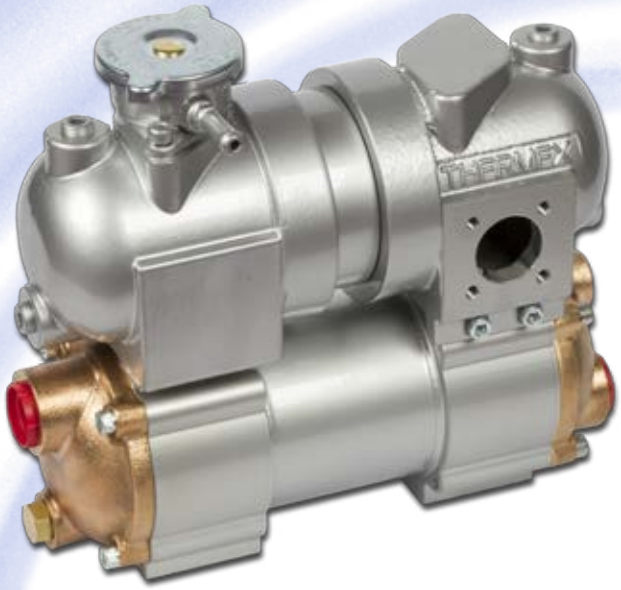
thermex

Advanced Cooling Technology

Header Tank Heat Exchangers

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.

A natural development from our established range of shell and tube oil coolers, Thermex Header Tank Heat Exchangers combine the standard 2000 series shell and tube components with a newly designed cast header tank to form a compact, efficient and robust cooler suitable for; generator sets, combined heat and power systems, marine engines and fire pumps.

The floating tube stack design allows expansion and contraction within the housing to minimise thermal stress and is easily removed for cleaning and maintenance.

A wide choice of construction material is available to ensure an effective and constant performance within diverse and demanding environments where coolant may be; fresh water, sea water or polluted water.

Unrivalled thermal performance and reliability continue to make Thermex Heat Exchangers the manufacturers' prime choice for cooling; engines and transmission oil, charge air, generator sets and pumps.

Header Tank Heat Exchangers - Features

Body (Shell);
- Aluminium

Headers;
- Cast Iron (Land based versions)
- Gun Metal (Marine based versions)

Tube Stack Options;
- 90/10 Cupro-Nickel (Standard)
- 70/30 Cupro-Nickel
- Titanium

Seals;
- Viton

Materials and Configurations

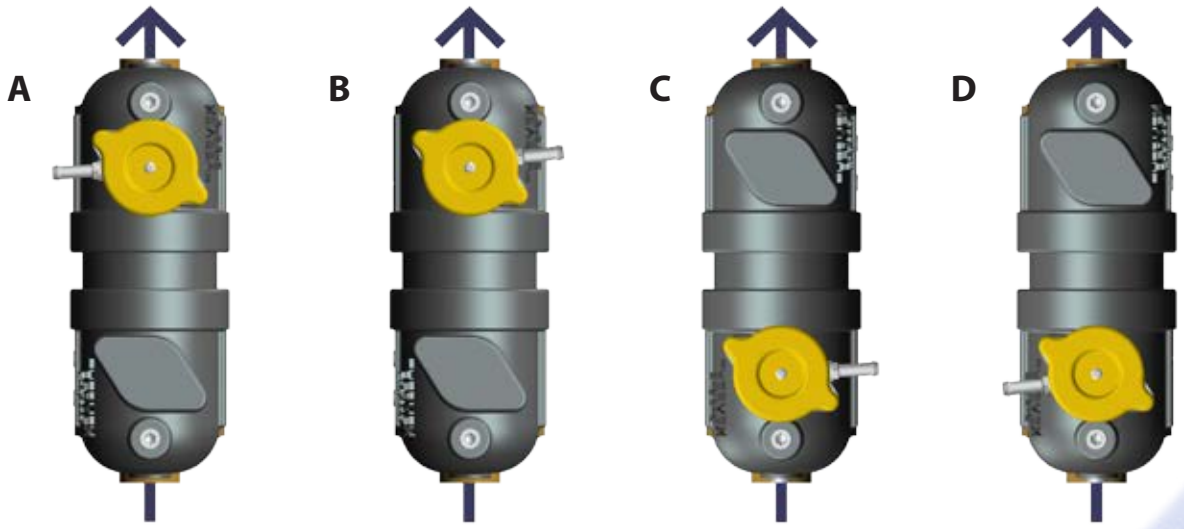
Thermex Header Tank Heat Exchangers are one of the most flexible and easily adaptable products of its kind on the market.

