

**MARINE PRODUCT GUIDE**



## Introduction

### HOLDING ON TO NATURE'S GLOW

Yanmar Marine is completely dedicated to boating, all around the world. Generations of expertise and experience, combined with unrivalled innovation and industry-leading technology, are built into every Yanmar engine. These are compact, lightweight, quiet, low emission diesels, renowned for their outstanding performance and rugged reliability. They go further and they work harder for you, year after year.

Yanmar and respect for nature go hand in hand. The engines are designed with the environment in mind, allowing you to enjoy your boating and still hold on to nature's glow. They are cleaner, planned from the outset with ecology on the agenda. Yanmar is proud of what it offers: and as a Yanmar owner you are always in good company.

# Contents

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Sailboat Engines 9-121 mhp	04
GM / YM Series	06
JH Series	08
Saildrive Series	10
KMG65E - Onboard Electricity	12
Powerboat Engines 150-900 mhp	14
BY2 Series	16
LPA Series	18
LV Series	20
LY3 Series	22
CX Series	24
SY Series	26
ZT370 Sterndrive	28
ZF Pod Drive System	30
Instruments & Controls	32
Original Parts	34
Service Network	36
Marine Engine Overview	38

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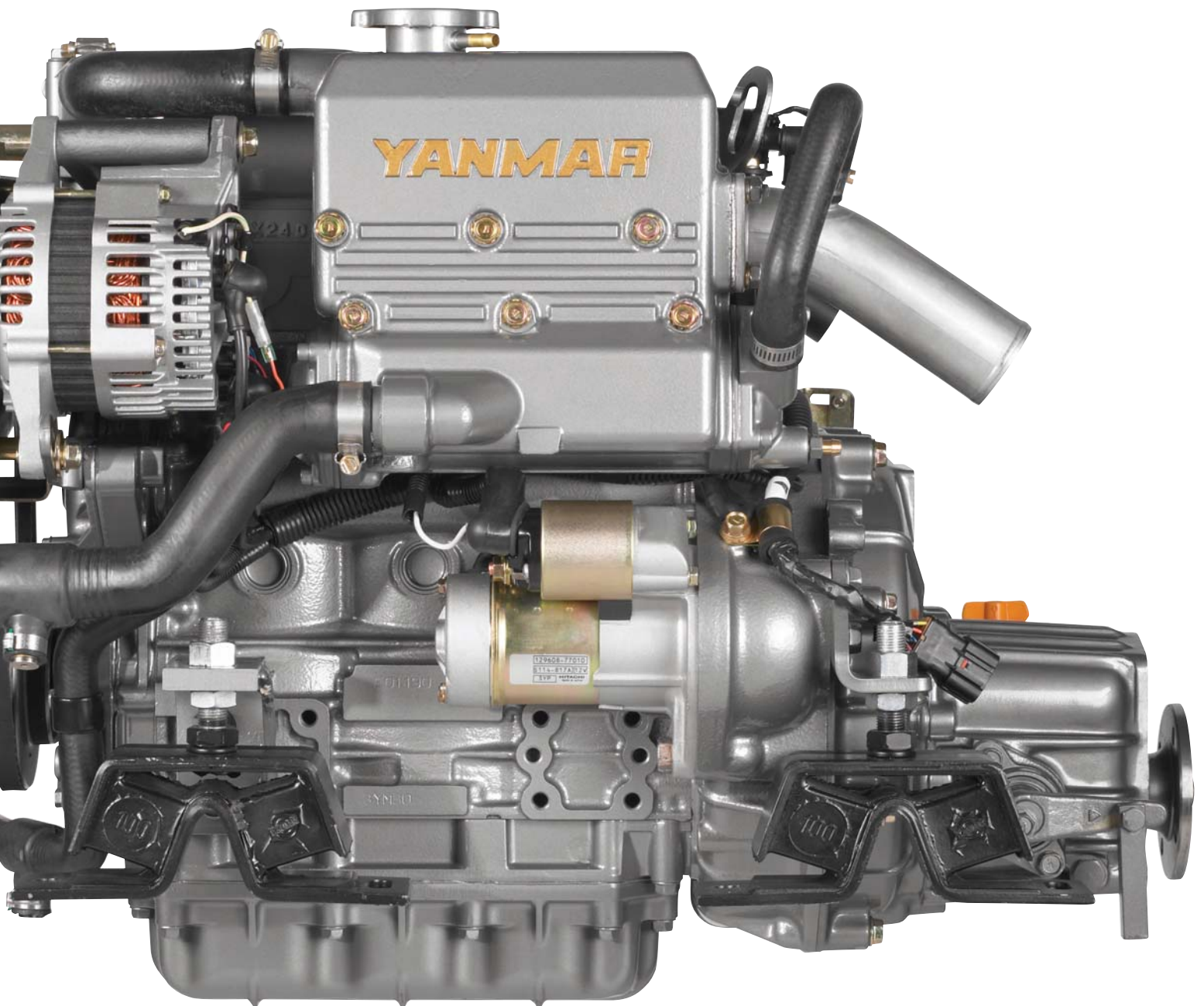
SAILBOAT ENGINES 9-121 MHP

## Sailboat Engines

Yanmar diesel engines are the lightest and toughest solutions available for sailboat inboard power. Smooth and quiet, innovative and built to last, the reputation of these engines is second-to-none. Yanmar has been building diesel engines for 100 years, always with the philosophy of developing more power for less weight.

Yanmar has always invested heavily in research, development and manufacturing processes and will continue to do so on behalf of its customers and boating in general.





