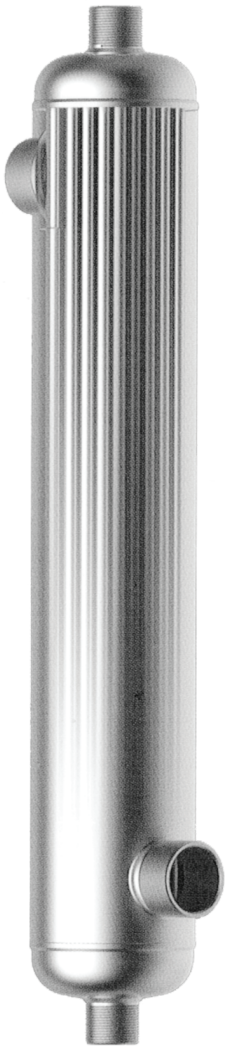
ADVANCE METALPRES INC
HOT WATER TANKS

MARINE ALLOY HEAT EXCHANGERS



M-Line Marine Alloy Heat Exchangers
Salt Water Pool Heaters

M-Line heat exchangers are a line of completely welded heat exchangers made entirely of a super austentic marine alloy. Its compact structure is an integration of innovative material with detailed engineering for effective use with high fluid velocities and low pressure drops, designed specifically for salt water pool applications.

The versatility of this robust straight tube design covers a comprehensive range of capacities, suitable for all residential and commercial pool applications

Applications

- Salt water pools, spas, hot tubs
- Transmission and engine coolers
- Marine Oil coolers
- Boiler sample coolers
- Waste water heat recovery

Standard Materials:

Nicrom 24
Super austentic (low carbon, high purity, nitrogen bearing) alloy

Maximum Working Pressure:

Up to 150 PSI (1.03 MPa)

Maximum Working Temperature:

Up to 406 °F (208°C)

			Water Flow			
			Hot Water		Cold Water	
Model	Nominal Capacity					
	kW	Btu/Hr	USGPM	PSIG	USPGM	PSIG
M 180	53	180,000	40	3.5	60	3.8
M 300	88	300,000	40	3.7	60	4.8
M 500	146	500,000	40	3.9	60	3.6

Nominal values are based on 60°C(40°F) temp. diff. between incoming heating and heated water

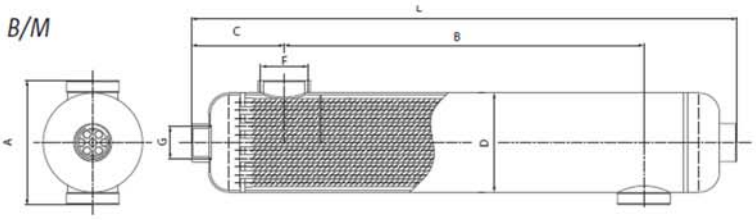
Model	Heat Transfer Area		Connection Shell	Connection Tubes
	m2	ft2	in	in
M 180	0.44	4.70	1-1/2"	1"
M 300	0.84	9.00	1-1/2"	1"
M 500	1.56	16.80	1-1/2"	1"

Unit 120, 2340 Viscount Way Richmond, BC V6V 1N1
tel: 1-604-279-8266 fax:1-604-279-8265
email: sales@metalpres.ca

Pool Heaters Technical Product Specifications

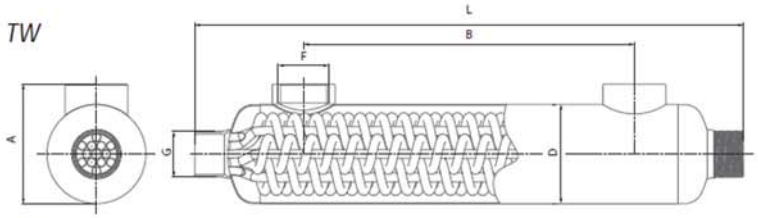
Heat Exchanger Model	Geometrical dimensions												Heat Transfer Area	
	L		A		B		C		Ø D		F	G		
	mm	in	mm	in	mm	in	mm	in	mm	in			m²	sq ft
M 180	402,1	15.8	160	6.3	193	7.6	104,6	4.1	103,6	4.1	1½"	1"	0,44	4.70
M 300	651,1	25.6	160	6.3	442	17.4	104,6	4.1	103,6	4.1	1½"	1"	0,84	9.00
M 500	1 104,1	43.5	160	6.3	859	33.8	104,6	4.1	103,6	4.1	1½"	1"	1,56	16.80
TW 100	332,6	13.1	108,9	4.3	134,6	5.3	–	–	90,4	3.6	1½"	1¼"	0,21	2.24
TW 200	530,6	20.9	108,9	4.3	332,6	13.1	–	–	90,4	3.6	1½"	1¼"	0,38	4.15
TW 300	758,6	29.9	108,9	4.3	560,6	22.1	–	–	90,4	3.6	1½"	1¼"	0,58	6.26
TW 400	910,6	35.9	108,9	4.3	712,6	28.1	–	–	90,4	3.6	1½"	1¼"	0,72	7.71

B/M



Tube side hot/shell side cold

TW



Tube side hot/shell side cold

Standard materials	
M LINE	Nicrom-24
TW LINE	grade I titanium
Maximum allowable working pressure	
M LINE - shell/tube side	10 bar / 150 PSIG
TW LINE - shell/tube side	10 bar / 150 PSIG
Maximum allowable working temperature	
M LINE - shell/tube side	208°C / 406°F
TW LINE - shell/tube side	120°C / 248°F

Nominal Performance

Heat Exchanger Model	Nominal Capacity		Hot Water Side				Cold Water Side			
			flow		pressure drop		flow		pressure drop	
	kW	BTU/h	l/min	USGPM	kPa	PSIG	l/min	USGPM	kPa	PSIG
M 180	53	180,000	150	40	24,0	3.5	227	60	26,2	3.8
M 300	88	300,000	150	40	25,5	3.7	227	60	33,1	4.8
M 500	146	500,000	150	40	27,0	3.9	227	60	24,8	3.6
TW 100	29	100,000	75	20	22,3	3.2	227	60	37,2	5.4
TW 200	57	200,000	75	20	32,3	4.7	227	60	40,5	5.9
TW 300	87	300,000	75	20	44,3	6.4	227	60	44,1	6.4
TW 400	113	400,000	75	20	52,7	7.6	227	60	46,2	6.7

Nominal Capacity Values are based on heating water 180°F (82.2°C) and return pool water 80°F (26.7°C)