BETA MARINE

Mid Diesel Engine Range

Heat Exchanger Cooled 43 to 150 hp

All the power you need

Prices and specifications are subject to amendment without notice. Information given is subject to our current Conditions of Tender and Sale.

Why Beta?

Because:

- We have a superb heat exchanger cooled engine range especially engineered for the yachtsman and work boats at an affordable price, and with a 5 year 'self service' warranty.
- With our Dealer network and dedicated seagoing team, we have probably installed a Beta engine in a yacht similar to yours. We will help you!
- Special Engine Feet option - designed and manufactured to suit your engine bearers.
- Low carbon foot print - these clean engines meet all current and projected **RCD** (Recreational Craft Directive 94/25/EC as amended by 2003/44/EC) exhaust emission regulations. Our Beta 43, Beta 50, Beta 60 & Beta 85 meet **EPA** (U.S Environmental Protection Agency) exhaust emission compliance.
- Our Mid engine range is based upon the most technically advanced Kubota diesels that give you very smooth, quiet power, right through the speed range. The Beta 150 is very similar, based on an FPT/IVECO diesel.
- Easy maintenance with mounted sump pump and optional polyvee belt & pulley drive transmission with our high output alternators.
- We are always improving our engine range so our current production may differ slightly from the photographs.
- Beta Engines are built in Gloucestershire, U.K.
- See our website for many details: **www.betamarine.co.uk**

Beta's Gloucester manufacturing facility

Seagoing Specifications

Beta Marine's Seagoing Engines are:

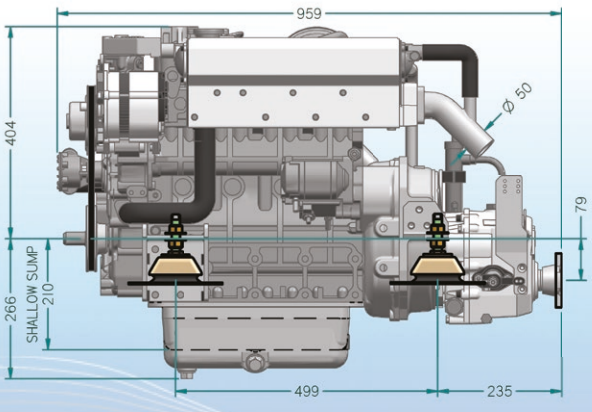
- Heat exchanger cooled, all naturally aspirated (except Beta 85 & Beta 105 - turbocharged) marine diesel engines based on Kubota.
- Multi cylinder with high inertia flywheel for smooth running.
- Three vortex combustion for quiet running, low emissions and excellent fuel consumption with indirect injection up to and including 75 hp.
- Quiet gear driven camshaft for engine reliability and easy servicing - no timing chains or tooth belts to replace.
- Mechanical injection pump and mechanical governing for maximum reliability.
- Direct injection - Beta 85 to Beta 150.
- Battery charging alternator - 70 amps, giving full power at cruising speed with 12 volt electric starting as standard.
- Heater plugs for cold start below 5°C.
- Standard "ABV" Control Panel.
- Heavy duty feet and flexible mountings.
- Technodrive, PRM, or ZF gearbox with 2:1 reduction ratio as standard. Output rotation is clockwise in ahead, viewed from gearbox end (in-line installation).
- Fuel filter and mechanical fuel lift pump.
- Lubricating oil filter and sump drain pump.
- 'Morse' type engine speed and gearbox control cable support and end fittings.
- Installation angles up to 15° maximum when static and 25° when heeling (Kubota).

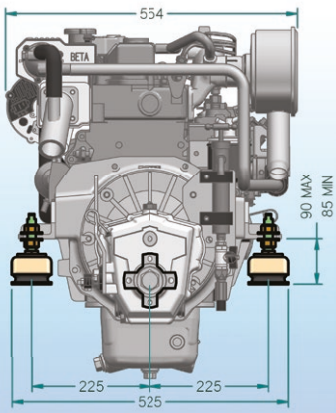
Seagoing Options

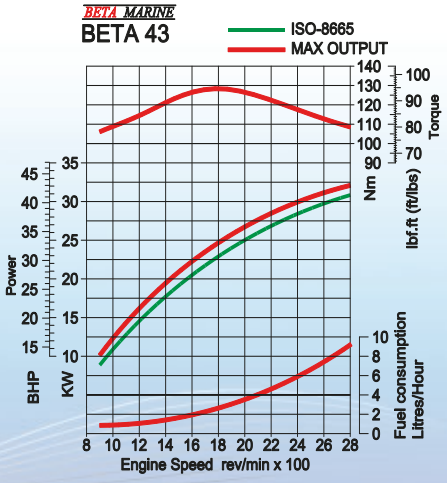
- Control panel options ABVW, B, C and D with gauges and alarms.
- Down angle and Vee Drive gearbox options.
- Calorifier connections for hot water systems.
- Larger 12v or 24v alternators.
- Travel Power 230 volt 50 Hz options.
- Hydraulic Propulsion package and/or bow thrusters.
- **Many more - see our price list!**

