



MARINE COMMON-RAIL ENGINES

6LY400 / 6LY440



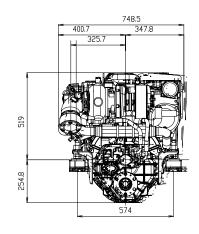
Specifications

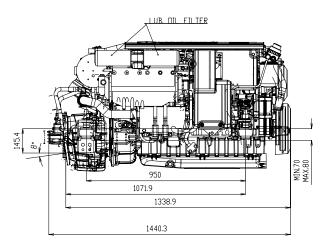
Configuration	In-line 6-cylinder, 4-stroke, vertical, water-cooled diesel engine			
Maximum output at crankshaft	*294 kW@3300 rpm	[400 mhp]@3300 rpm		
	*324 kW@3300 rpm	[440 mhp]@3300 rpm		
Displacement	5.813 L	[354 cu in]		
Bore x stroke	106 mm x 110 mm	[4.17 in x 4.33 in]		
Combustion system	Direct Injection with Denso Common-rail system			
Aspiration	Turbocharged with watercooled turbine housing			
Starting system	Electric starting 12V - 2.5 kW			
Alternator	12V - 125A			
Cooling system	Fresh water cooling by centrifugal fresh water pump and rubber impeller seawater pump			
Lubrication system	Enclosed, forced lubricating system			
Direction of rotation (crankshaft)	Counterclockwise viewed from stern			
Dry weight without gear	585 kg	1290 lbs		
Emission compliance	EU: RCD 2	US: EPA Tier 3	IMO/GL	EMC
Engine mounting	Rubber type flexible mounting			

NOTE:

Fuel condition: Density at $15^{\circ}\text{C} = 0.842 \text{ g/cm}^3$; 1HP = 0.7355 kW

Dimensions





6LY440 with KMH61A2 marine gear

Worldwide YANMAR Service Network

First-quality YANMAR parts and service are available wherever you are and for whatever you need to do through an international network of dedicated YANMAR distributors and dealers. Thoroughly trained and fully equipped. For your convenience,

you will find the YANMAR sales and service network in more than 130 countries all around the world.

www.yanmarmarine.com/Network/

^{*}Fuel temperature 40°C at the inlet of the fuel injection pump [ISO 8665]



YANMAR 6LY - the rebirth of a legend

Our fourth-generation 6LY marine diesel series builds on the virtues of its classic six-cylinder forerunners, advancing efficiency and lowering emissions.

The new 6LY takes the all the attributes of its forerunners and adds major engineering advances. The beating heart of the engine remains the international powerboat racewinning compact 5.8 -litre in-line six-cylinder YANMAR engine block that over three decades has cemented its popularity with boat designers, builders and owners who laud its performance, fuel efficiency, reliability and smooth and quiet operation.

This latest incarnation has taken the engine into a new era of mechanical and digital sophistication. We have completely re-engineered the fuel induction and aspiration systems - all functions now being managed by state-of-the-art electronic precision for even better all-round performance.

We've replaced single injectors with a high-pressure common-rail fuel system to deliver exceptionally finely atomised fuel to the cylinders for better power-to-weight performance, fuel economy and smooth

running. There's also a new 24-valve cylinder head which, with a redesigned inlet and exhaust manifold, optimises engine breathing.

All this makes the 6LY one of the most efficient, refined and easy-to-live-with marine diesel engines in the 400-500 mhp power segment on the market today. It's ideal not just for new-builds, but for refits too. Sharing the compact footprint of its predecessors, it fits perfectly into engine rooms housing earlier 6LY models and other similar engines. The 6LY400/440 connects easily with existing mechanical controls.

