



Advanced Cooling Technology



# Marine Oil Coolers



# Introduction



Founded in 1979, Thermex is now recognised as a manufacturer that delivers innovative designs and quality products to a global customer base from its extensive range of liquid and air cooled heat exchangers.

The Thermex standard marine shell and tube range includes; oil coolers, raw water/fresh water heat exchangers, exhaust manifolds and charge air coolers. The removable header and floating tube stack allow easy maintenance supported by the availability of replacement tube bundles and service kits.

The design of Thermex tube stacks is versatile and can be adapted to fit into the bespoke housings of equipment manufacturers. Thermex heat exchangers undergo 100% pressure testing in our factory and can be supplied with full material certification by internationally recognised independent classification societies such as; Lloyds Register, Bureau Veritas, ABS, DNV and NKK is also available.

The reliability of the marine range has resulted in a well earned reputation with established companies from the industry including manufacturers of;

- » Marine Engines and Systems
- » Deck Handling Equipment and Winches
- » Marine Hydraulic Power Packs
- » Marine Generators
- » Marine Gear Boxes



## Features and Benefits;

- » Comprehensive Range
- » Shell diameters from 3" to 8"
- » Lengths from 175mm to 1811mm
- » Variety of threaded and hose tail connections
- » Floating tube stack design
- » Easy to maintain and service
- » Sacrificial anodes available on request
- » Leak detection rings (2700 and 2800 series)

# Materials and Configurations

The Standard Shell and Tube 2000 Series range with aluminium body, floating tube stack held in place with "O" rings (to allow differential expansion) and 90/10 Cupro-Nickel tubes provides an efficient and proven solution for most hydraulic and industrial applications. Thermex marine heat exchangers are however operating in a more demanding environment and are therefore manufactured from higher specification materials to maximise performance and minimize the risks associated with erosion or corrosion.

## Construction Materials;

### Body

Aluminium 6063 (2300 and 2500 Series)  
Aluminium LM6M (2700 and 2800 Series)

### Tubes

Standard	90/10 Cupro-Nickel (CN102)
Special	70/30 Cupro-Nickel (CN107)
Titanium	Titanium Gr.2

### Tube Plates

Standard	Naval Brass (CZ112)
Special	90/10 Cupro-Nickel (CN102)
Titanium	Titanium Gr.2

### Headers

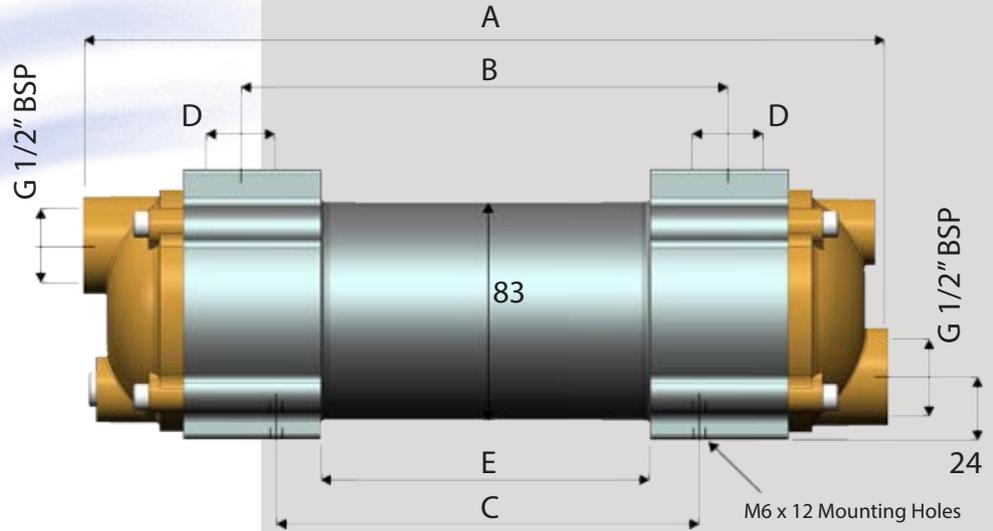
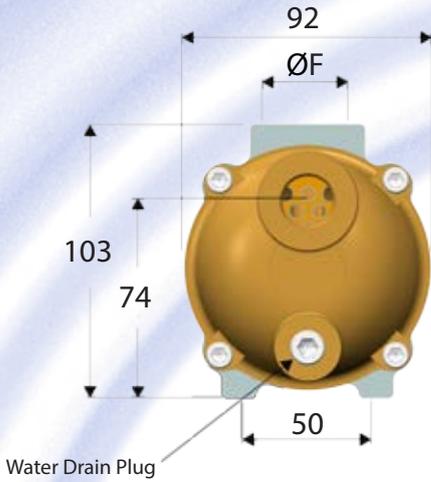
Gunmetal LG2  
(Other materials such as Aluminium Bronze, 70/30 and Titanium available upon request)