Beta 43

4 Cylinders - 1999cc - 43hp max at 2,800 rev/min - 253Kg





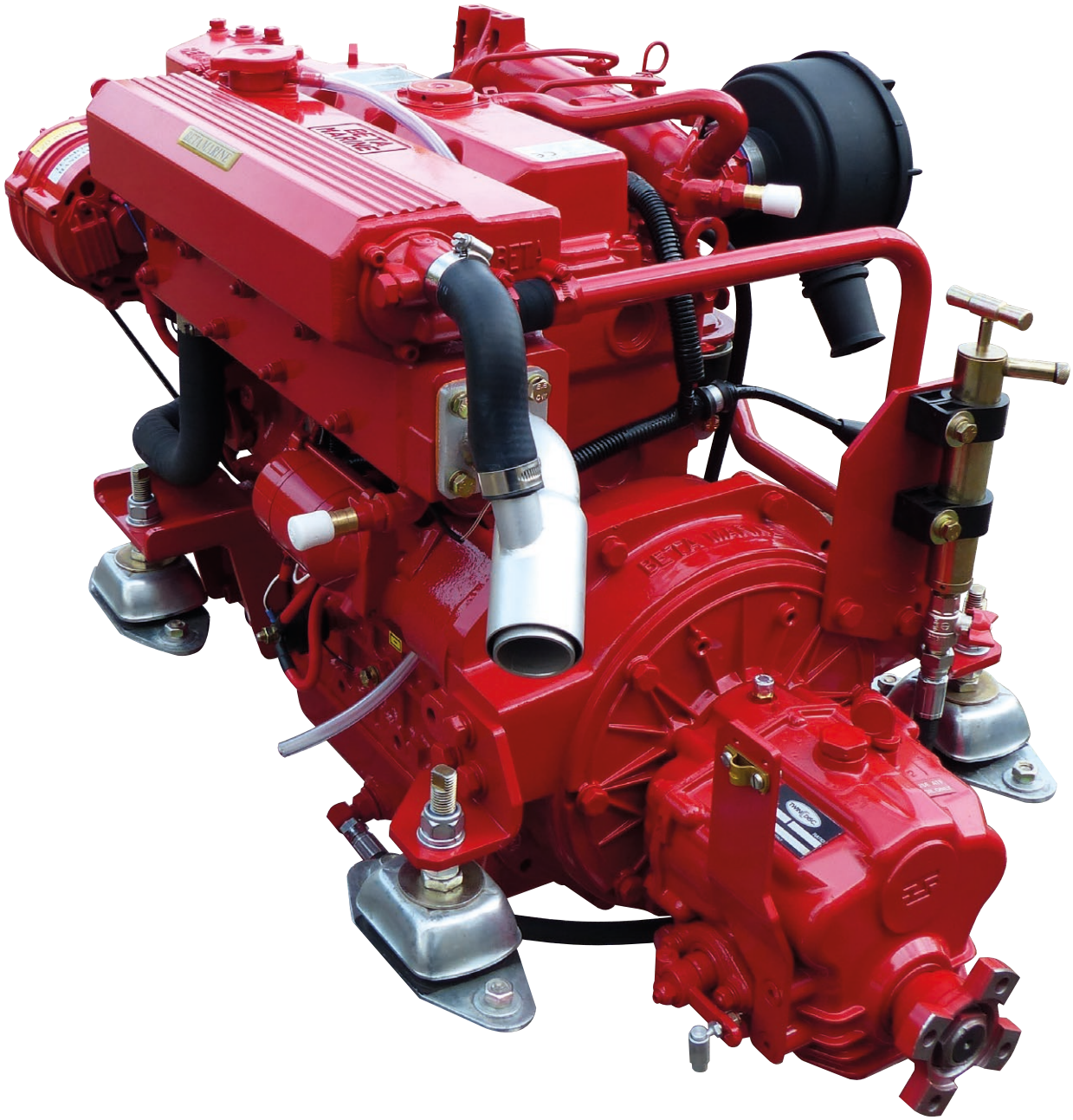


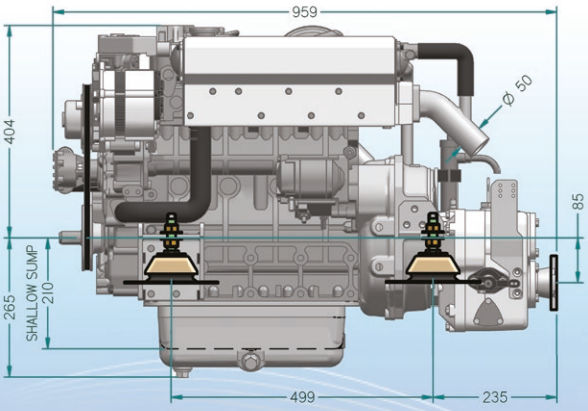
These are typical dimension: please ask Beta Marine for an accurate drawing if required

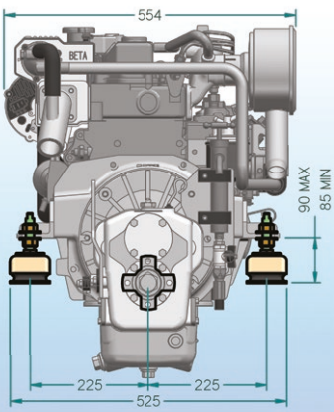
Based on theoretical propeller loading - matched at full speed

Beta 50

4 Cylinders - 2197cc - 50hp max at 2,800 rev/min - 260Kg







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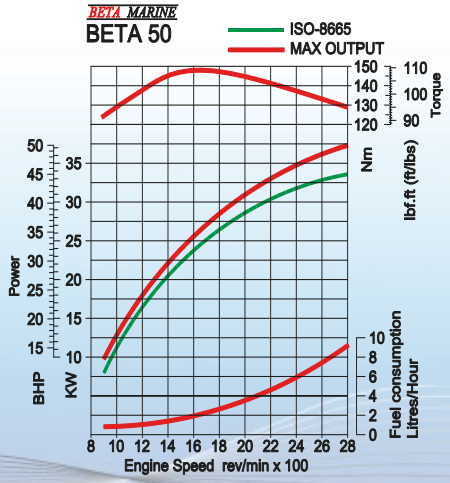
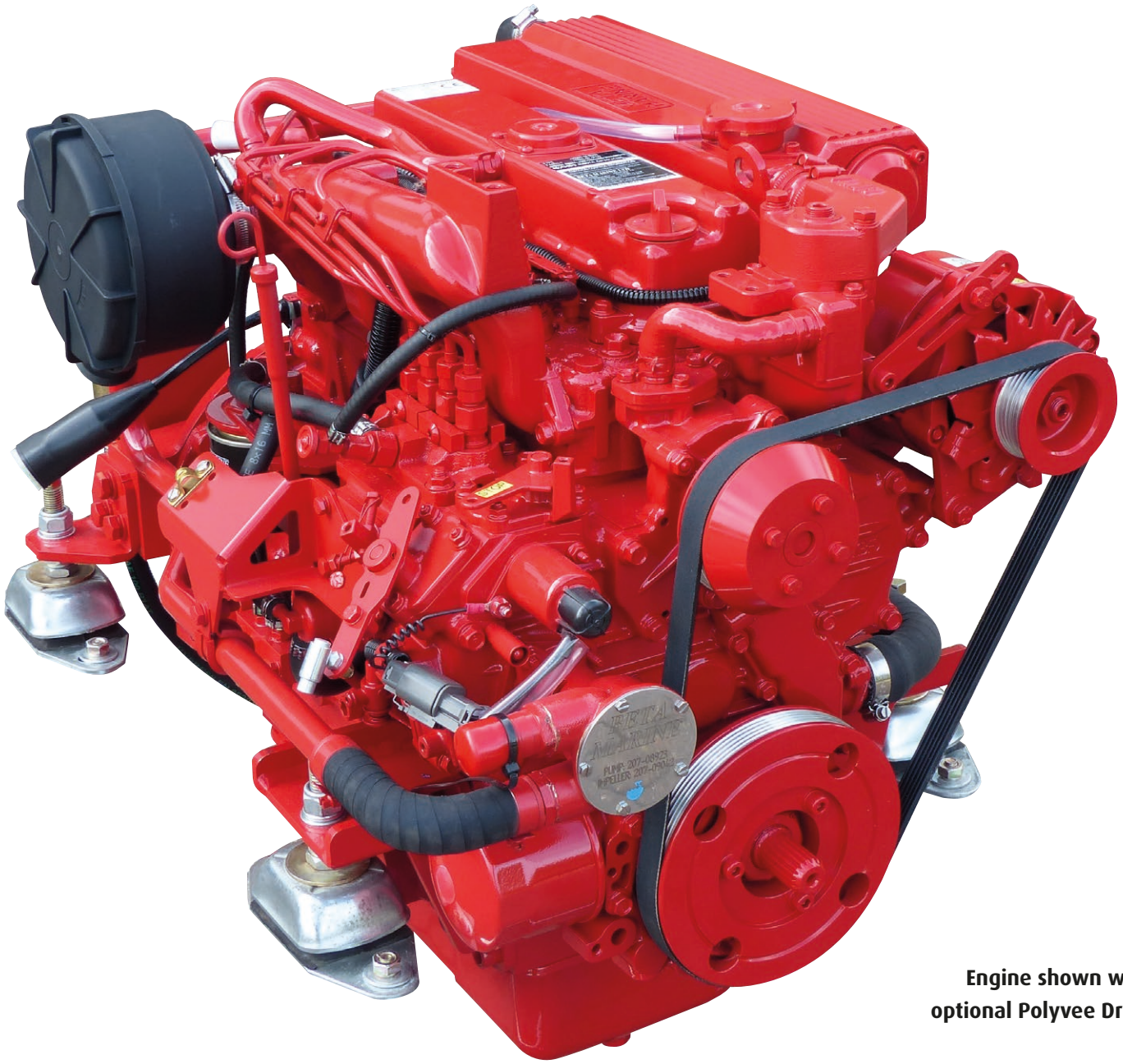