Fingertip controllability

For the ultimate in easy and precise boat control, YANMAR offers the latest VC10 'fly-by-wire' vessel control system to give precision gear changing and throttle adjustment with perfect 'feel'. And with the joystick control option as part of a fully-integrated YANMAR engine and controls package, docking is also really easy. Single- and

dual-lever control heads have push-buttons for function selection. Operations are precisely monitored on 3.5-inch robust IP66-rated display screens with IP66 waterproof rating and with full diagnostic capabilities plus UV-protection, anti-dazzle coating and anti-fogging ventilation.

For maximum operational security, two parallel CAN bus networks separate engine and monitoring functions. YANMAR's J1939 control bus is dedicated to the engine and drive control system while GPS, chart plotter and monitoring displays are handled by NMEA2000 data bus so that, in the unlikely event of J1939 failure, the system automatically switches to a pull-out back-up panel.

VC10 offers operation modes for single and twin-inboard or sterndrive installations. All are designed for easy serviceability and are readily expandable to allow owners to extend monitoring capability at any time.









Common-rail

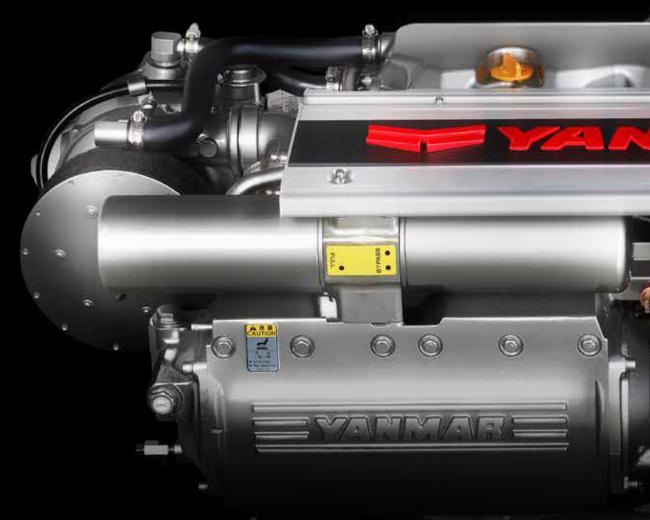
The 6LY400/440 has common-rail fuel injection in place of single mechanical direct injectors and is rated for leisure marine and workboat applications. There's new pipe work to handle the higher pressures of the Denso CR system, as well as a new 24-valve cylinder head, along with redesigned inlet and exhaust manifold to assist engine breathing.

Proven marine technology

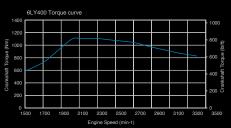
The new engine takes what was a very accomplished and highly popular power unit to a higher level. Like all YANMAR marine engines, it was designed expressly for marine duty.

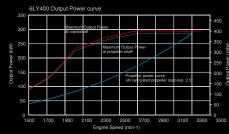
After decades of distinguished service 6LY series engines are still regarded as some of the best in the world for cruising and workboat duty. In its transfigured form the 6LY is set to

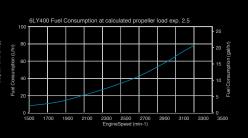
continue this tradition. Its small footprint, low height and narrow width will make it attractive for installation in new craft with ever-tighter engine-room space. Its high power density in an ultra-compact package will also make it an engine of choice for replacement not only of earlier YANMAR units, but also larger and heavier engines of similar output.



Performance curves



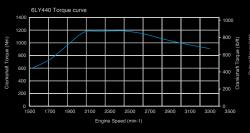


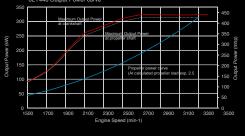


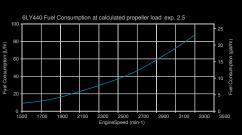
Unique features:

- 4th generation YANMAR 6LY engine
- Purpose-built marine engine
- Legendary YANMAR reliability
- Complies with US Tier 3 and EU RCD 2 emissions limits











Global head office

YANMAR MARINE INTERNATIONAL B.V. Brugplein 11 1332 BS Almere the Netherlands www.yanmarmarine.com