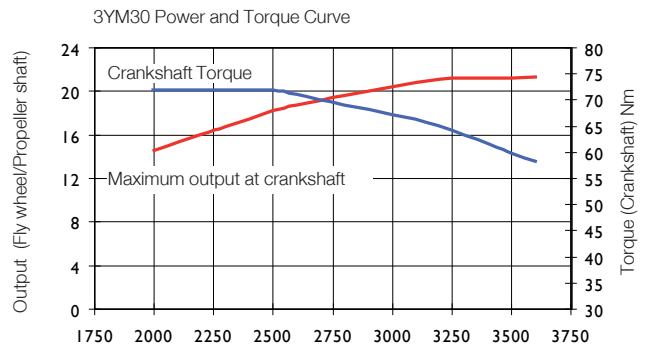
GM/YM SERIES

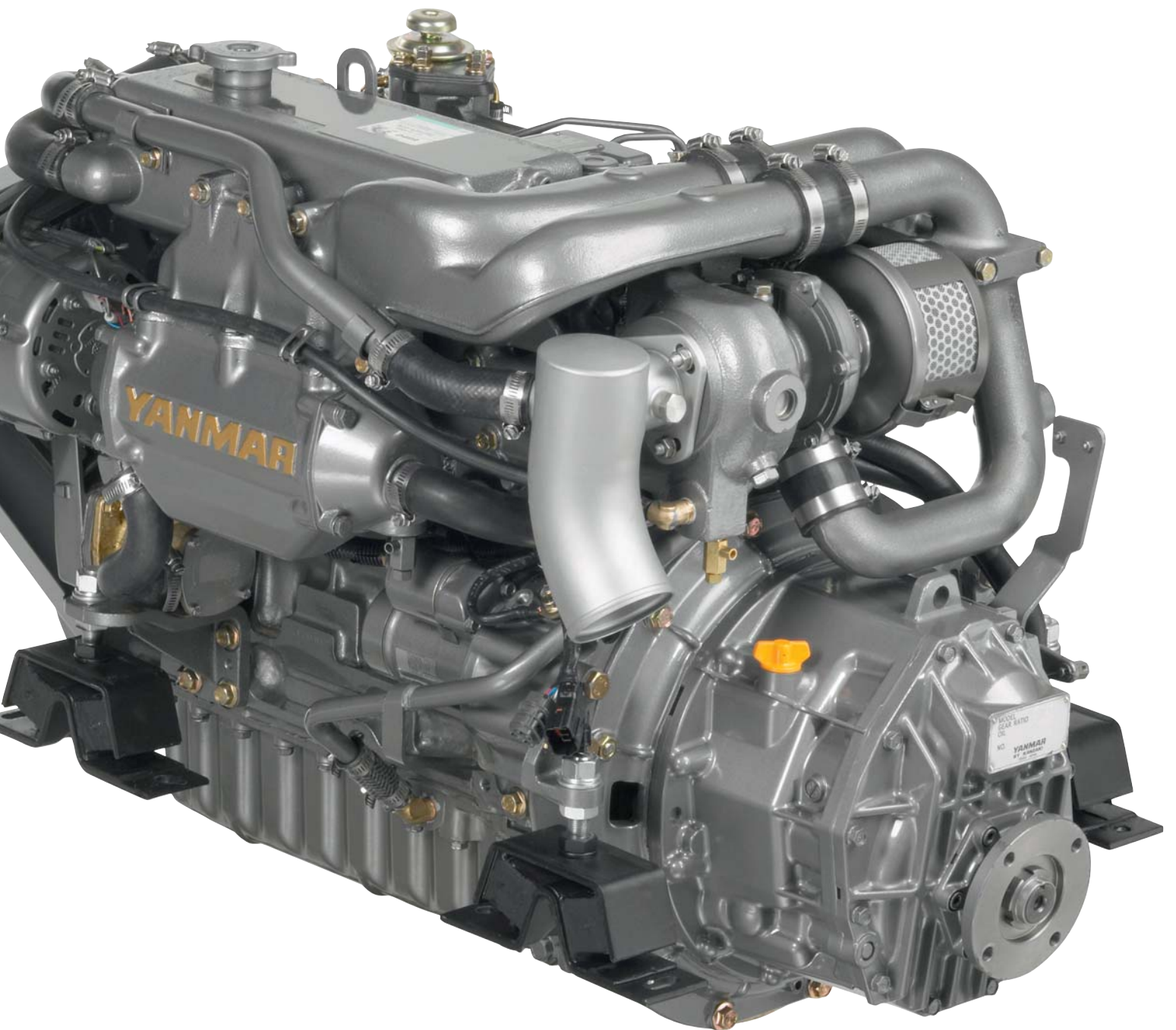
# The Power To Move You

## YANMAR GM/YM SERIES 6.6-21.3 KW / 9-29.1 MHP

With the largest displacement and smallest dimensions in their class, these thoroughbred workhorses provide sure-fire auxiliary power for sailboats and durable primary power for small motorboats. This is the most reliable diesel support around, best-in-class and ready to use whenever you need it. Compact; lightweight; economical; easily serviced; durable. Running further for you and with greater efficiency.

- Extra power, higher torque
- Quieter and smoother
- Fuel efficient and easily maintained





## JH SERIES



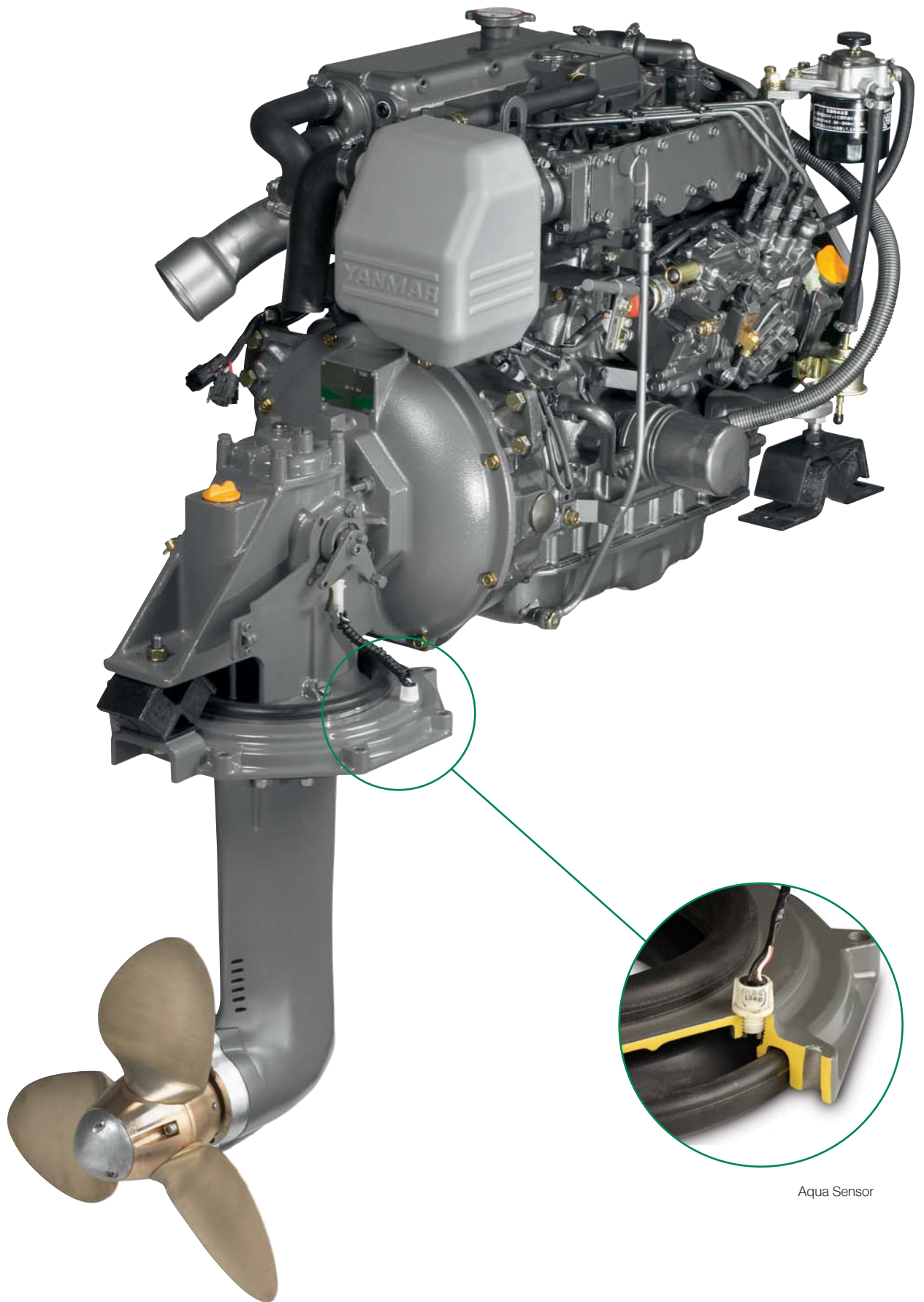
## Quickly And Quietly

### YANMAR JH SERIES 28.7-89.1 KW / 39-121 MHP

Compact and powerful, clean and quiet, these are mid-range three and four-cylinder diesels based on a completely redesigned engine block and new combustion system. The new 3JH5E and 4JH5E are fully compliant with EPA Tier 3 emissions regulations, so you can enjoy more displacement, power and torque, with low vibration, low noise and low emissions. Maintenance is easy and straightforward. In any case, you have the comfort of knowing that Yanmar Marine provides high quality service and advice facilities around the globe.

