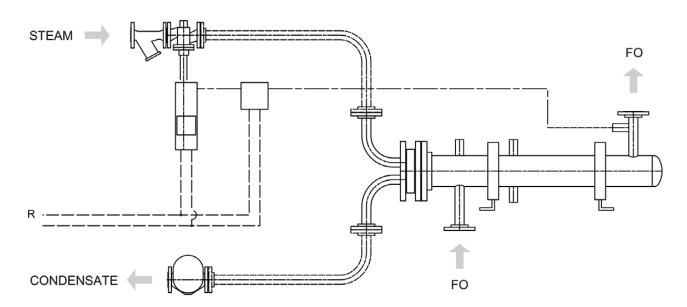
The system is very reliable and used where it is essential that the temperature is kept constant at all times.

To secure both stable and reliable operation a cooling unit for the valve motor is included.

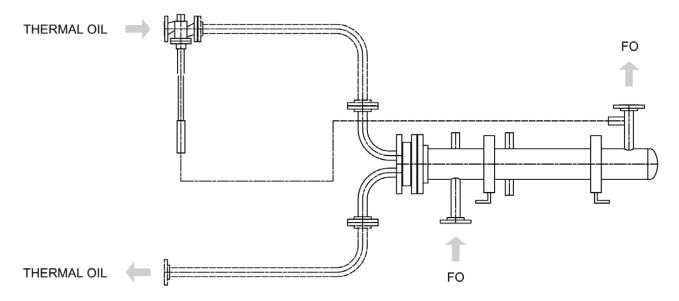
### Steam mechanical



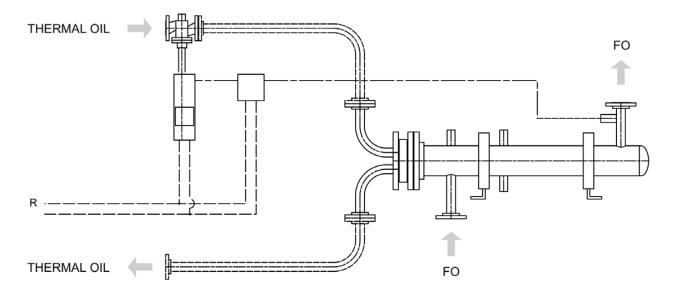
#### Steam electronic



### Thermal oil mechanic



### Thermal oil electronic



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