### Seals

Operating up to 100 °C	Nitrile
Operating up to 120 °C	Viton



# 2300 Series



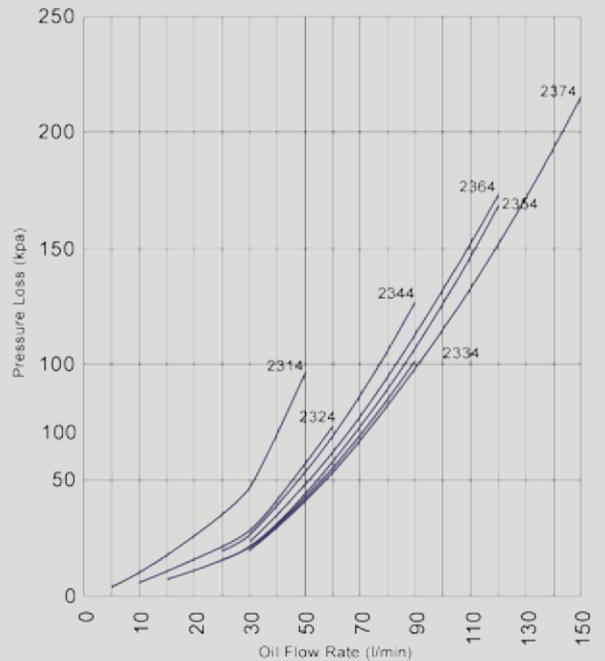
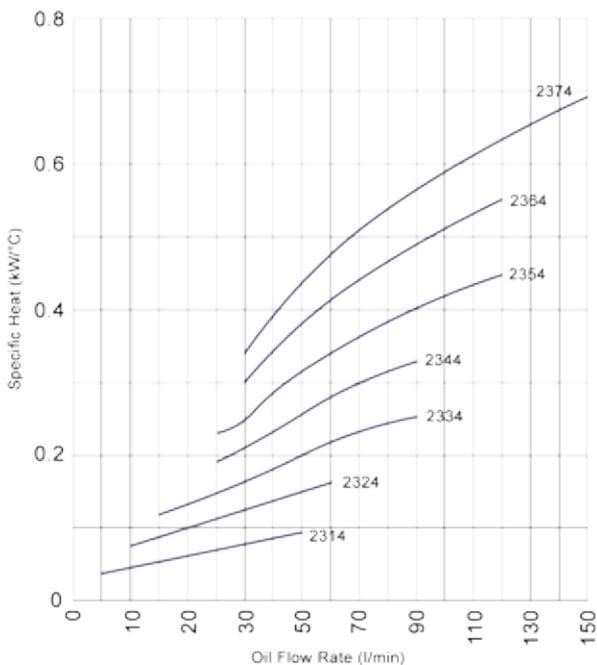
Type	A (mm)	B (mm)	C (mm)	D (BSP)	E (mm)	ØF (mm)	Kg	Oil Vol (L)	Water Vol (L)
2314	175	59	*	G 1/2"	-	29.1	3	0.3	0.4
2324	259	135	117	G 3/4"	-	36	4	0.5	0.5
2334	345	221	203	G 3/4"	-	36	5	0.7	0.6
2344	443	319	301	G 3/4"	263	36	5	1.0	0.7
2354	571	447	429	G 3/4"	391	36	6	1.3	0.9
2364	717	587	575	G 1"	537	-	7	1.7	1.1
2374	895	765	753	G 1"	715	-	8	2.2	1.4