- Highly efficient performance
- Whisper quiet running
- Powerful electrical system
- Simple to maintain





Aqua Sensor

## SAILDRIVE SERIES

## The Efficient Transfer Of Power

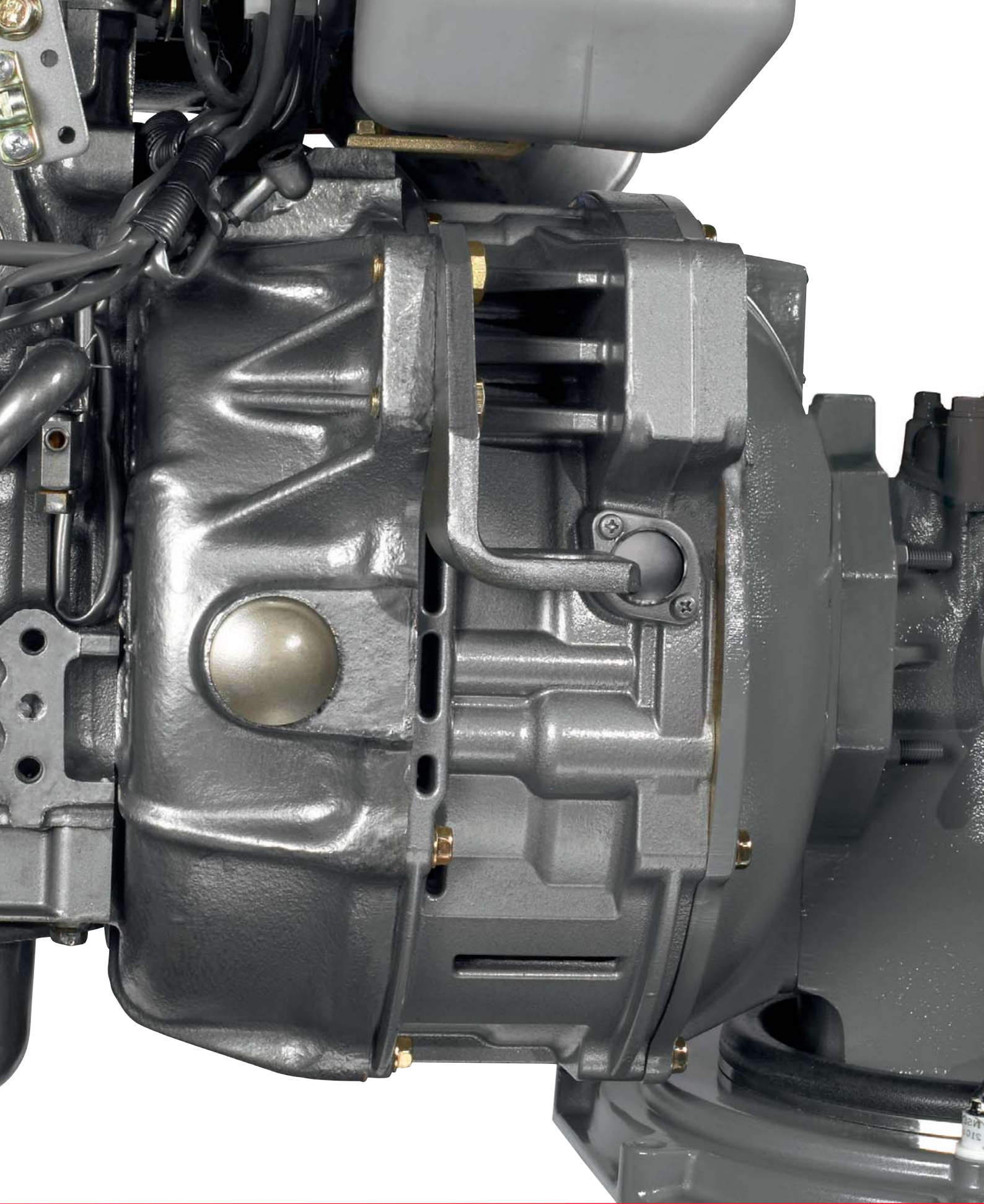
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### YANMAR SAILDRIVE SERIES SD20 / SD50

All Yanmar Saildrives feature patented double-seal safety technology with audio warning device. Diesels from 9 mhp to 75 mhp can take advantage of these easy-to-install drives, the SD20 or SD50, depending on engine size. Saildrives help to eliminate shaft vibrations, unnecessary noise, alignment and space problems, thanks to their direct power-to-prop configuration. Boat balance, manoeuvrability and thrust are improved.

- Inner and outer seals with Aqua Sensor
- Whisper quiet and low vibration
- Simple and user-friendly
- Straightforward to maintain





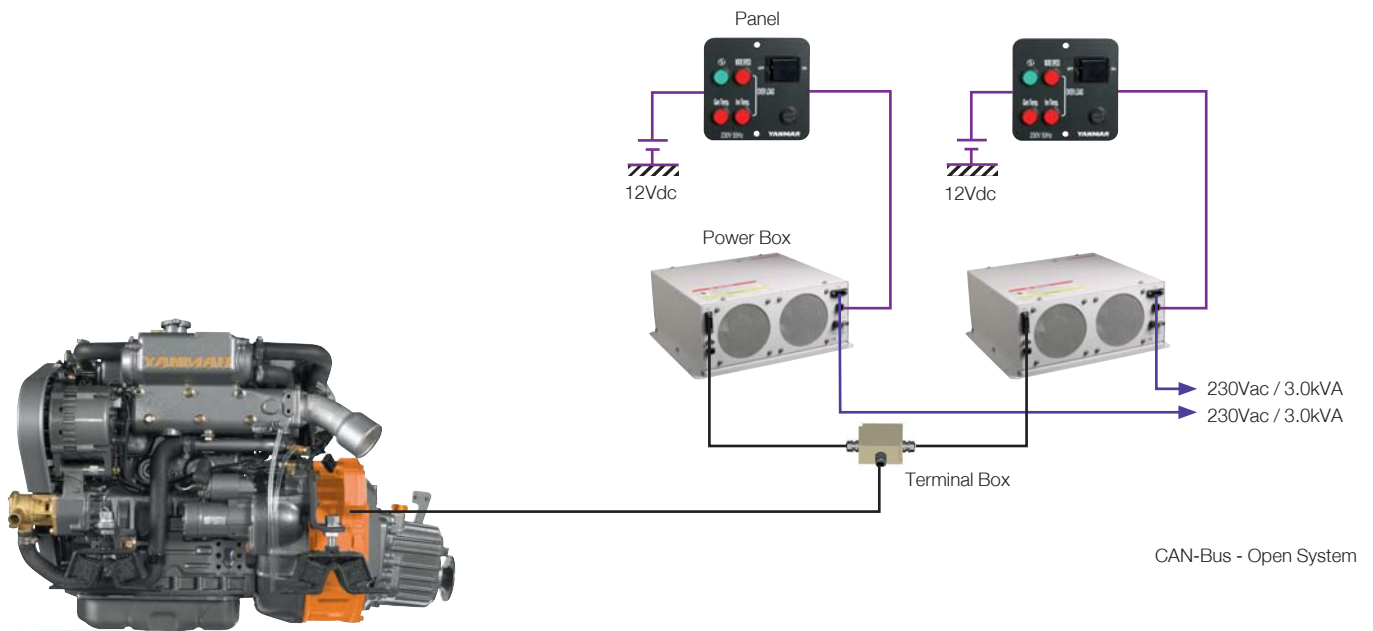
## KMG65E - ONBOARD ELECTRICITY

## Economical Power Solution

### KMG65E GENERATING SYSTEM

Developed to work with Yanmar's 3JH5E and 4JH5E Series diesel engines, the KMG65E is a compact and economical solution to the supply of onboard electricity. The generator is a mere 105 mm deep and weighs just 21 kg, fitting between the engine and transmission, whether standard gearbox or SD50 Saildrive. Sufficient electricity is generated, irrespective of engine speed or load - for example, to run kitchen equipment, a computer, television and music system. The KMG65E can also be used to charge the boat's batteries.


