



## Diesel Engine - Marine Propulsion Engine **M92B**

**64 kWm 2400 rev/min**

The M92B engine is the successor to the very successful M92. It has been inspired by and led by the future requirements of our customers to meet the needs of the marine industry.

Built to the most demanding standards, the M92B engine meets all the requirements of both EC Stage 2 and USA EPA Tier 2 off-highway emissions legislation from 2004 and brings significant improvements over the M92 highly successful predecessor.

The M92B is a quiet 4.4 litre unit delivering improved performance and reduced operating costs in an efficient package ideal for a range of marine applications.

### Class leading performance

The M92B provides an increase in torque capability over its highly successful predecessor. Improvements have also been made to the torque curve of the engine to give up to 12% more low speed torque with torque back up, increasing to 26%.

### Cleaner and quieter

The M92B operates with smoke levels barely visible to the naked eye. Improvements of up to 3dBA have also been made to bare engine noise over its predecessor. Concentrating on reduced noise levels throughout the complete operating range of the engine from idle through to full load rated speed. This has been achieved through numerous individual product developments, including a new cylinder block design and developments to the front end gear train.

### Quality by design

Product design and manufacturing process improvements have been implemented from concept to enhance both engine reliability and durability. Perkins Sabre have also taken the opportunity to improve the 'design for assembly' through simplified sub-assemblies and improved joint and sealing technologies.

### Ease of installation

The changeover for existing M90/M92 to EC Stage 2 and USA EPA Tier 2 product is made easy through the carryover of existing envelope size and mounting points therefore minimising installation issues in repowering projects.

### Lower operating costs

Service intervals are now set at 500 hours as standard and the warranty period has been extended to 2 years with 3 years on majors. In addition, fuel economy has improved by as much as 6%.

### Product support

Total worldwide service continues to be provided through a network of 4000 distributors and dealers. This is enhanced by the introduction of TIPSS (The Integrated Parts and Service System) which represents a step change in diesel engine support. TIPSS enables customers to electronically specify and order parts as well as service electronic and mechanical engine with online guides and service tools.

***designed to perform ... delivered with choice***

## Standard Engine Specification

- Base engine.
- 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, intake manifold and heat exchanger.
- Air intake filter.
- High inclination engine sump with sump drain pump.
- Inverted spin-on element lub oil filter.
- Transmission oil cooler.
- Totally enclosed engine breather.
- High mounted single element fuel filter.
- Manual control adaption parts.
- Alarm switches and warning siren.

## Optional Equipment

- **Backends** – suitable for a range of transmissions.
- **Marine Transmissions** (Standard)
  - Hurth HSW 450A
  - Newage PRM 500D / PRM 260D
  - Borg Warner 10-18
- **Electrical**
  - 12 volt insulated or negative earth
  - 24 volt insulated
- **Exhaust Outlets**
  - Water injected outlet
  - Dry exhaust flange
- **Instrumentation** – single and dual station instrumentation including audible and visual alarms with gauges, senders, switches, loom and varying lengths of interconnecting cables. Simple tachometer panels are also available.
- **Power Take Off** – crankshaft PTO extension shaft with pulley drives.
- **Mountings** – solid mounting brackets – flexible engine mountings with alignment shims, optional brackets and flexible mountings.
- **Miscellaneous**
  - Belt cover.
  - Solid or flexible output couplings.
  - Engine mounted electro-magnetic bilge pumps.
  - Fuel pre-filter with water alarm.
  - Flexible fuel feed and return pipes.
  - Calorifier connections.
  - Tool kit.
  - On-board parts kit.

## General Data

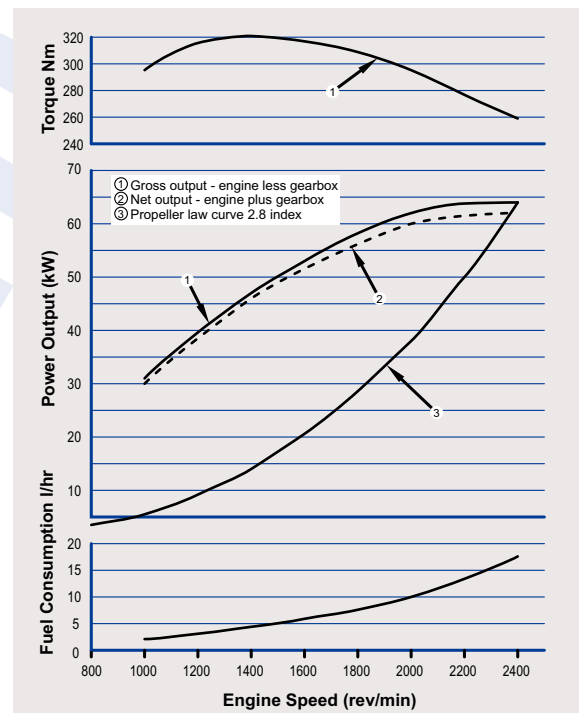


**Perkins**  
Perkins Engines Company Limited

All information in this leaflet is substantially correct at the time of printing but may be changed subsequently by the company



<b>Bore / Stroke</b>	105mm x 127mm
<b>Cubic Capacity</b>	4.4 litres
<b>Cycle</b>	4 stroke
<b>Number of Cylinders</b>	4 in-line
<b>Aspiration</b>	Naturally aspirated.
<b>Combustion System</b>	Direct injection.
<b>Engine Rotation</b>	Anti-clockwise viewed from rear.
<b>Fuel Pump</b>	Delphi rotary with electric stop.
<b>Engine Operating Angles</b>	Maximum continuous operating angles 20° front up; 25° sideways (35° sideways intermittent operation).
<b>Power Take Off</b>	Available from front end drive (for drive limitations refer to Sabre Engines Ltd).
<b>Wet Weight</b>	423kg engine only. 460kg with Hurth HSW 450A. 504kg with PRM 500D.



For more information regarding the product please contact:

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