For 3/4" BSP water connections add Suffix H to part number  
 For 70/30 CuNi tube stack change last digit to 6 e.g. 2314 becomes 2316  
 For Titanium tube stack add suffix T to part number e.g. 2314 becomes 2314T

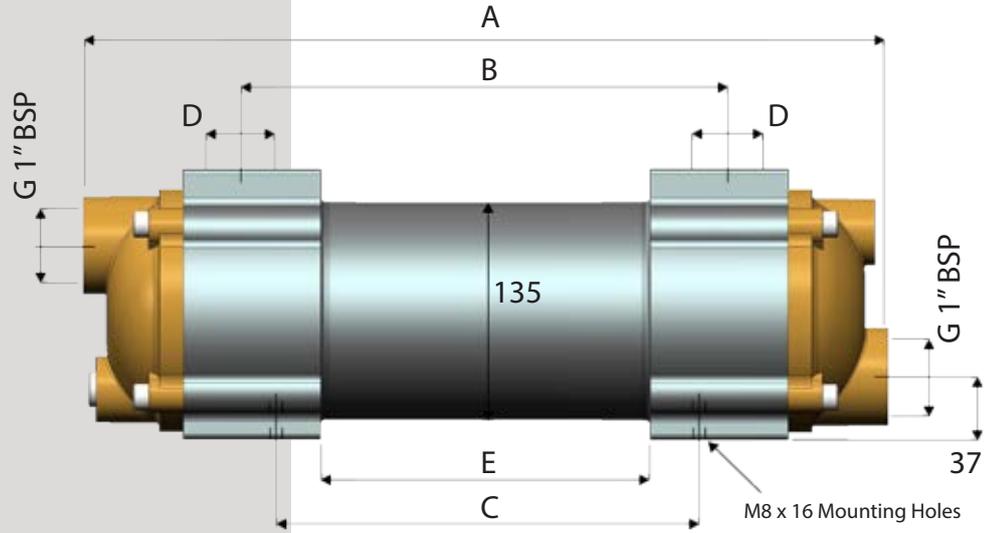
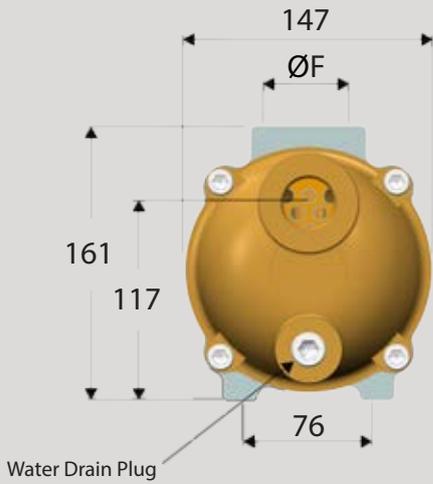
Maximum Working Temperature	100 °C
Maximum Working Oil Pressure	30 Bar
Maximum Working Water Pressure	10 Bar

Minimum Sea Water Flow Rate	3 Pass Cooler - 20 L/min
Maximum Sea Water Flow Rate	3 Pass Cooler - 45 L/min

For higher temperatures, pressures and flow rates please contact us to discuss alternative options