- Choice of one or two remote power boxes
- Providing 3kW or two times 3kW at 230 volts. 50Hz
- Generator fits between engine and transmission
- Simple to install and maintain





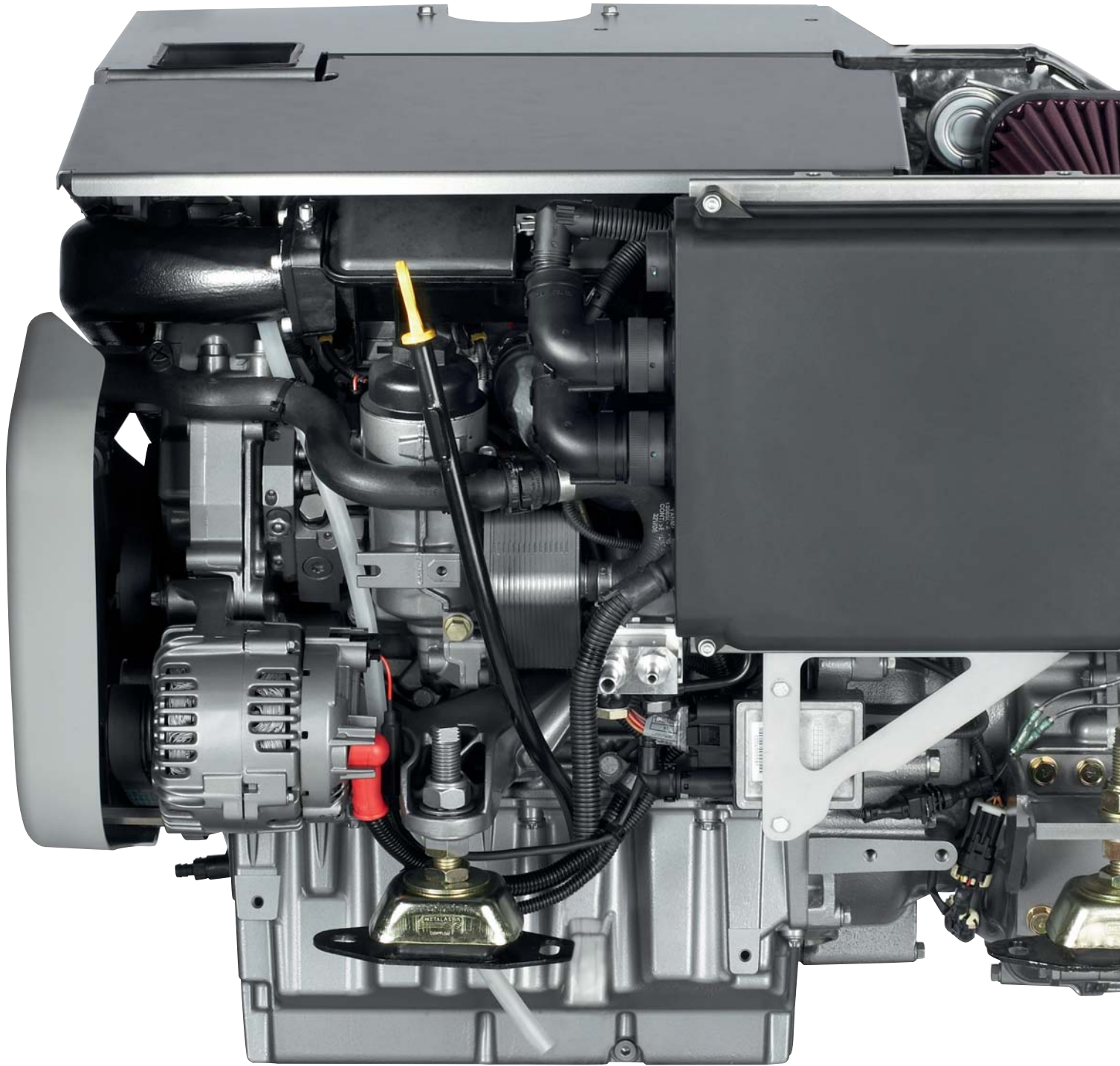
POWERBOAT ENGINES 150-900 MHP

## Powerboat Engines



Some owners use their Yanmar diesels to help them win competitions or break records. Some use them go for high-speed, long-distance cruising. Others are content to take a more leisurely approach to their time on the water. All can enjoy confidence in their Yanmar power. They have chosen the toughest and most durable power packs available for pleasure boating.

Yanmar continues to make substantial investments in product design, development and manufacturing excellence. One of the objectives is to make the best still better.



BY2 SERIES



## Turning Power Into Performance

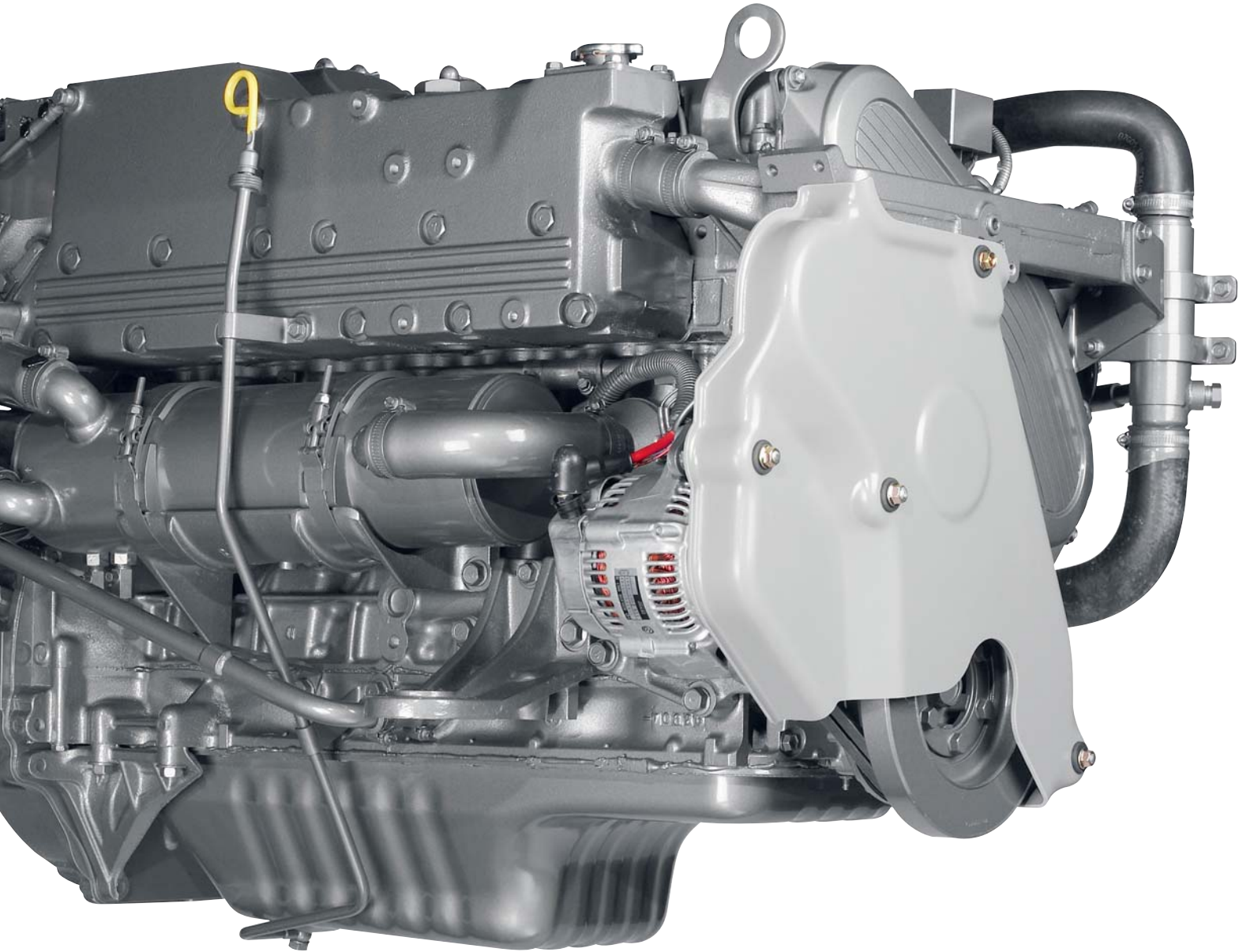
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### YANMAR BY2 SERIES 110-191 KW / 150-260 MHP

