

## Fuel Coolers

We have been manufacturing marine heat exchangers for many years and have built up an enviable reputation for quality and reliability. We have recently introduced our fuel cooler range to meet the requirement on modern marine diesel engines for fuel cooling.

With increasing exhaust omission regulations, manufacturers have been turning to digitally controlled high pressure common rail fuel injection systems on their engines. This generates much higher diesel fuel temperatures and flows in the return lines to the fuel tanks.

This can cause problems, particularly in marine applications where fuel tanks are in enclosed spaces with little or no air flow over them to prevent heat build up. Excessive heat build up in the fuel tanks can be dangerous and also engines using warm fuel suffer a significant power loss. To overcome these problems, our sea water cooled fuel cooler should be fitted in the low pressure return line to the fuel tank to eliminate the build up of heat. This actual amount of heat to be dissipated from the return fuel is very small. The size of fuel cooler is always the smallest one that will take the full sea water flow of the engine.

All our marine products are manufactured use stainless steel 316L or titanium tubes on the sea water side. This is a very corrosive resistant material and is suitable for use in harsh sea water environments.

Our fuel coolers are shown with their dimensions and maximum allowable sea water flow on the reverse side of the brochure.

Typical examples of oil coolers fitted to marine transmissions with an oil inlet temperature of 80°C and a sea water temperature of 32°C.

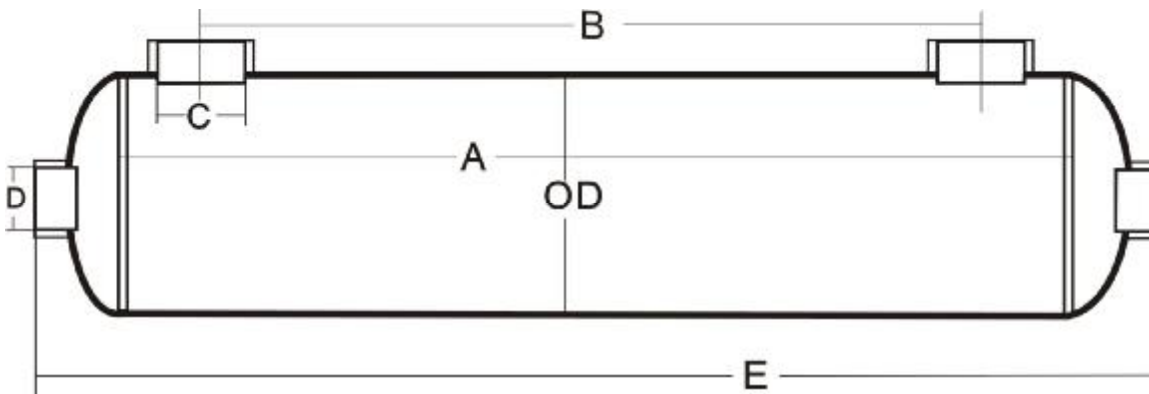
### Design Parameter

Maximum working pressure on oil side: 25 bar

Maximum working pressure on water side: 3 bar

Design temperature: -100-125°C

### Specification and dimension of oil coolers



Type	A (mm)	B (mm)	C (BSP)	D (mm)	E (mm)	Max sea water flow L/M	Suitable for engine power	Outer diameter
DC 60	136	96	3/8"	22mm	222	100	215HP/160kW	OD60mm
EC80-H	100	60	1/2"	1 1/2"	206	180	400HP/300kW	OD89mm
FC80-H	196	140	1"	2"	316	270	600HP/450kW	OD108mm
FG80-H	286	218	1 1/4"	2 1/2"	416	370	830HP/620kW	OD133mm

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