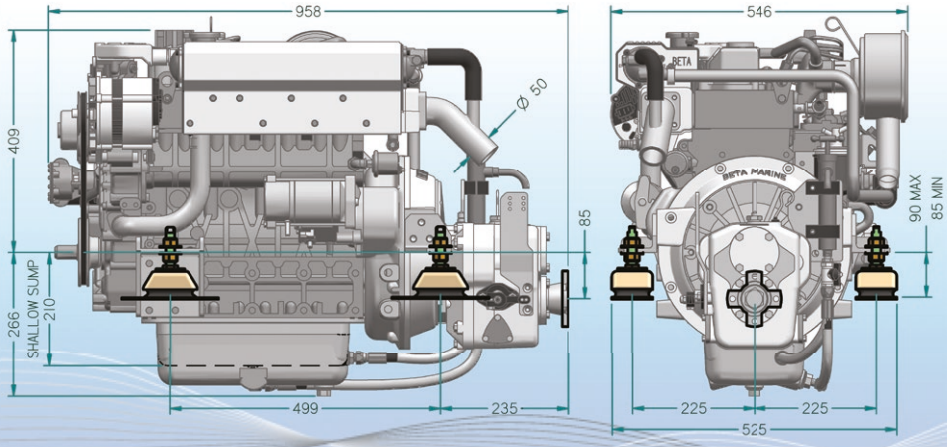
Based on theoretical propeller loading - matched at full speed

Beta 60

4 Cylinders - 2424cc - 56hp max at 2,700 rev/min - 287Kg



Engine shown with optional Polyvee Drive



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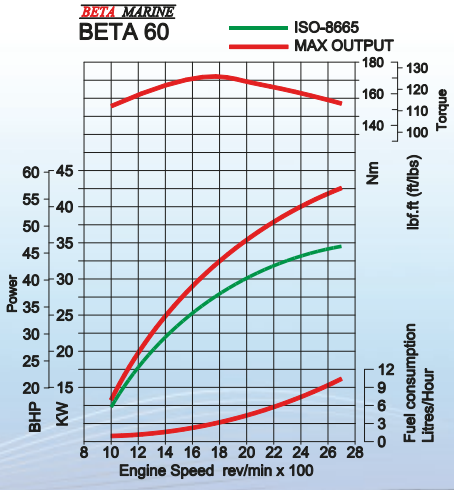
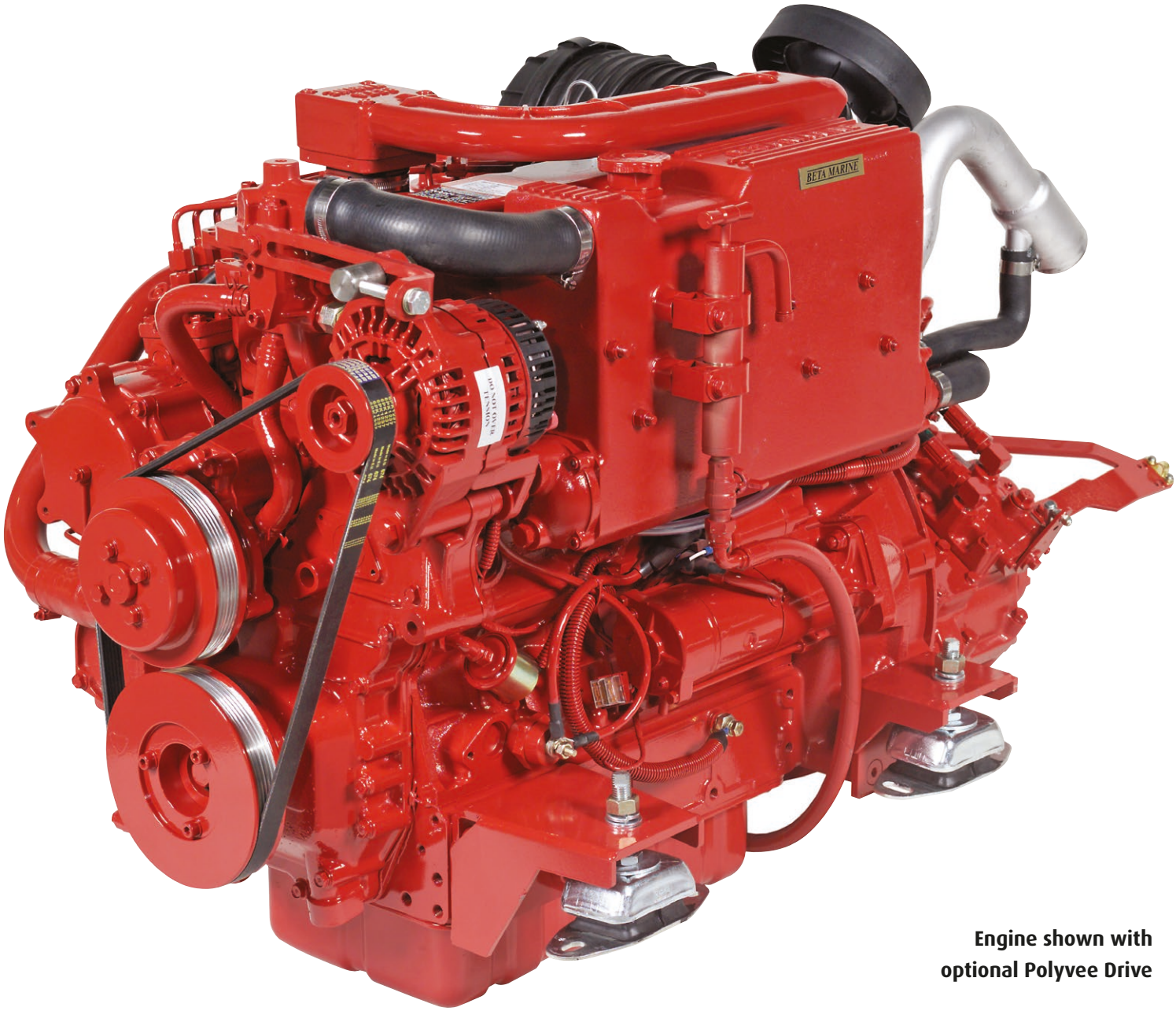


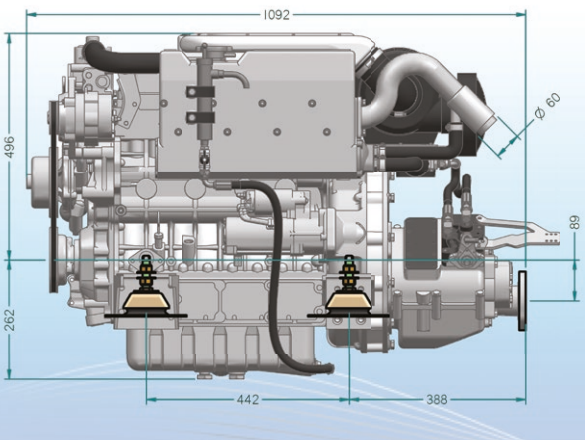
Based on theoretical propeller loading - matched at full speed