Hailed as setting new standards for the boating industry, the leading-edge, second generation BY2 Series engines continue at the same output as their predecessors but incorporate many upgrades, including the re-programming of the ECU from torque to speed control, providing even smoother operation and better synchronisation on twin-engine applications. Choose from shaftdrive or the hydrodynamic Yanmar ZT370 sterndrive. These tough but lightweight, common rail electronic BY2 diesels meet the latest EPA and RCD emissions regulations.

- Smooth, powerful acceleration
- State-of-the-art electronic control
- Total package of engine, control, gear or sterndrive
- CAN-BUS network on NMEA 2000 open protocol





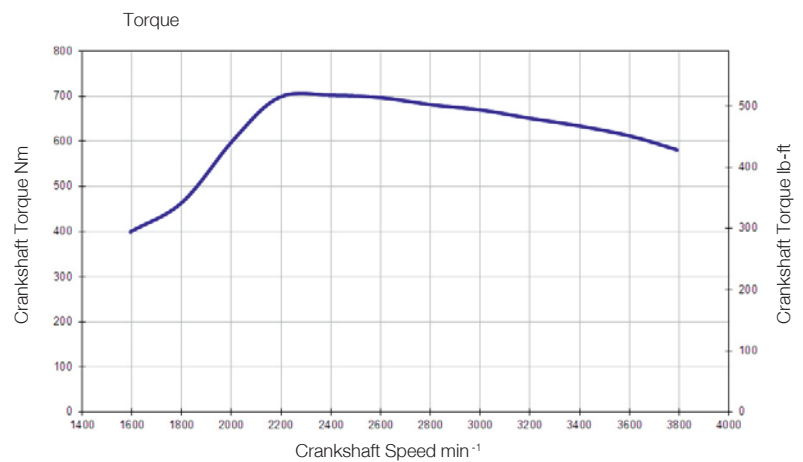
LPA SERIES

## Taking Performance Further

### YANMAR 6LPA-STP2 222 KW / 315 MHP

The turbocharged, overhead-cam 6LPA-STP2 is incredibly compact and light in weight, considering their high power output and thorough ruggedness. The waste-gated, water-cooled turbo really makes things happen when the throttle is pushed down. There are four valves for each of the six cylinders, allowing enhanced breathing and boosting top-end performance. Enjoy smooth shifting, instant response and abundant torque throughout your engine's operating range. Now available with the high technology Yanmar ZT370 sterndrive.

- Turbocharged, intercooled, waste-gated
- Big breathing four-valve head
- Going faster on less fuel
- Choice of shaftdrive or sterndrive