# 2500 Series

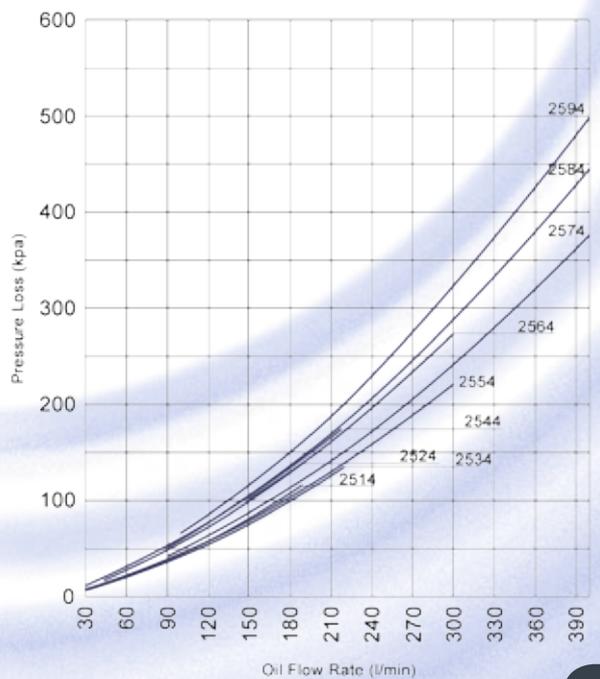
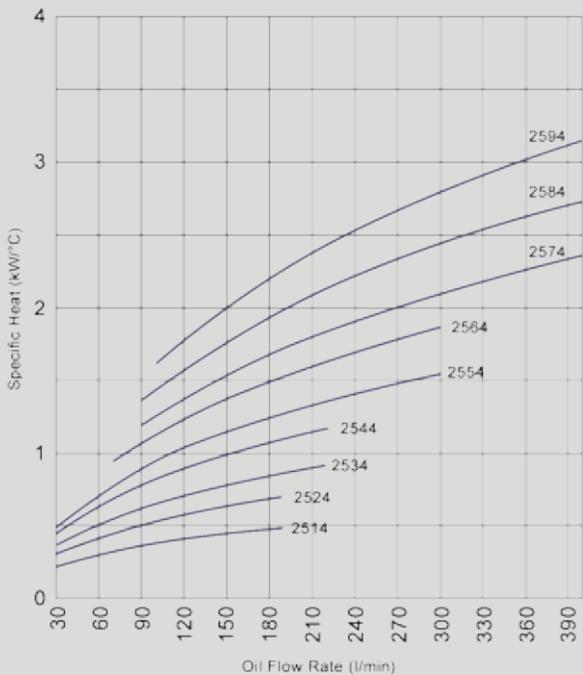


Type	A (mm)	B (mm)	C (mm)	D (BSP)	E (mm)	ØF (mm)	Kg	Oil Vol (L)	Water Vol (L)
2514	291	129	75	G 1"	-	45	10	1.4	1.4
2524	377	199	161	G 1 1/4"	-	53	12	1.9	1.7
2534	475	297	259	G 1 1/4"	-	53	13	2.5	2.1
2544	603	425	387	G 1 1/4"	333	53	14	3.5	2.6
2554	749	571	533	G 1 1/2"	479	59	17	4.5	3.2
2564	927	749	711	G 1 1/2"	657	59	20	5.8	3.9
2574	1129	951	913	G 1 1/2"	859	59	23	7.3	4.8
2584	1381	1203	1165	G 1 1/2"	1111	59	27	9.0	5.8
2594	1727	1549	1511	G 1 1/2"	1457	59	32	11.5	7.2

