

1000 Series M225Ti Marine Propulsion Engine

165.5 kW (222 hp) @ 2500 rpm

Most compact package in its class – Offers boat design flexibility – easier new boat and repower installation.

Premium engine features for reliability and durability – Minimises downtime and service costs.

Unrivalled worldwide parts and service network – You can make the most of your machine with support from our global network.

Operator and environmentally friendly with low noise, rapid startability and low emissions. This is achieved with the 'FASTRAM' combustion system and fully closed breather system.

Competitive engine and parts pricing, extended service intervals and exceptionally low fuel consumption make the M225Ti & M150Ti engines the best in their class with significant owner savings over alternative engines.



Specification		
Number of cylinders	6 vertical in-line	
Bore and stroke	100 x 127 mm	3.9 x 5.0 in
Displacement	6 litres	366 in ³
Aspiration	Wastegated turbocharger, charge air cooled	
Cycle	4 stroke	
Combustion system	Fastram direct injection	
Compression ratio	16.0:1	
Rotation	Anti-clockwise, from rear	
Total lubricating capacity	15 litres	3.9 US gal
Cooling system	Water cooled	
Total coolant capacity	25.3 litres	6.7 US gal

www.Perkins.com/Marine

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Final weight and dimensions will depend on completed specification.

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 **Perkins**[®]

THE HEART OF EVERY GREAT MACHINE

1000 Series M225Ti Marine Propulsion Engine

165.5 kW (222 hp) @ 2500 rpm

Features and benefits

Powered by your needs

- Perkins engines can be tailored specifically for you.

These engines offer a choice of standard build configurations to match the needs of customers for a diverse range of applications

Lower operating costs

- Service intervals 400 hours as standard and Perkins provides comprehensive warranty cover for two years, with three years on major engine components

Reliability and durability

- High capacity heat exchanger with cupro-nickel tubestack ensures low operating temperatures for reliable and durable operation. Gear driven engine and raw water pumps with high quality silicone hoses for the ultimate in reliable cooling and leak-free operation
- An integral plate type oil cooler offers compactness, saving installation space and features a by-pass valve for start up safety
- The turbocharger wastegate system reduces the maximum cylinder pressure and hence improves reliability and durability

Innovative performance specification

- A 'Fastram' combustion system, Bosch rotary fuel pump, wastegated turbocharger and air intake silencer offer improvements in fuel economy, emissions and noise
- The turbocharger wastegate system optimises low engine speed performance providing smoother and faster boat acceleration at planing speed
- Low friction controlled expansion oil cooled pistons, three ring pack and honed cylinder liners give exceptionally low oil consumption, easier cold starting and extended oil change periods

Product support

- Perkins actively pursues product support excellence by ensuring our distribution network invest in their territory – strengthening relationships and providing more value to you, our customer
- Through an experienced global network of distributors and dealers, fully trained engine experts deliver total service support around the clock, 365 days a year. They have a comprehensive suite of web based tools at their fingertips covering technical information, parts identification and ordering systems, all dedicated to maximising the productivity of your engine
- Throughout the entire life of a Perkins engine, we provide access to genuine OE specification parts and service. We give 100% reassurance that you receive the very best in terms of quality for lowest possible cost .. wherever your Perkins powered machine is operating in the world
- To find your local distributor: www.perkins.com/distributor

E-mail: Marine@Perkins.com Web: www.Perkins.com/Marine

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Marine Power

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Technical information

Benefits

- Excellent power to weight
- Ease of Installation
- Clean, quiet, smooth operation
- Excellent fuel economy
- Easy to maintain with 500hr Service interval
- Reliability

Standard features

- Fresh water heat exchanger cooled engine with gear driven self priming raw water and fresh water pumps or keel cooling adaption
- Fresh water cooled exhaust manifold
- Wastegated turbocharger with insulation cover
- Raw water cooled charge air cooler
- Air Intake filter with cleaner element
- High inclination engine sump, top access dipstick and engine mounted sump drain pump
- Twin element lubricating oil filter
- Integral plate engine lubricating oil cooler
- Closed breather system
- High mounted twin element fuel filter
- Thermostart cold start aid
- Manual control adaptation parts
- Electric stop solenoid
- Alarm switches and warning siren