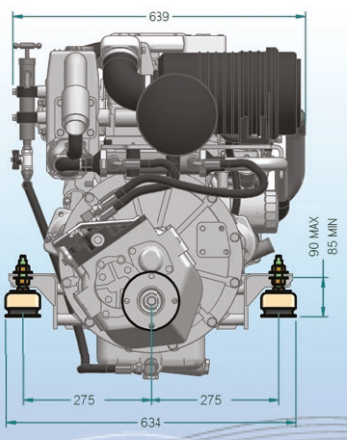
Beta 75

4 Cylinders - 3620cc - 75hp max at 2,600 rev/min - 414Kg



Engine shown with optional Polyvee Drive





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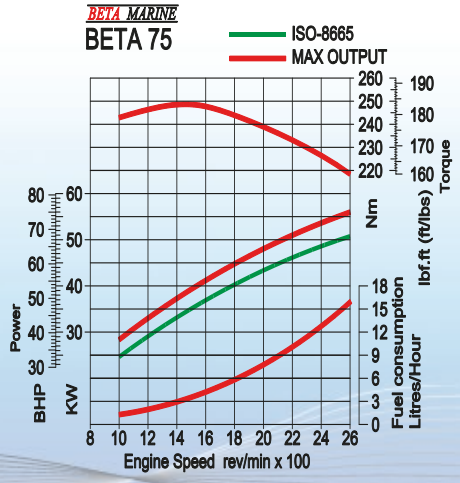
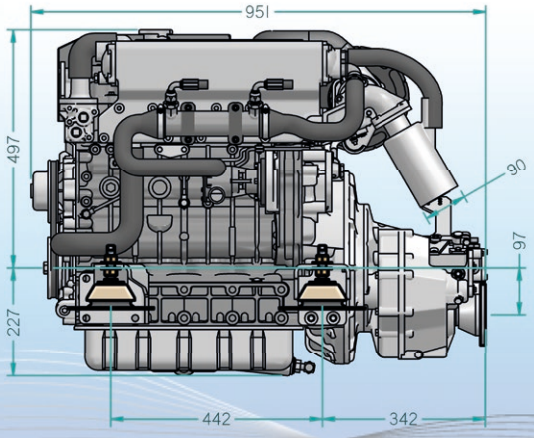
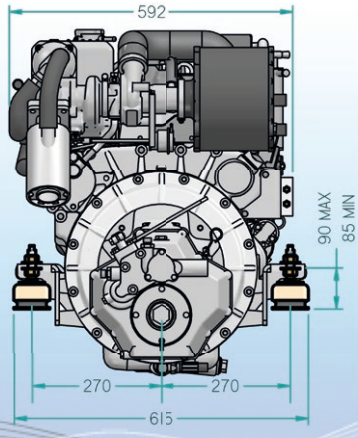


Based on theoretical propeller loading - matched at full speed

Beta 85

4 Cylinders - 3331cc - 83hp max at 2,800 rev/min - 359Kg





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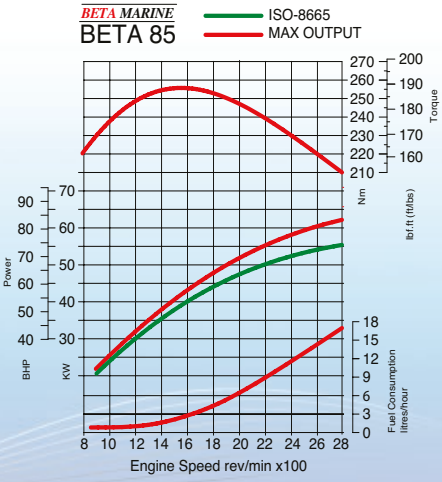
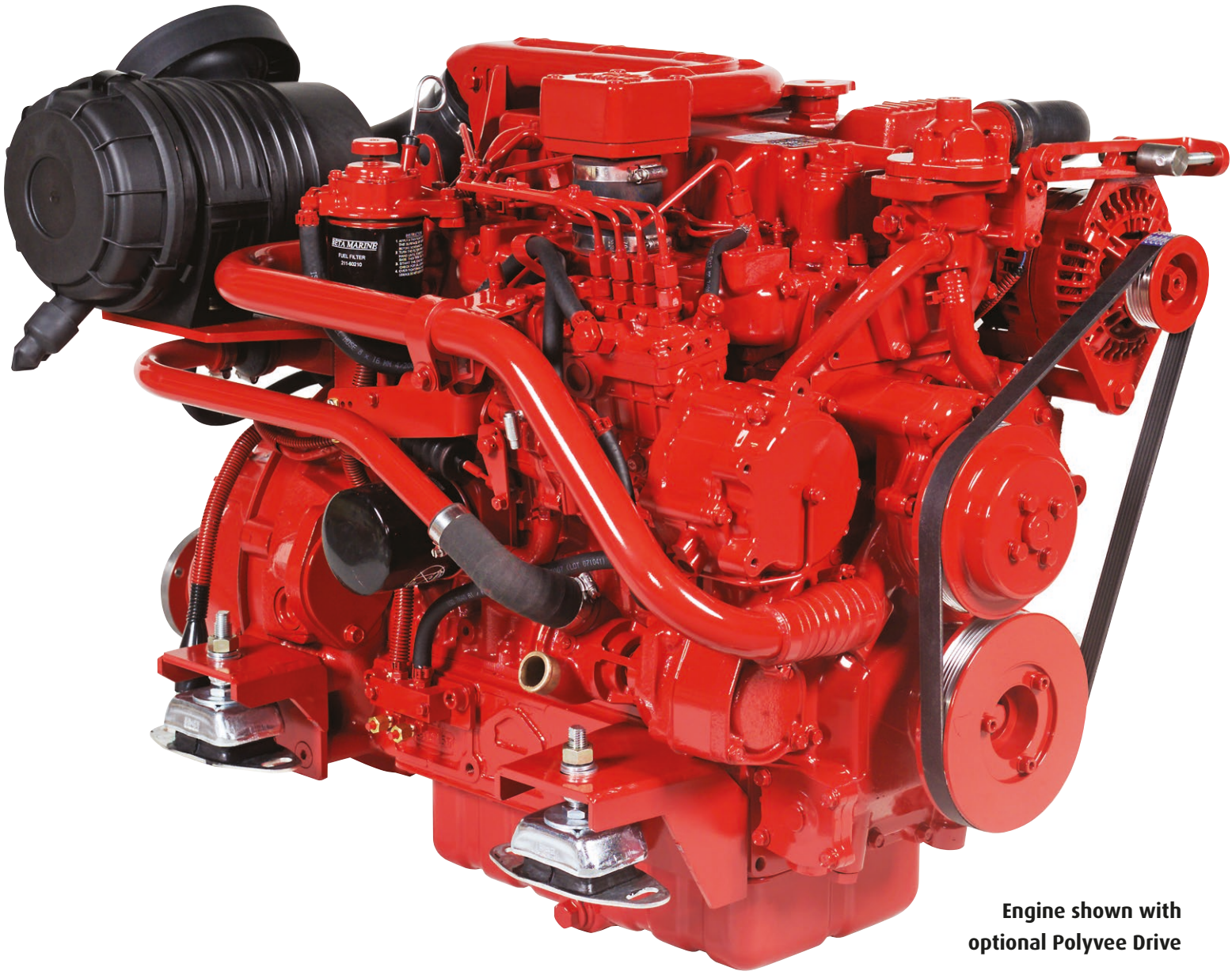


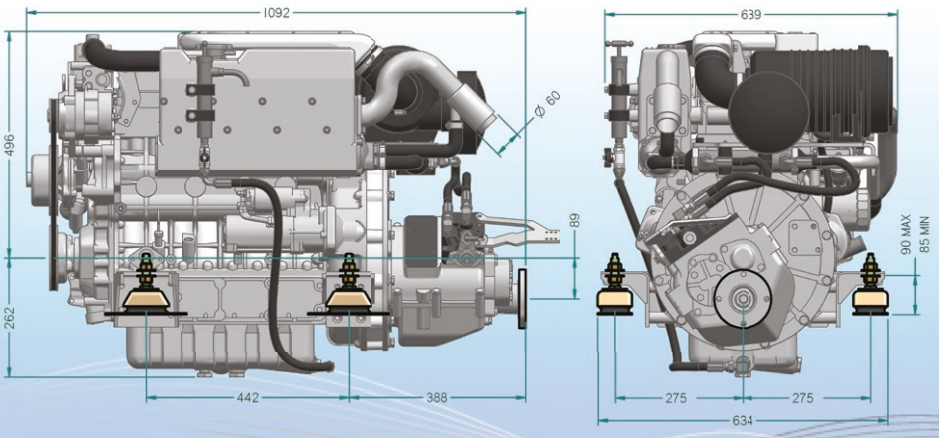
Based on theoretical propeller loading - matched at full speed