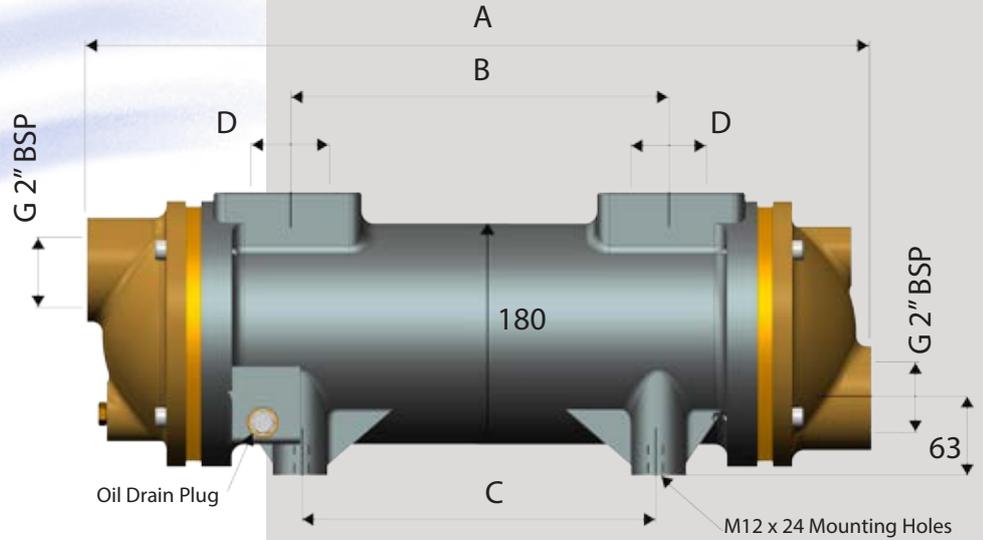
Maximum Working Temperature	100 °C
Maximum Working Oil Pressure	30 Bar
Maximum Working Water Pressure	10 Bar

Minimum Sea Water Flow Rate	3 Pass Cooler - 50 L/min
Maximum Sea Water Flow Rate	3 Pass Cooler - 120 L/min

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# 2700 Series



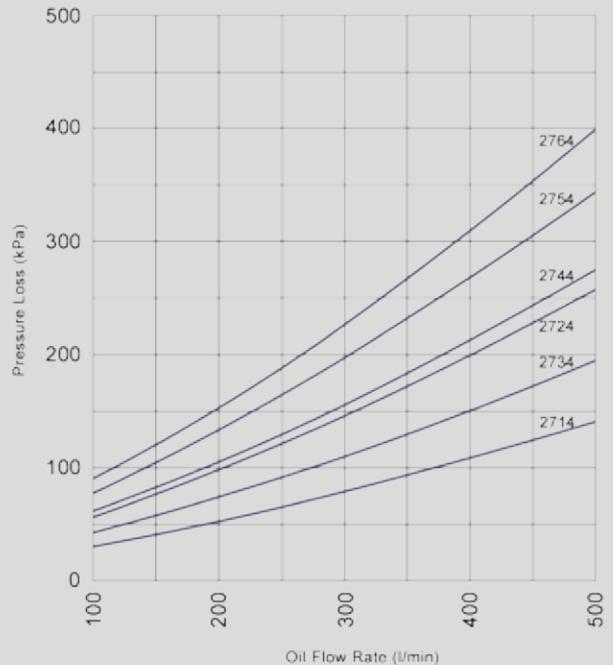
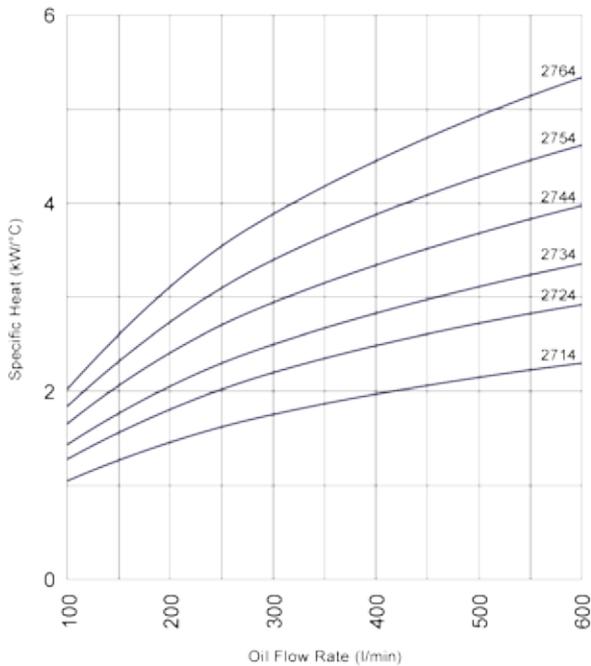
Type	A (mm)	B (mm)	C (mm)	D (BSP)	Kg	Oil Vol (L)	Water Vol (L)
2714	650	326	306	G 2"	38	5.5	5.0
2724	796	472	452	G 2"	43	7.0	6.0
2734	974	650	630	G 2"	48	9.0	7.5
2744	1176	852	832	G 2"	55	11.0	9.0
2754	1428	1104	1084	G 2"	63	14.0	10.5
2764	1777	1453	1433	G 2"	74	17.5	13.0

