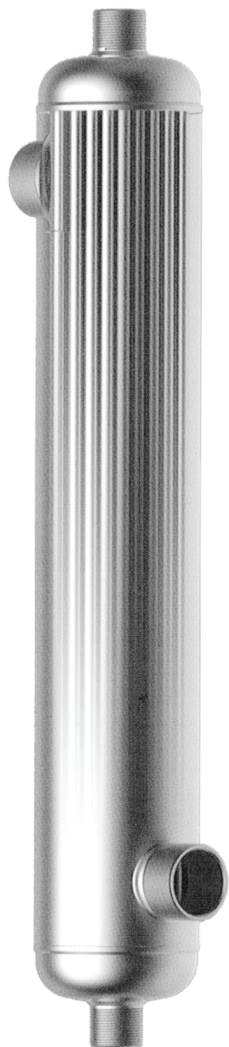


MARINE ALLOY HEAT EXCHANGERS



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 austenitic 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 austenitic (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)

Model	Nominal Capacity		Water Flow			
			Hot Water		Cold Water	
	kW	Btu/Hr	USGPM	PSIG	USGPM	PSIG
M 180	53	180000	7.93	0.40	55.48	1.10
M 300	88	300000	10.57	0.90	79.25	2.50
M 500	146	500000	14.53	1.30	95.10	3.20

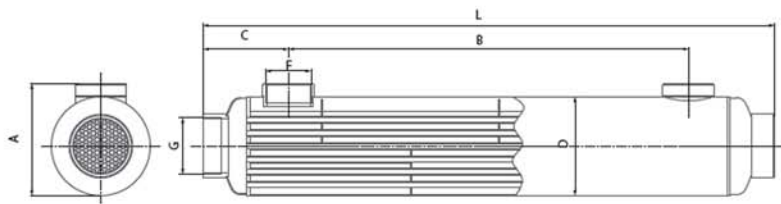
Nominal values are based on 60°C(40°F) temp. diff. between incoming heating and heated water

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"

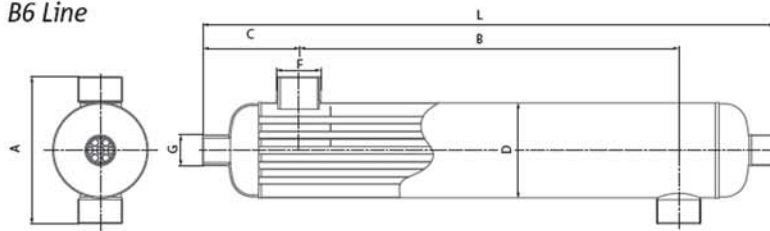


Technical Product Specifications

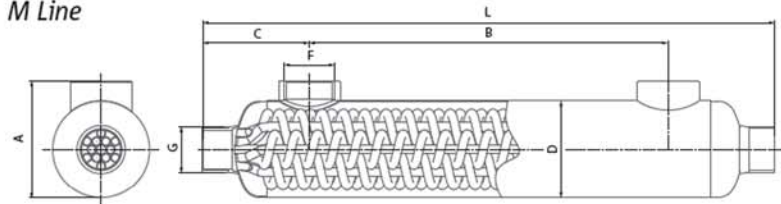
Heat Exchanger Model	Dimensions										Connections		Heat Transfer Area	
	L		A		B		C		Ø D		F	G		
	mm	in	mm	in	mm	in	mm	in	mm	in	Shell	Tubes	m ²	sq ft
B6-280	400.0	15.7	94.5	3.7	240.0	9.4	80.0	3.1	80.0	3.1	1"	1½"	0.47	5.10
B6-390	373.0	14.7	117.6	4.6	193.0	7.6	90.0	3.5	103.6	4.1	1½"	2"	0.60	6.50
B6-700	622.0	24.5	117.6	4.6	442.0	17.4	90.0	3.5	103.6	4.1	1½"	2"	1.15	12.40
B6-1200	1075.0	42.3	117.6	4.6	895.0	35.2	90.0	3.5	103.6	4.1	1½"	2"	2.14	23.00
M-180	402.1	15.8	160.0	6.3	193.0	7.6	104.6	4.1	103.6	4.1	1½"	1"	0.44	4.70
M-300	651.1	25.6	160.0	6.3	442.0	17.4	104.6	4.1	103.6	4.1	1½"	1"	0.84	9.00
M-500	1 104.1	43.5	160.0	6.3	895.0	35.2	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	99.0	3.9	90.4	3.6	1½"	1¼"	0.21	2.24
TW-200	530.6	20.9	108.9	4.3	332.6	13.1	99.0	3.9	90.4	3.6	1½"	1¼"	0.38	4.15
TW-300	758.6	29.9	108.9	4.3	560.6	22.1	99.0	3.9	90.4	3.6	1½"	1¼"	0.58	6.26
TW-400	910.6	35.9	108.9	4.3	712.6	28.1	99.0	3.9	90.4	3.6	1½"	1¼"	0.72	7.71



B6 Line



M Line



TW Line

Standard materials

B6 LINE Stainless Steel 316 L

M LINE Nicrom-24

TW LINE Titanium

Maximum allowable working pressure

B6 LINE 10 bar / 150 PSIG

M LINE 10 bar / 150 PSIG

TW LINE 10 bar / 150 PSIG

Maximum allowable working temperature

B6 LINE 208°C / 406°F

M LINE 208°C / 406°F

TW LINE 120°C / 248°F

Heat Exchanger Model	Nominal Capacity		Hot Water Side				Cold Water Side			
			flow		pressure drop		flow		pressure drop	
			kW	BTU/h	l/min	USGPM	kPa	PSI	l/min	USGPM
B6-280	82	280,000	125	33.0	22.4	3.3	250	66.1	14.8	2.2
B6-390	114	390,000	260	68.7	30.6	4.4	520	137.4	26.8	3.9
B6-700	205	700,000	215	56.8	14.3	2.1	430	113.6	25.0	3.6
B6-1200	352	1,200,000	238	62.9	25.2	3.7	476	125.8	47.0	6.8
M-180	53	180,000	100	26.4	7.0	1.0	150	39.6	8.7	1.3
M-300	88	300,000	105	27.7	8.2	1.2	157	41.6	8.6	1.3
M-500	146	500,000	120	31.7	11.4	1.7	180	47.6	11.8	1.7
TW-100	29	100,000	17	4.6	6.1	0.9	38	10.0	0.3	0.1
TW-200	57	200,000	28	7.5	26.7	3.9	61	16.0	1.4	0.2
TW-300	87	300,000	36	9.5	63.2	9.2	76	20.0	2.9	0.4
TW-400	113	400,000	35	9.1	71.7	10.4	265	70.0	40.7	5.9

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