The part number consists of eight digits, each representing a specific feature of the size and specification of the header tank heat exchanger. Your final part number should look similar to the example below;

H31M-3SAA

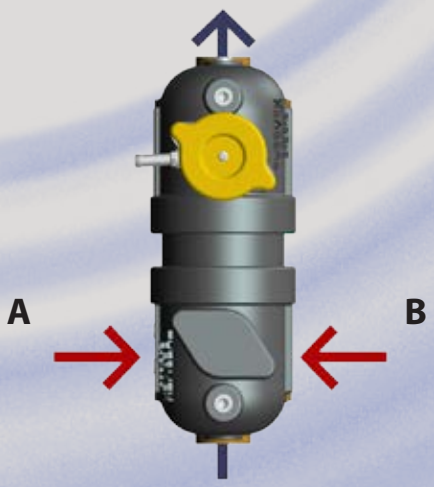
Digits 1 and 2 and 3		Digit 4	Digit 4	Digit 6
Series	**Length**	**Application**	**Coolant Passes**	**Coolant Connection Size**
H3 H5	(See pages 3 and 4)	M - Marine L - Land	1 - Single 2 - Double 3 - Triple	S - Standard L - Large

Digit 7 - Filler Neck Position (Arrow represents coolant flow direction)

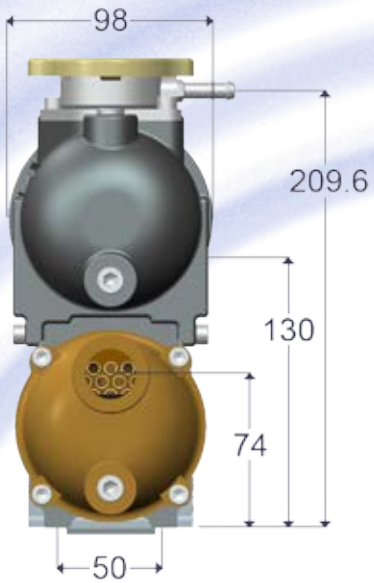


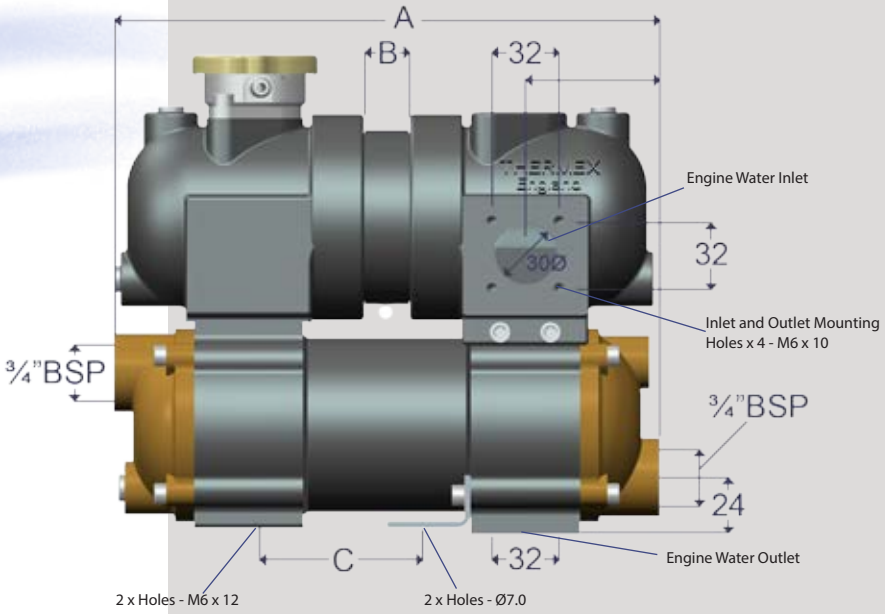
Digit 8 - Engine Water Inlet Position

Blue arrow represents coolant flow direction
Red arrow represents engine water flow inlet



H3 Series





Type	A (mm)	B (mm)	C (mm)	Weight Kg	Engine Water Vol (L)	Header Tank Vol (L)	Coolant Water Vol (L)
H31	259	21	76	6	0.5	1.0	0.5
H32	345	107	162	7	0.7	1.4	0.6
H33	443	205	260	7.5	1.0	1.8	0.7
H34	571	333	388	8.5	1.3	2.4	0.9
H35	717	479	534	10	1.7	3.0	1.1
H36	895	657	712	11	2.2	3.4	1.4

Maximum Working Temperature	120 °C
Maximum Working Engine Water Pressure	1 Bar
Maximum Working Coolant Water Pressure	10 Bar