For 3/4" BSP water connections add Suffix H to part number  
 For 70/30 CuNi tube stack change last digit to 6 e.g. 2314 becomes 2316  
 For Titanium tube stack add suffix T to part number e.g. 2314 becomes 2314T

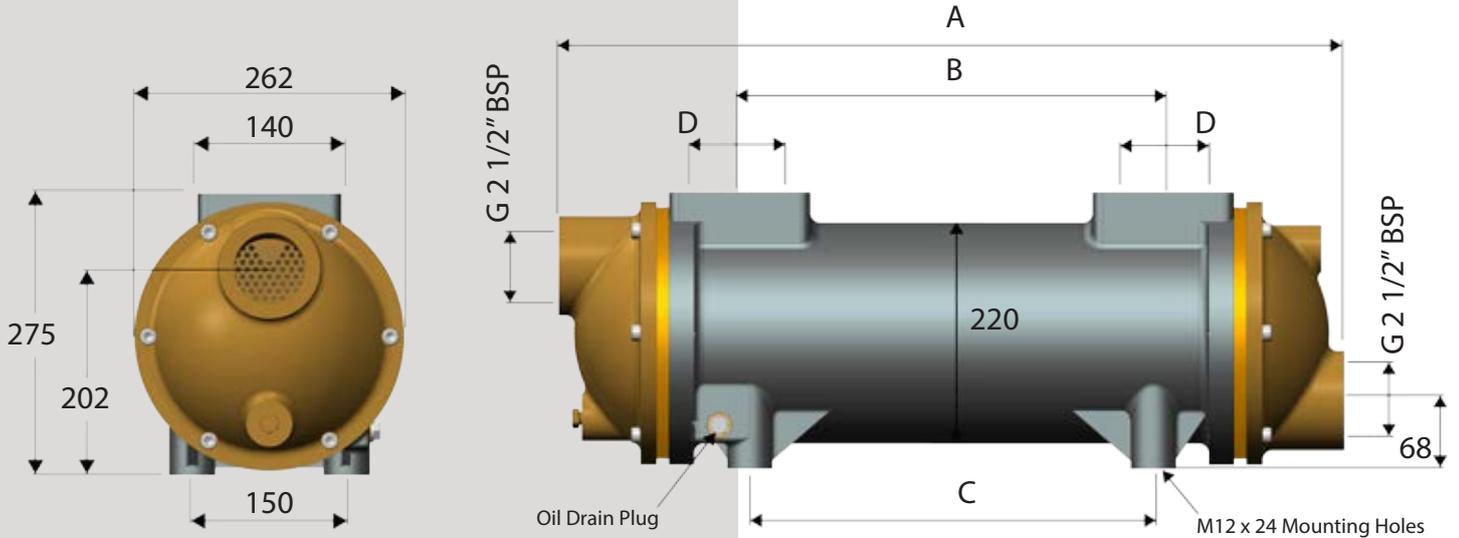
Maximum Working Temperature	100 °C
Maximum Working Oil Pressure	20 Bar
Maximum Working Water Pressure	10 Bar