LV SERIES

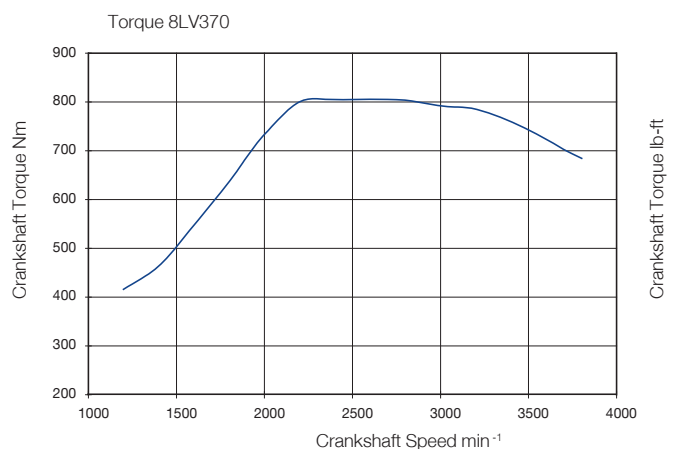
## For New Boats & Repowering

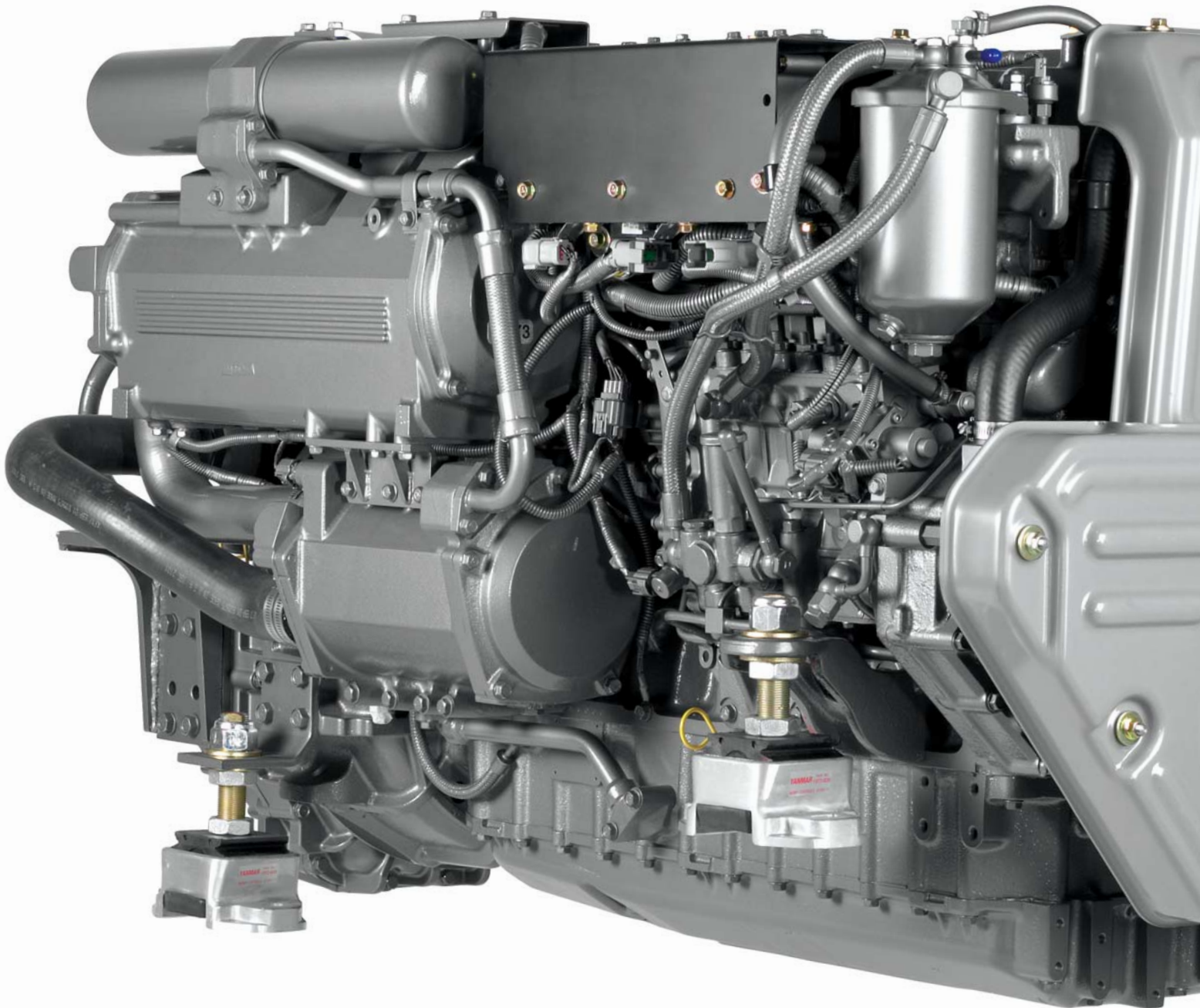
### YANMAR 8LV 320/370 235-272 kW / 320-370 mhp

You will be astonished by the acceleration, top speed and fuel economy of Yanmar's new twin-turbo 8LV320 and 8LV370 diesel engines. You'll be just as impressed by the amazingly low noise levels and the smooth ride. Add in all of those renowned Yanmar qualities of performance, reliability, durability and respect for nature and you have an engine that pushes marine standards to a new high.

For ski boats to fast sports craft to luxury cruisers - new build or repowering - the 8LV is at the forefront of today's propulsion technology, providing the kind of high end performance associated with V8 gasoline engines, but with all of the solid, long-life and cost-effective benefits of diesel. This V8 can be matched perfectly with Yanmar's latest twin-propeller sterndrive, the ZT370, or to a KMH50 inboard transmission.

- Twin-turbo V8 diesel with common-rail fuel injection
- Available with new ZT370 sterndrive or KMH50 transmission
- Benefits from Yanmar's VCS CAN-bus vessel control system
- Wide power band from low 550 rpm to high 3,800 rpm
- Designed for fuel economy and with outstanding cruising range
- Extremely high power, gripping acceleration and big torque
- Exceptionally low noise and minimised vibration
- Advantages of powerful 12V / 180A alternator





## LY3 SERIES

## More Power With Less Weight

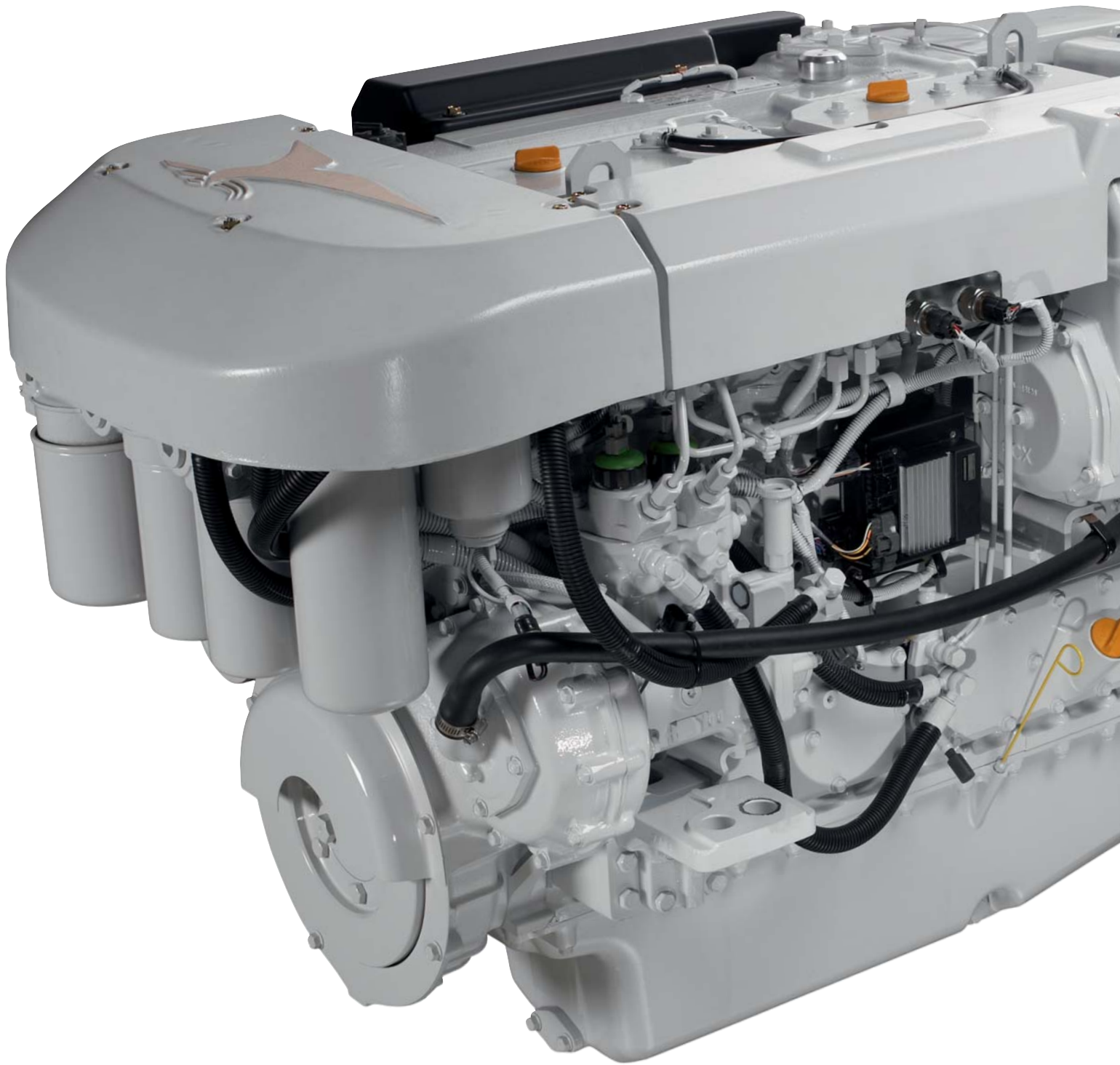
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### YANMAR LY3 SERIES 279-353 KW / 380-480 MHP

Ultra-smooth LY3 Series engines, lightest in their class, incorporate sophisticated electronic control to ensure constant power, almost regardless of operating conditions. They are turbocharged, intercooled and waste-gated six-cylinder power plants, with a wide choice of marine gear. Yanmar has become the benchmark for power-to-weight superiority and the tough, direct-injection LY3 Series extends the innovative technology to push performance still further.