Beta 90

4 Cylinders - 3769cc - 90hp max at 2,600 rev/min - 425Kg



Engine shown with optional Polyvee Drive



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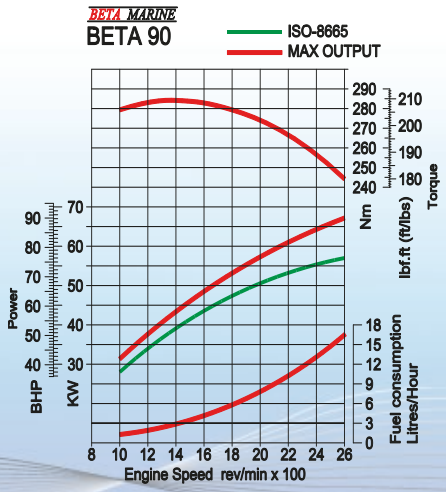
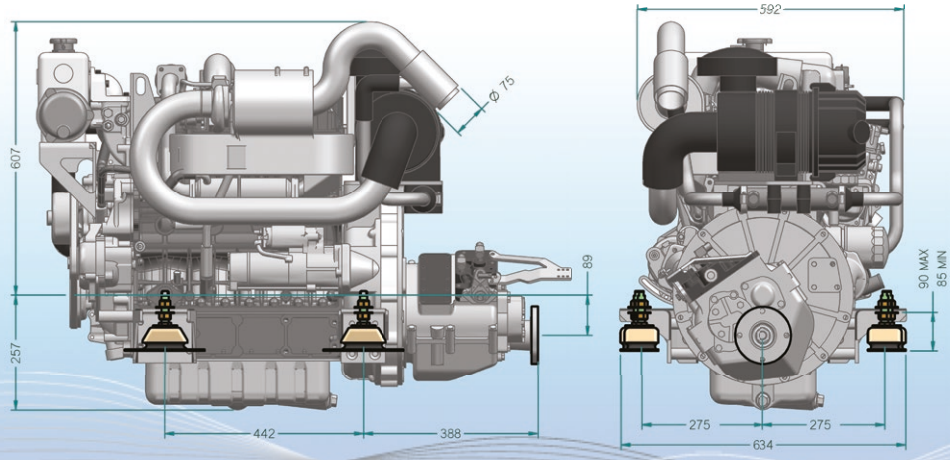


Based on theoretical propeller loading - matched at full speed

Beta 105

4 Cylinders - 3769cc - 99hp max at 2,600 rev/min - 425Kg



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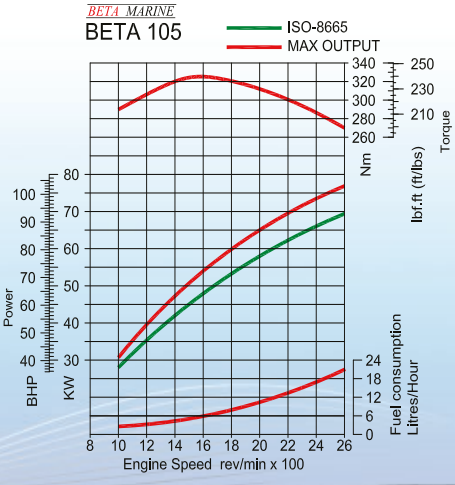
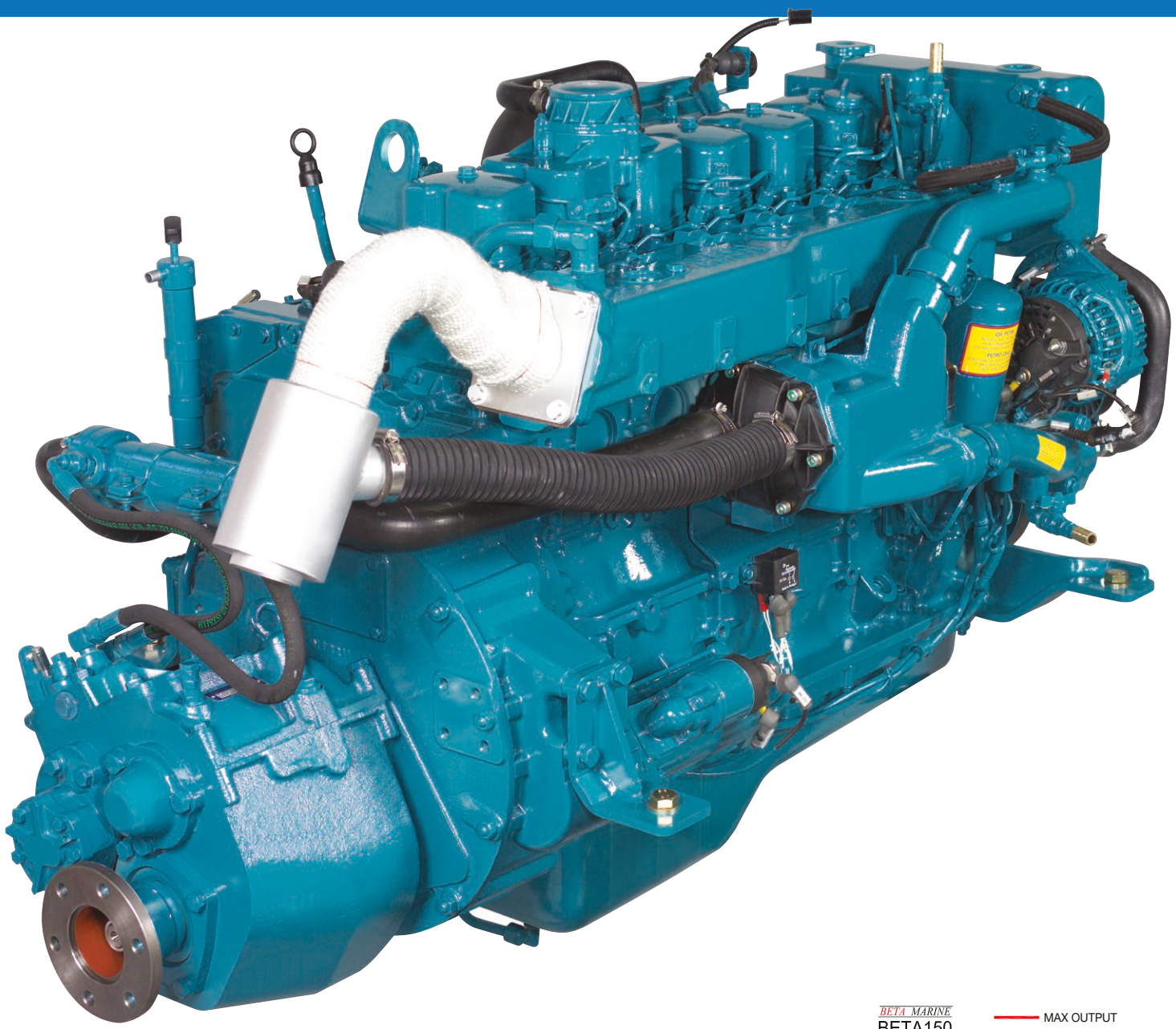
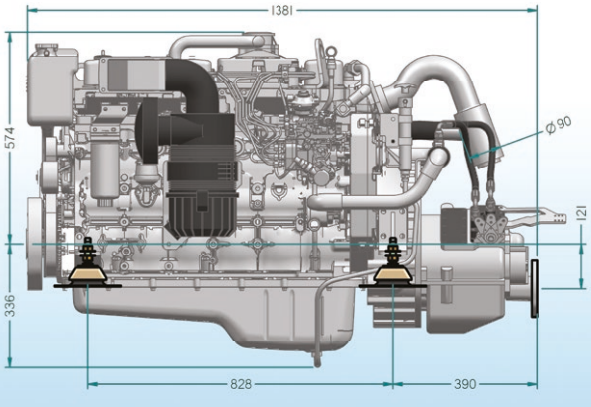


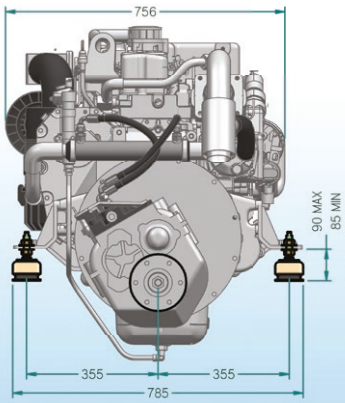
Based on theoretical propeller loading - matched at full speed