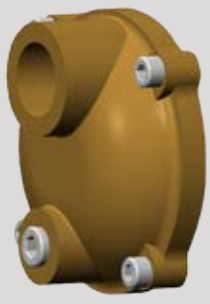
Coolant Flow 1 - Single Pass

Standard Connection (S)	1.5" BSP
Large Connection (L)	2" BSP
Minimum Sea Water Flow Rate	60 L/min
Maximum Sea Water Flow Rate	135 L/min

Coolant Flow 2 - Double Pass

Standard Connection (S)	1/2" BSP
Large Connection (L)	3/4" BSP
Minimum Sea Water Flow Rate	40 L/min
Maximum Sea Water Flow Rate	90 L/min

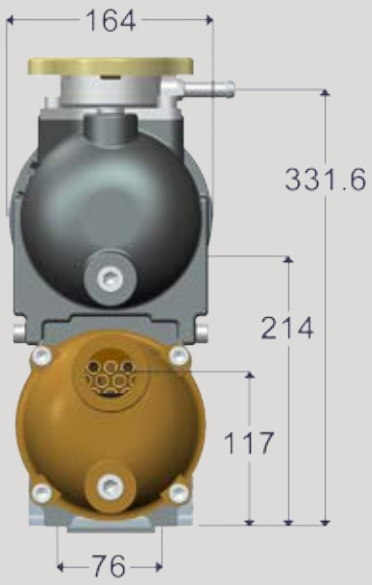
Coolant Flow 3 - Triple Pass

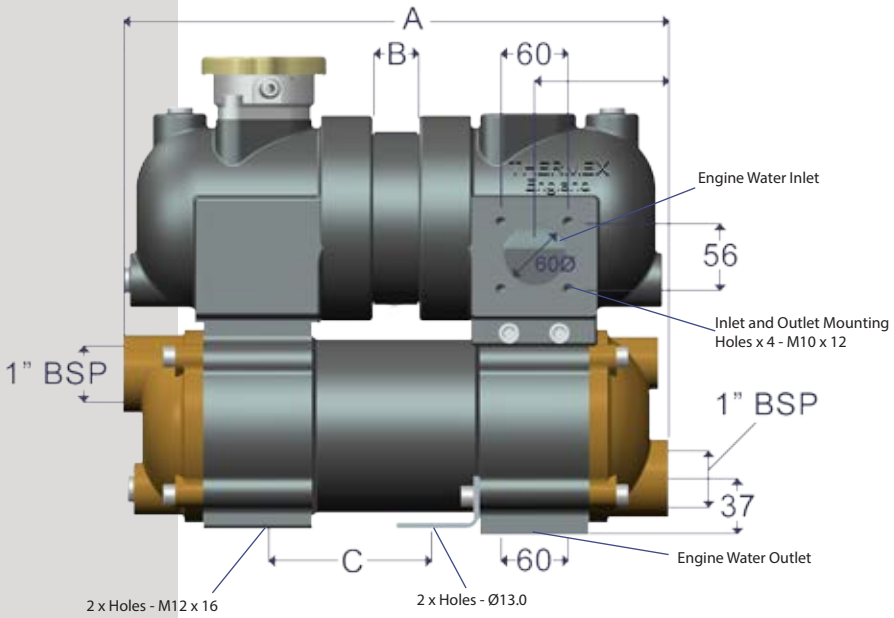


Standard Connection (S)	1/2" BSP
Large Connection (L)	3/4" BSP
Minimum Sea Water Flow Rate	20 L/min
Maximum Sea Water Flow Rate	45 L/min

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

H5 Series





Type	A (mm)	B (mm)	C (mm)	Weight Kg	Engine Water Vol (L)	Header Tank Vol (L)	Coolant Water Vol (L)
H51	377	53	116	16.5	1.9	4.2	1.7
H52	475	151	214	18	2.5	5.4	2.1
H53	603	279	342	20	3.5	6.9	2.6
H54	749	425	488	23.5	4.5	8.7	3.2
H55	927	603	666	27.5	5.8	10.9	3.9
H56	1129	805	868	31.5	7.3	13.4	4.8

Maximum Working Temperature	120 °C
Maximum Working Engine Water Pressure	1 Bar
Maximum Working Coolant Water Pressure	10 Bar

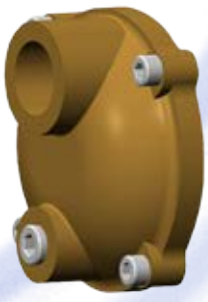
Coolant Flow 1 - Single Pass

Standard Connection (S)	1.5" BSP
Large Connection (L)	3" BSP
Minimum Sea Water Flow Rate	150 L/min
Maximum Sea Water Flow Rate	360 L/min