- New electronic control system
- Efficient four-valve head
- More power from less weight
- CAN-BUS network on NMEA 2000 open protocol





CX SERIES

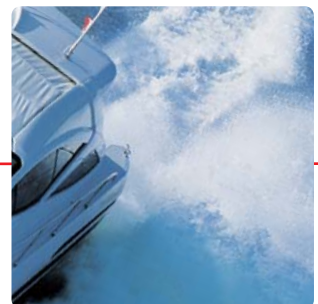
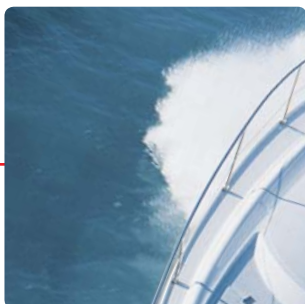
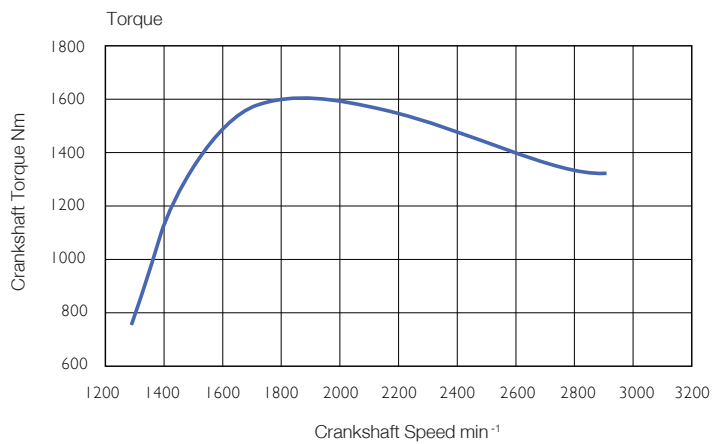


## Leaving Them In Your Wake

### YANMAR 6CX-530 390 KW / 530 MHP

The high-output CX engines with their extra-smooth power provide the speed and reliability to stay out in front. This sets new standards for excitement on the water, coupled with on-board comfort and peace of mind. Outstanding power-to-weight ratio and low-slung configuration contribute to the ability to make a fast boat go even faster. These Yanmar diesels have the muscle and endurance to dramatically lift performance. The new 530 mhp model is the boating industry's only 7.4-litre diesel for pleasure use.

- Outperforms larger petrol engines
- Flat torque characteristics
- Compact and narrow profile
- Built for thorough reliability





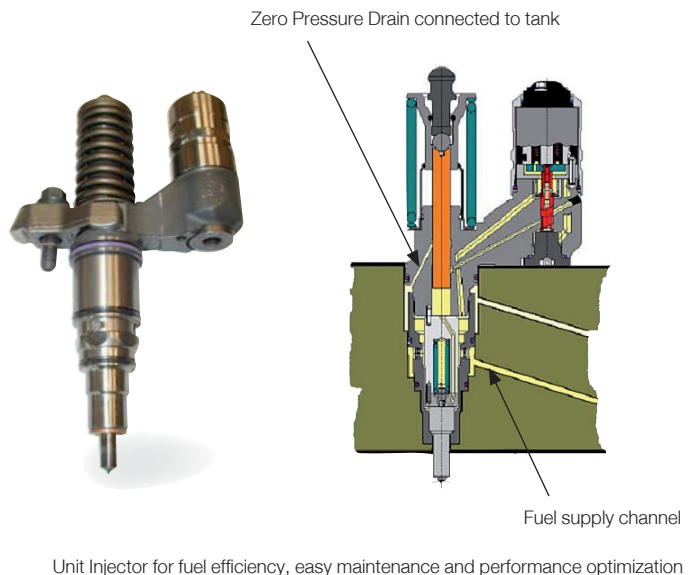
SY SERIES

## When Performance Matters Most

### YANMAR SY SERIES 481-662 KW / 655-900 MHP

Discerning boaters expect their new cruisers and motor yachts to be built with vision and pride, wanting nothing but the best from stem to stern. And therein lies a fundamental key to the success of these high-performance diesels, from 655 mhp to 900 mhp. This is big power from a lightweight but heavy-duty body, whether the in-line-six or V8 model, with an electronic management system to optimise performance. There is leading-edge communications area networking, electronic unit injection for incredible efficiency, and a separate four-valve head per cylinder.

- Higher power from low weight
- Industry-leading electronics and diagnostics
- Ultimate efficiency from unit injector technology
- Modular design and low maintenance





ZT370 STERNDRIVE

## The Perfect Match

### YANMAR ZT370 STERNDRIVE

Designed, built and proven by Yanmar, the all-new ZT370 sterndrive is the perfect transmission match for the Yanmar LV, BY2 and LP Series diesel engines, unsurpassed for new installations and ideal for repowering. This quiet, hydrodynamic sterndrive has a new type of hydraulic clutch for exceptional smoothness, precision forged gears for extra-long life, two counter-rotating propellers for superb acceleration and tight-hold tracking, and large rudder dimensions for superior handling, whether your boat is single or twin installation.

- Hydraulic clutch for shockless engagement
- Mechanical / Electro Magnetic shift
- Precision-forged gears for long life
- Complete with power steering and trim
- Reduction ratios 1.65 / 1.78 / 1.97 / 2.18
- Yanmar propellers





## ZF POD DRIVE SYSTEM

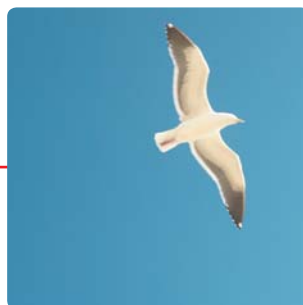
## Steering A New Course

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### ZF POD DRIVE SYSTEM POWERED BY YANMAR

The new ZF Pod Drive System powered by Yanmar has been developed to provide you with finger-tip control of your boat. You can take advantage of significant improvements in top-end performance and handling, cruising speed and fuel economy - overall efficiency gain can be as much as 25 per cent. Just as importantly, you are able to manoeuvre and dock with unequalled ease and precision. The Pod Drive is designed for safety. Two sacrificial pieces are incorporated into the system to break away in the case of impact and avoiding damage to the hull. The aft-facing propellers are protected by the gearcase and skeg. Most floating objects will be deflected down and away. So enjoy your boating to the full.