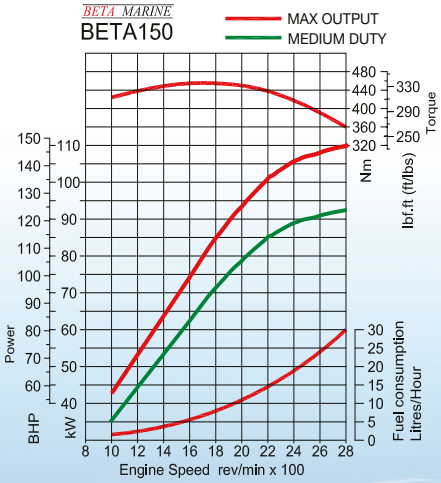
Beta 150

6 Cylinders - 6.7 litre - 147hp max at 2,800 rev/min - 680Kg









The Beta 150 has been specially developed for commercial Fishing Boats, Launches, Wide Beamers and Dutch Barges. It is a heavy duty - 6 cylinder - naturally aspirated - direct injection - marine propulsion diesel engine. Its outstanding asset is the slow speed / high torque of 440Nm developed at 1400 rev/min from an engine of solid construction that is not only smooth and quiet but also economic with direct injection. This engine is 'Recreational Craft Directive' emission compliant and EPA compliant.

Control Panels

Standard Control Panel 'ABV'

Tachometer with running hour recorder, keystart switch, push button stop, green light for 'power on', red warning lights and audible alarm for: low oil pressure, high water temperature, domestic and engine alternators 'no charge; 3m interconnection cable with multi pin plug connector.

Control Panel 'ABVW'

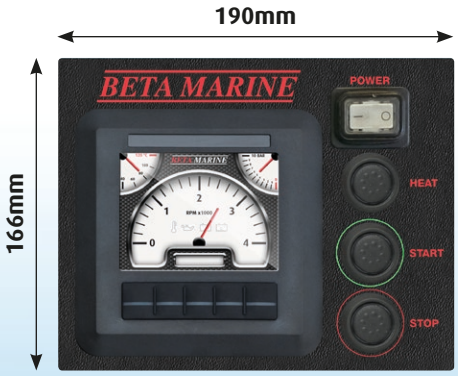
Tachometer with running hour recorder, waterproof push buttons for heat/start/stop, green light for 'power on', red warning lights and audible alarm for: low oil pressure, high water temperature, domestic and engine alternators 'no charge; 3m interconnection cable with multi pin plug connector.

Control Panel 'B'

Tachometer with running hour recorder, water temperature gauge, keystart switch, push button stop, green light for 'power on', red warning lights and audible alarm for: low oil pressure, high water temperature, domestic and engine alternators 'no charge; 3m interconnection cable with multi pin plug connector.

Control Panel 'C' Deluxe

Tachometer with running hour recorder, oil pressure and water temperature gauges, voltmeter, keystart switch, push button stop, green light for 'power on', red warning lights and audible alarm for: low oil pressure, high water temperature, domestic and engine alternators 'no charge; 3m interconnection cable with multi pin plug connector.



Control Panel 'D' Digital

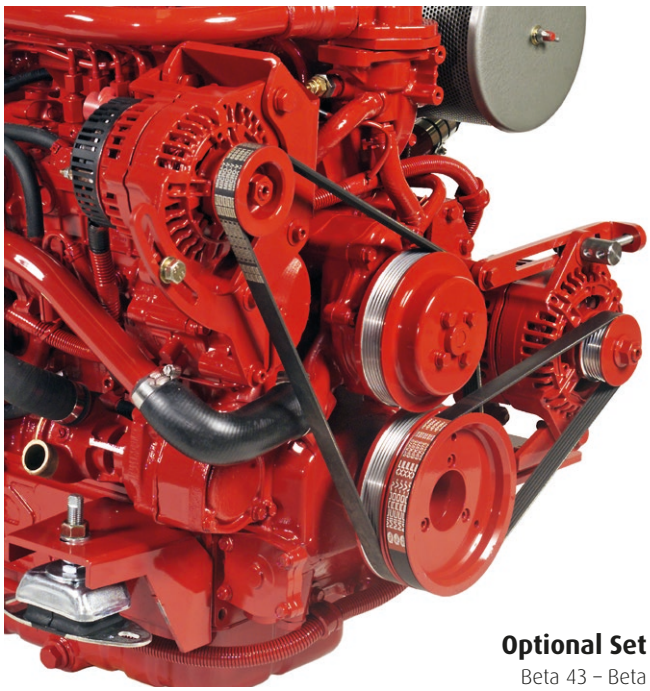
'Digital' display – front panel is waterproof to IP65. The display panel switches between the normal engine displays of: engine speed (a tachometer), oil pressure gauge, engine temperature gauge and voltmeter for either one or two alternators. It is also possible to plug-in another electronic display for viewing elsewhere; that could be the wheelhouse.

Alternator Options

Beta Marine offer a selection of different options to suit most requirements for either heat exchanger cooling or keel cooling.

If you require an alternative solution with specific alternators we can normally design, manufacture and fit suitable alternator supports and pulley drives to suit your needs.

Standard Set Up
Beta 10 – Beta 38



Optional Set Up
Beta 43 – Beta 105

Travel Power (3.5kVA & 5kVA)

Beta has pioneered the use of engine mounted 'Travel Power' generators. These engine mounted generators are very compact and produce 'normal' mains electricity at 230 volts (single phase and 50 Hz) from just above tickover achieving full output from approximately 1500 rev/min - cruising speed. This generator can provide electric power for your washer/dryer, electric kettle or microwave etc.

Accessories

Beta Marine's range of seagoing propulsion engines are complemented by a complete range of spares and accessories, **see our price list for comprehensive listing!**