Minimum Sea Water Flow Rate	3 Pass Cooler - 100 L/min
Maximum Sea Water Flow Rate	3 Pass Cooler - 210 L/min

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# 2800 Series

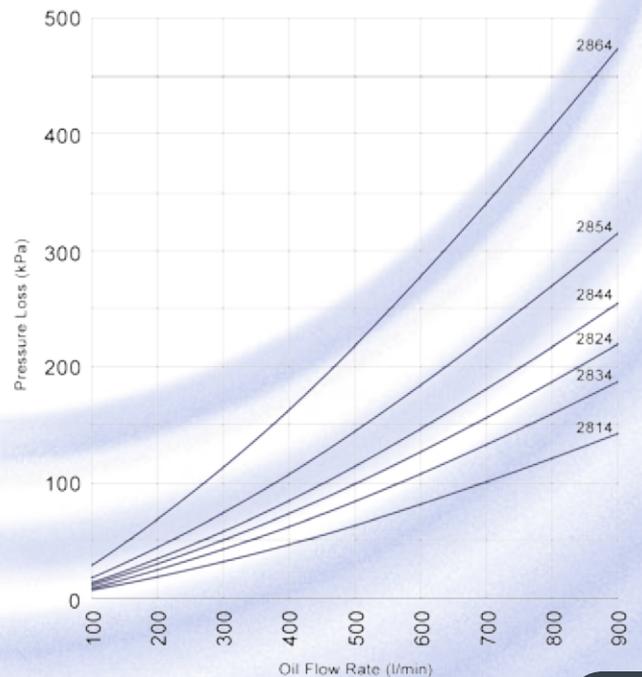
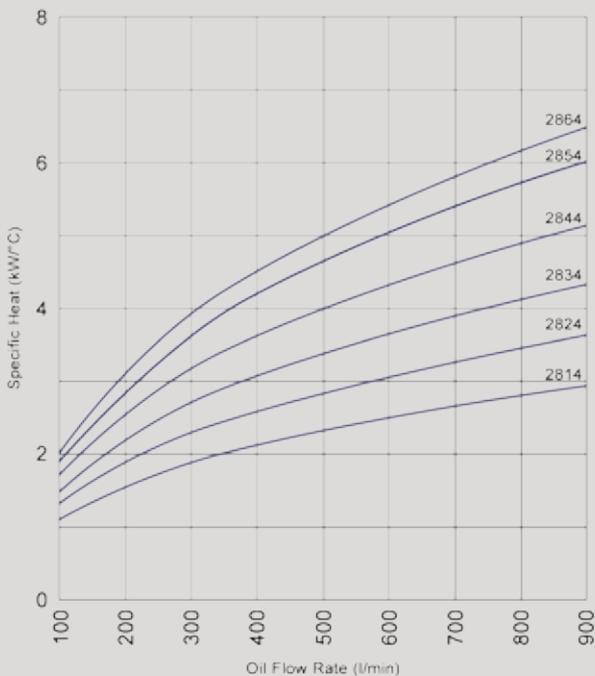


Type	A (mm)	B (mm)	C (mm)	D (BSP)	Kg	Oil Vol (L)	Water Vol (L)
2814	684	326	306	G 3"	48	9.0	7.5
2824	830	472	452	G 3"	54	11.5	9.0
2834	1008	650	630	G 3"	62	15.0	10.5
2844	1210	852	832	G 3"	71	18.5	13.0
2854	1462	1104	1084	G 3"	82	23.0	15.5
2864	1811	1453	1433	G 3"	97	29.5	19.0

Maximum Working Temperature	100 °C
Maximum Working Oil Pressure	20 Bar
Maximum Working Water Pressure	10 Bar

Minimum Sea Water Flow Rate	3 Pass Cooler - 140 L/min
Maximum Sea Water Flow Rate	3 Pass Cooler - 300 L/min

For higher temperatures, pressures and flow rates please contact us to discuss alternative options





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