Coolant Flow 2 - Double Pass

Standard Connection (S)	1" BSP
Large Connection (L)	1.5" BSP
Minimum Sea Water Flow Rate	100 L/min
Maximum Sea Water Flow Rate	240 L/min

Coolant Flow 3 - Triple Pass



Standard Connection (S)	1" BSP
Large Connection (L)	1.5" BSP
Minimum Sea Water Flow Rate	50 L/min

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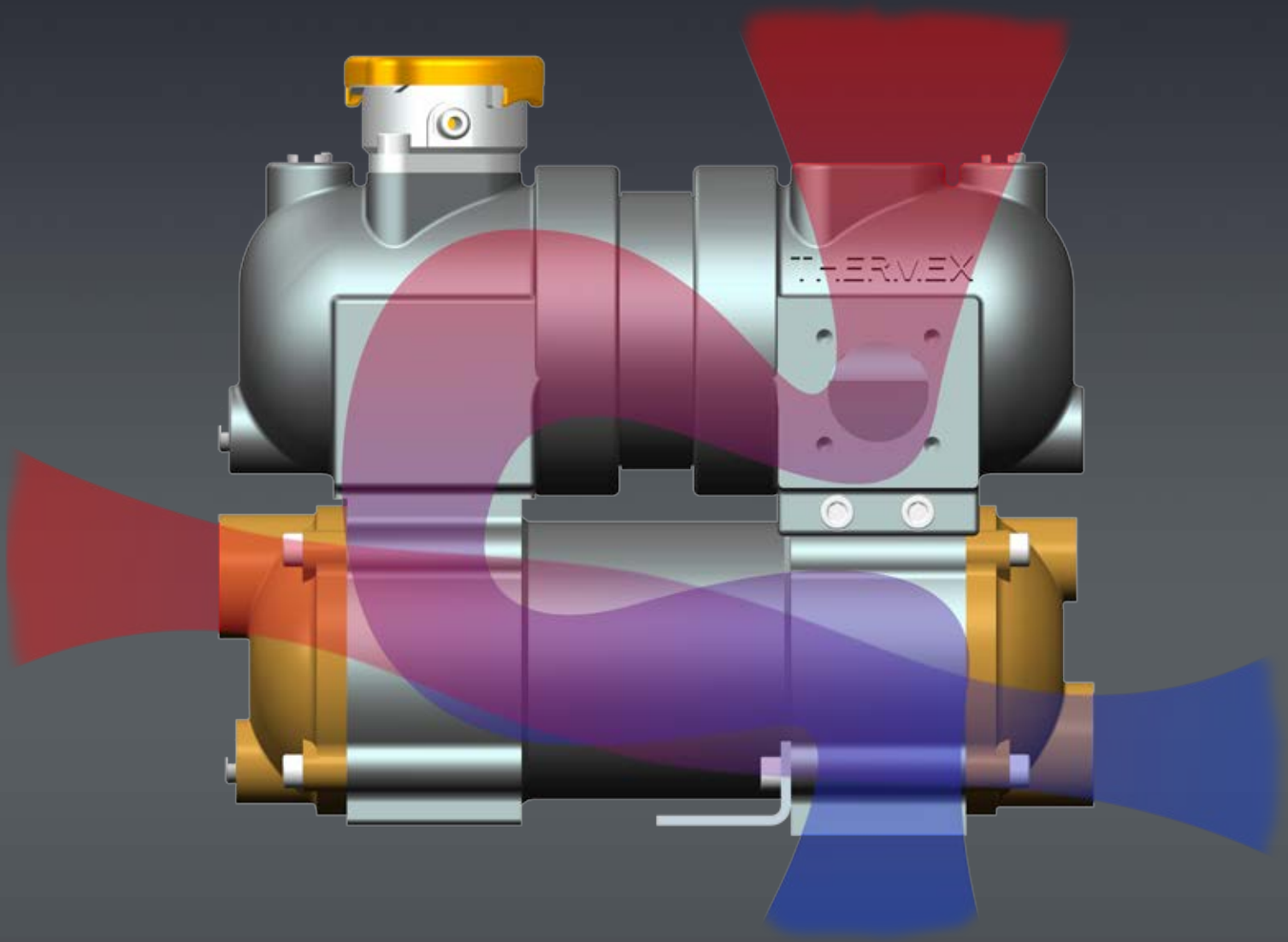

Thermex Ltd
Merse Road, North Moons Moat, Redditch, Worcestershire, B98 9HL, U.K.
Tel: +44 (0)1527 62210 - Fax: +44 (0)1527 60138
www.thermex.co.uk - sales@thermex.co.uk