3.5/5kVA Travel Power

Control Levers & Cables

Short Voyage Kits, Genuine Beta Spares & Lubrication Oils

Fuel Pipe Connections

Fuel/Water Separator

Wet Exhuast Waterlock Silencer

Remote Header Tank Kit

Flexible Couplings

Stern Gear Lube Kit

Fuel Lift Pump

Water Inlet Kit

Isolating Switch

Antisiphon Valve

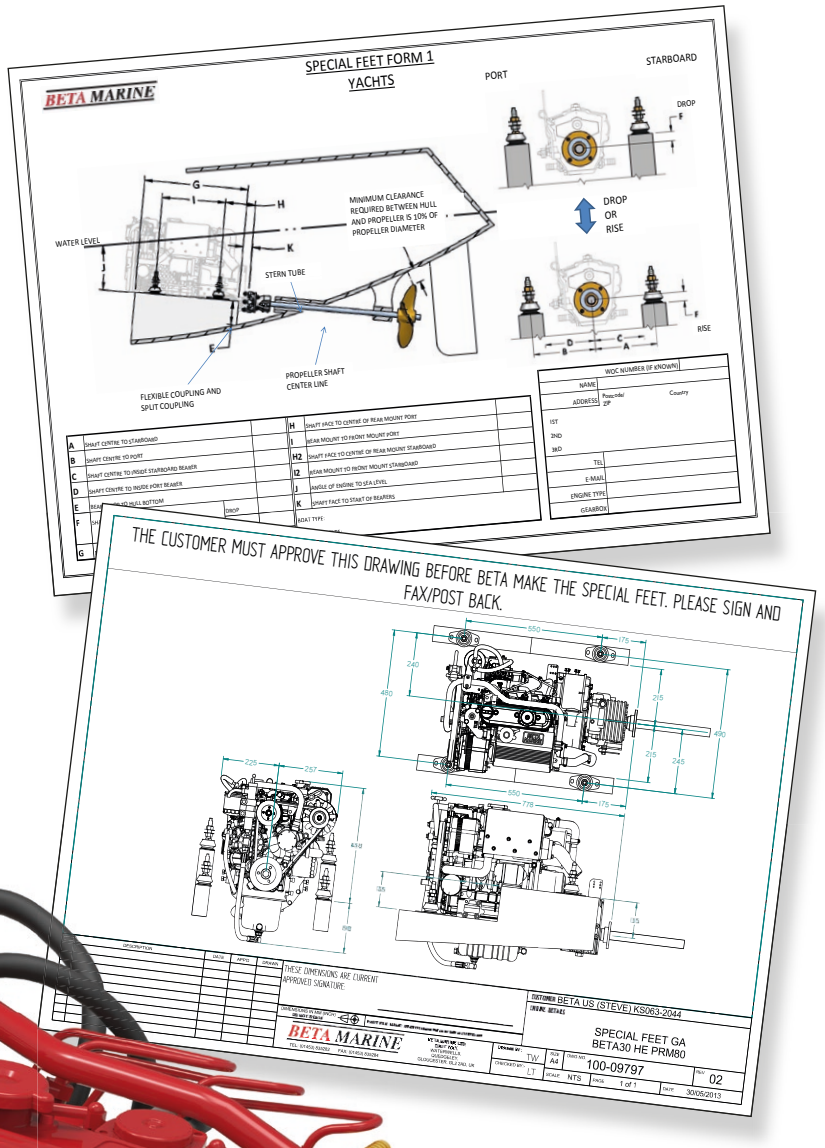
Re-Engining? - Special Feet

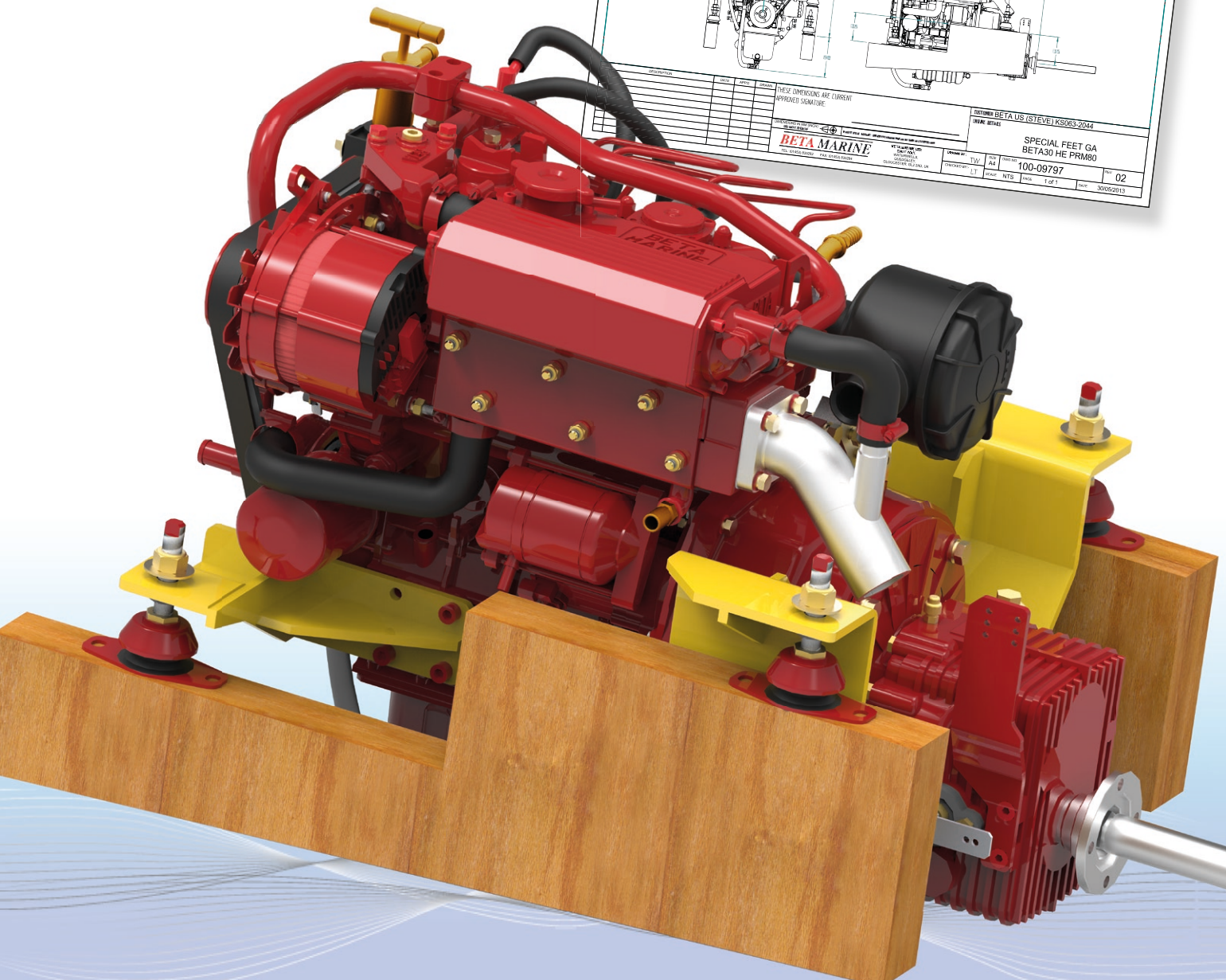
Are you replacing an old engine?

Beta engines have been fitted into thousands of yachts around the world with our standard engine feet; but where necessary we also offer our unique service of designing and manufacturing “Special Engine Feet” so that our engine just drops onto your existing engine bearers.

We have made hundreds of “Special Feet” over the years and in many cases can substantially reduce the time and installation costs.

The system works like this: we have a standard drawing where you just fill in the measurements of your existing engine bearers and propeller shaft position; we then prepare a finalised drawing for you to sign-off for us to manufacture your special feet. We then manufacture, fit and paint them so that your engine arrives ready to ‘drop in’.