Optional equipment

- Backends – suitable for a range of transmissions, (standard) Hurth HSW 630A Newage PRM 1000D
- Electrical – 12 or 24 volt insulated marine electrics
- Exhaust outlets – variable angle water injected outlets including highrise option. Dry outlets with flexible bellows instrumentation – single and dual station instrumentation incorporating audible/visual alarms and gauges complete with senders. Switches and varying lengths of interconnecting cables
- Power Take Off – crankshaft PTO extension shaft with pulley drives
- Solid mounting brackets
- Flexible engine mountings with adjustment shims
- Solid or flexible output couplings
- Toolkit
- On board parts kit
- Engine mounted electro-magnetic bilge pumps
- Calorifier connections
- Fuel pre-filter with water alarm
- Fuel feed and return pipes

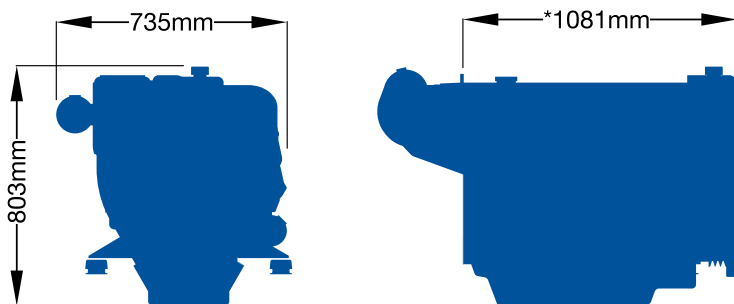
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Engine package weights and dimensions

Length	*1081 mm	43 in
Width	735 mm	29 in
Height	803 mm	32 in
Weight (dry)	573 kg	1263 lb

*Less gearbox

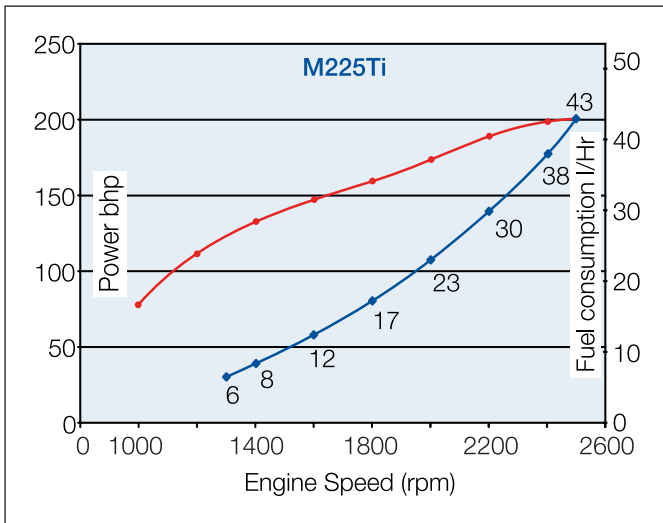
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Propeller law consumption (2.8 index).

Propellers should be matched to achieve maximum rated engine speed under fully laden boat conditions. Engine delivered from factory will be set to produce gross (flywheel) power output within manufacturing tolerances and run-in allowance to BS AU141a: 1974 conditions.

Speed rpm	Power kW	Power hp	Speed rpm	Torque Nm	Torque lb-ft	Rating type
2500	165.5	222	1400	700	516	MD

Rating definitions

Pleasure duty: For vessels operating up to 30% load factor. This rating is intended for pleasure/non-revenue generating applications that operate less than 500 hours a year. Typical applications could include but are not limited to: High speed planning craft.

Light duty: For vessels operating up to 50% load factor. This rating is intended for applications that operate less than 1500 hours a year in variable load applications where full power is limited to 2 hours out of every 12 hours of operation and reduced power must be at or below 200 rpm of the maximum rated rpm. Typical applications could include but are not limited to: planing / semi displacement craft such as customs and police launches, sport fish charter vessels, passenger carriers, survey craft and long distance cruisers etc.

Medium duty: For vessels operating up to 60% load factor. This rating is intended for applications that operate less than 4000 hours a year. Typical applications could include but are not limited to: Semi-displacement / displacement craft such as customs and police launches, high speed commercial fishing, passenger carriers, survey craft, ferries and long distance cruisers etc.

Heavy duty: For vessels operating up to 80% load factor. This rating is intended for applications that operate less than 4000 hours a year. Typical applications could include but are not limited to: semi-displacement / displacement craft such as customs and police launches, high speed commercial fishing, passenger carriers, survey craft and ferries etc.

For further details on definitions please contact your local Perkins distributor.

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