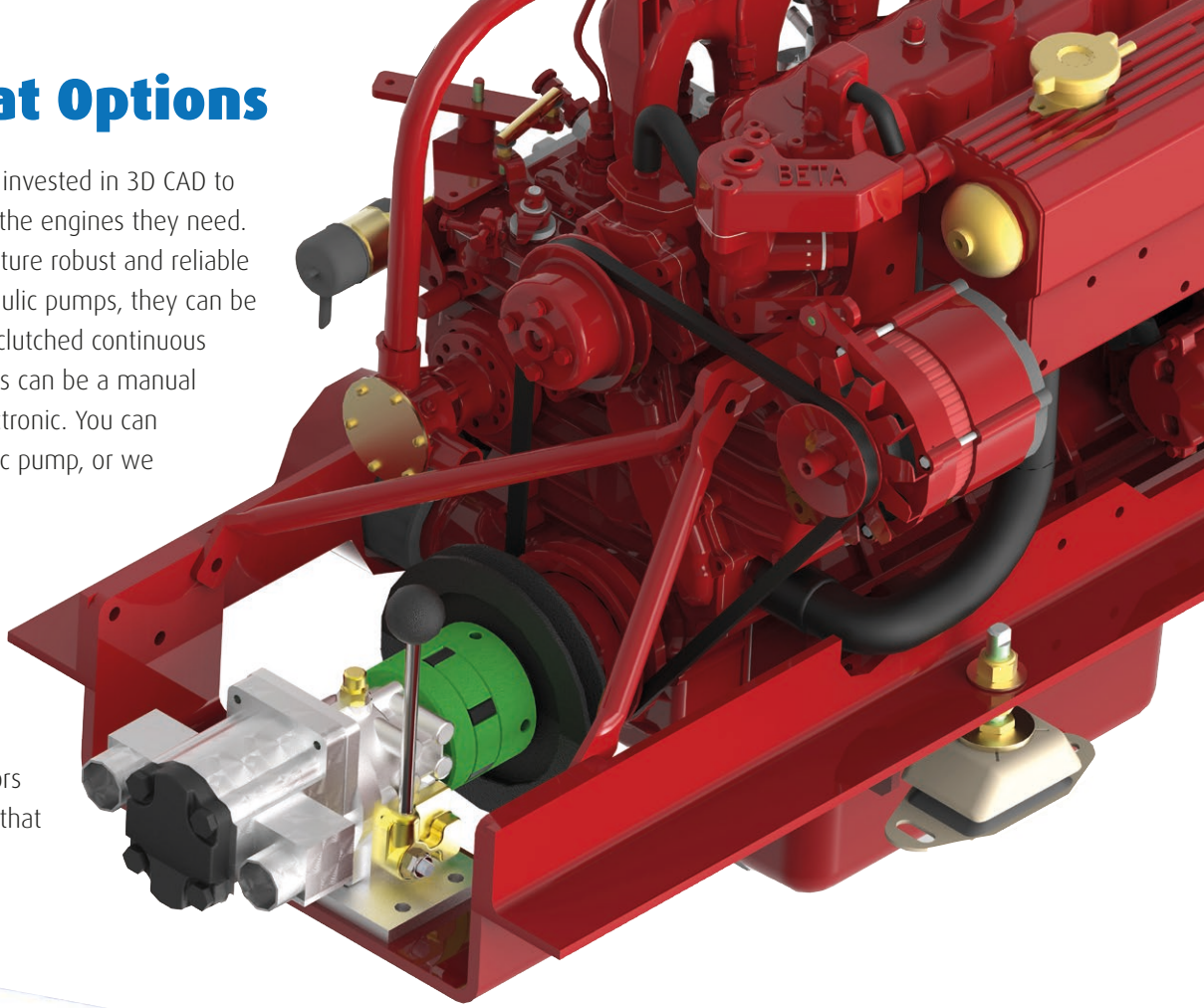


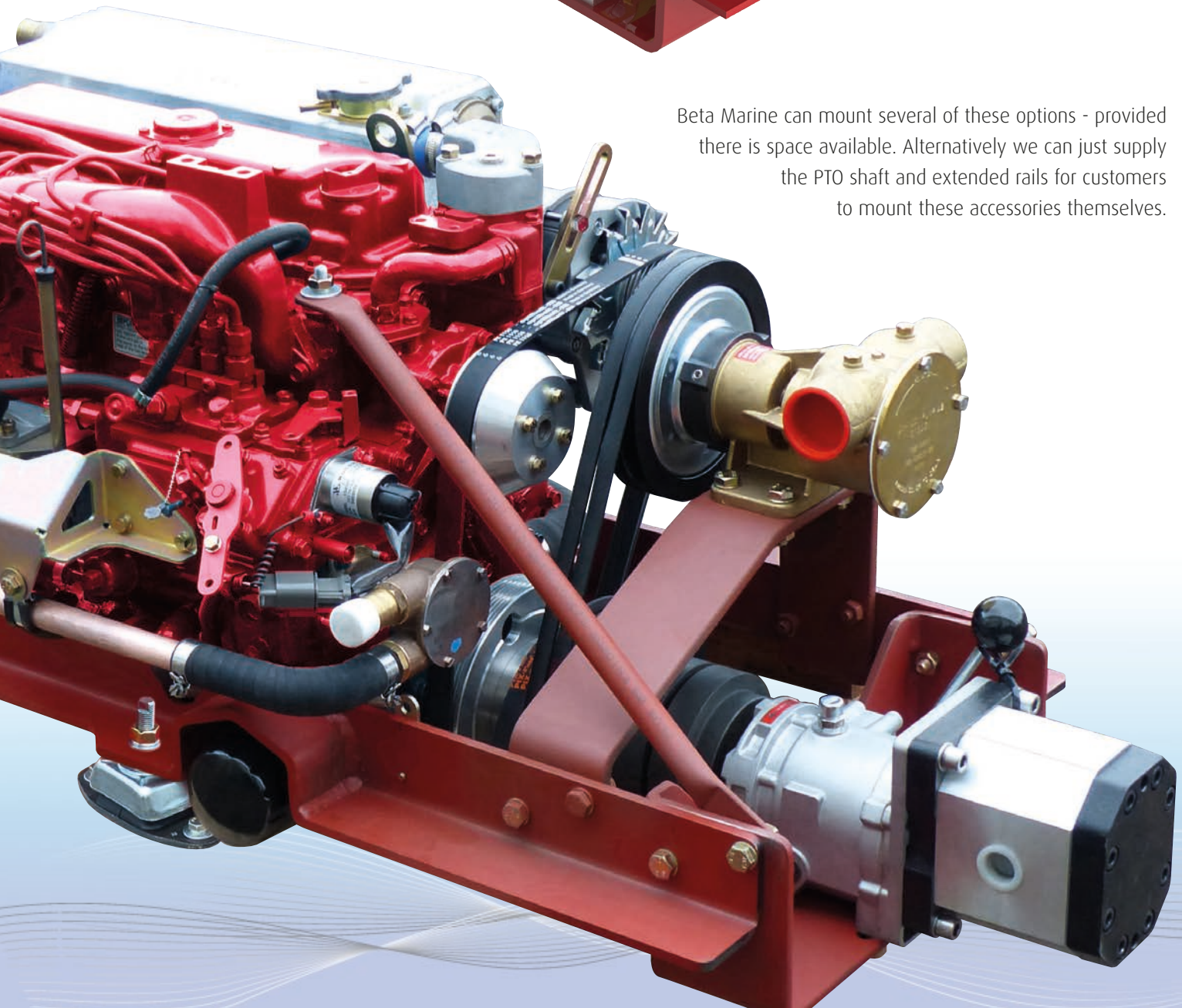


Fishing Boat Options

Beta Marine has continually invested in 3D CAD to provide our customers with the engines they need. We can design and manufacture robust and reliable supports for mounting hydraulic pumps, they can be for clutched operation or unclutched continuous operation. The clutch controls can be a manual lever, 'Morse' cables, or electronic. You can supply us with your hydraulic pump, or we can fit new components.

We also mount deck wash and bilge pumps that are often 'belt driven' as detailed in the photograph and are usually clutched. Another option is compressors for air conditioning systems that are usually belt driven.





Beta Marine can mount several of these options - provided there is space available. Alternatively we can just supply the PTO shaft and extended rails for customers to mount these accessories themselves.

Gensets for Yachts and Workboats

Beta Marine has gained considerable experience over many years manufacturing marine generating sets for yachts and work boats. These small marine generating sets are based on Kubota diesel engines from 3kVA up to 50kVA; available as a standard generating set or acoustically housed.

- A Quality robust design - manufactured for reliable and dependable long life operation.
- Low noise levels as standard - Acoustic housings an option.
- Heat Exchanger cooling or Keel cooling.
- Lloyds Register "Design Appraisal"
- 'Recreational Craft Directive 94/25/EC as amended by 2003/44/EC' emission compliant.
- Generating Set Warranty is 12 months from commissioning in accordance with our standard terms.

Our marine generating sets have high quality Acoustic housings using 35mm acoustic material that are carefully designed to have compact dimensions and low weight, with all service connections brought to the outside of the housing - ready for a quick and easy installation.

Beta Marine manufacture marine generating sets up to 1,000 kVA with classification to Lloyds Register, DNV, Bureau Veritas, Germanischer Lloyd, ABS etc. We welcome your marine enquiries for main, standby, emergency sets and other marine auxiliary equipment.

Ref: 1740, Nov 2015

BETA MARINE

The Yachtmans Choice...

- A competitive price
- 10 to 150 hp, engineered in the UK
- Advanced, compact, quiet reliable engines
- Easy engine replacement, with our special feet option
- Amazing 'Beta' national and International support
- 5 Year 'Self Service' Warranty

Beta Marine Limited, Davy Way, Waterwells, Quedgeley, Gloucester, GL2 2AD. UK

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