- For Yanmar diesel engines up to 450 mhp
- For planing and non-planing boats
- New design lightweight electric steering
- Better fuel economy, longer range, higher speeds



## YANMAR QUALITY INSTRUMENTATION BUILT ON NMEA 2000 OPEN CONTROL



1  
Analogue Tachometer



2  
Digital and Analogue Speedometer with  
two frequency inputs



3  
Volt



4  
A range of third-party devices can be  
connected via the NMEA 2000  
plug and play platform



5  
Various Electronic &  
Mechanical control heads



6  
Various Start switches



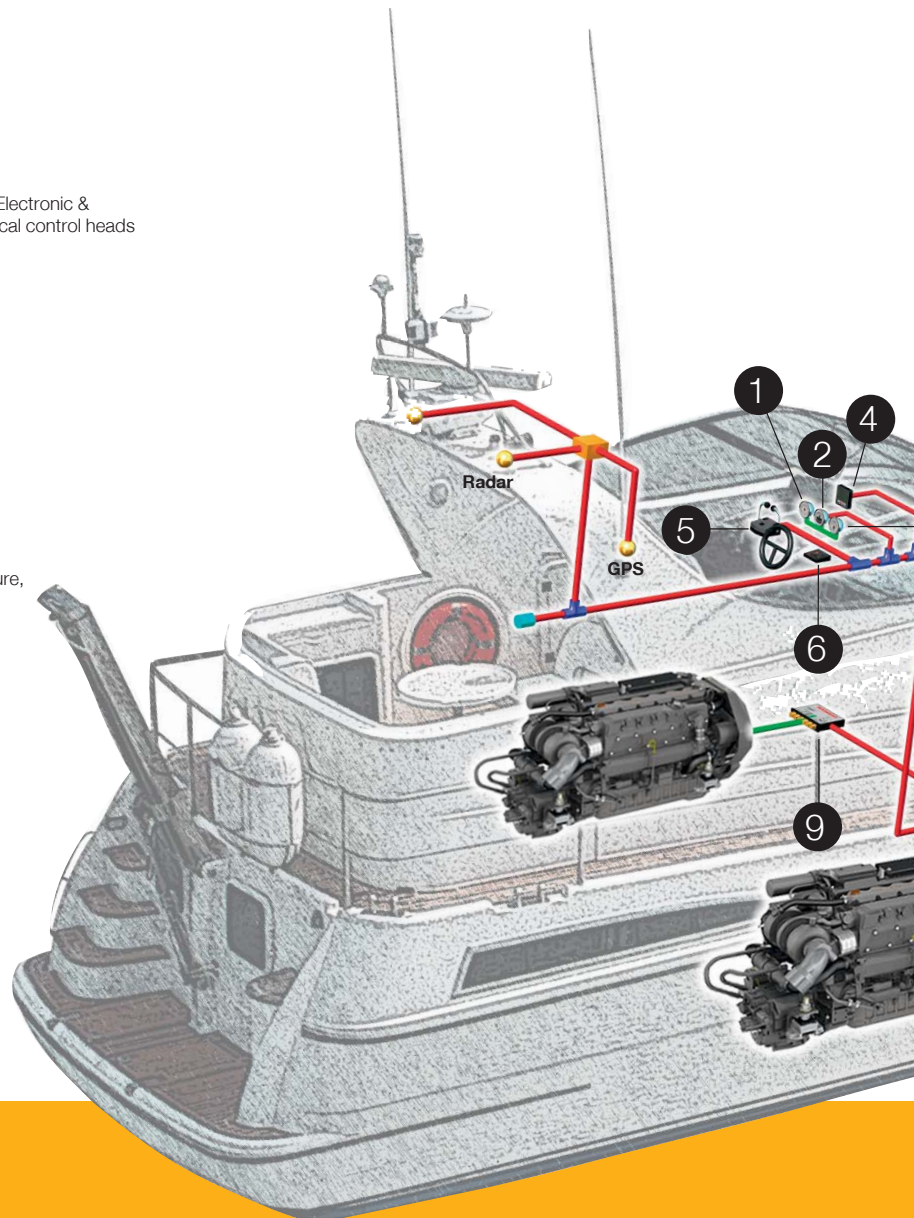
7  
Fuel, Temperature,  
Boost gauges



8  
LCD with navigation capability



9  
CAN-bus Engine Interface,  
Vessel Data unit and Actuators available



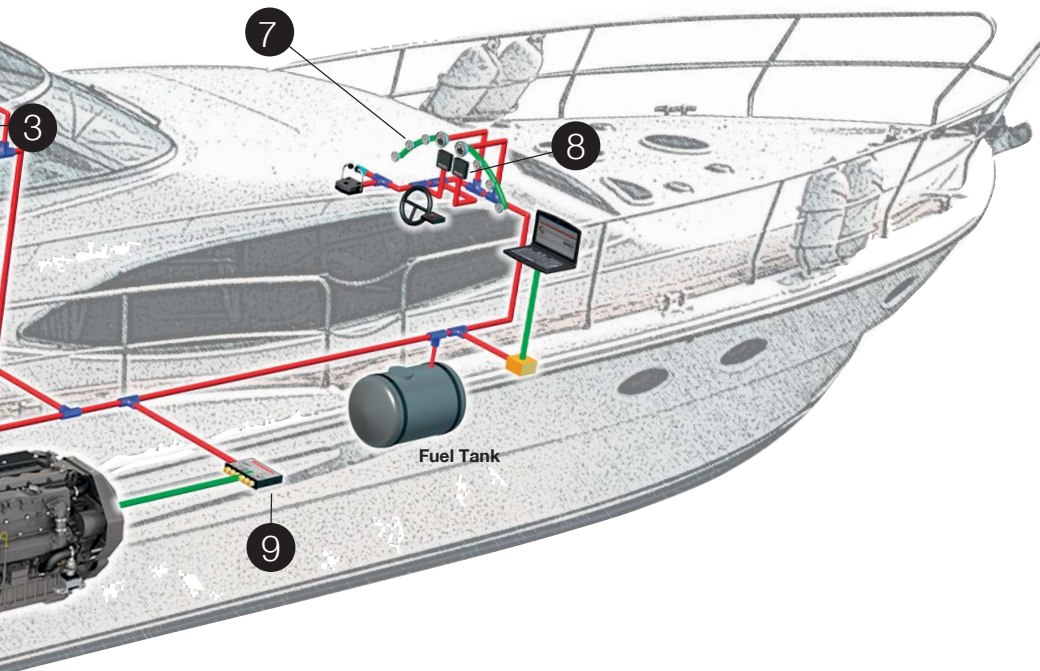


## Accessories

### YANMAR BRANDED GAUGES

Yanmar diesel engines are renowned for their performance and reliability. There are displays, instruments, gauges, controls and electronic systems to accompany these engines, all developed to the highest standards, fulfilling demands for functionality and durability. Precision, accuracy, reliability and good looks are key elements in the Yanmar range of equipment to help you enjoy your boating to the full.

- Displays and monitors
- Instruments and gauges
- Engine controls
- Electronic systems



### VESSEL CONTROL SYSTEM

Complete control, total comfort.

- Sideway movement
- Diagonal movement
- 360° turn (rotation within a boat length)
- Extra smooth engagement



Yanmar Branded VCS panels and controls



ORIGINAL PARTS

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## OIL, COOLANT AND YANMAR GENUINE PARTS

Note that Yanmar Marine offers a range of branded oils, formulated specially for its engines, plus protective coolants. Fitting non-genuine spare parts can turn a reliable Yanmar engine into a malfunctioning engine. Serious problems can occur. Use Yanmar genuine parts to extend the working life of your engine.





SERVICE NETWORK

## Service & Parts

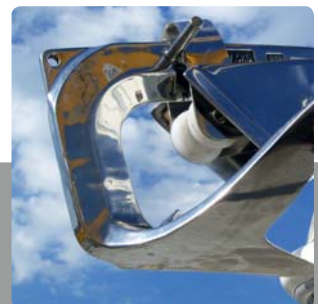
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### OUTSTANDING SERVICE FOR EXCEPTIONAL ENGINES

Official Yanmar dealers, with fully-trained staff and extensively equipped facilities, are located around the world. They provide outstanding service in support of the complete range of exceptional Yanmar diesel engines and associated equipment. And if you register your new engine on-line at [www.yanmarmarine.com](http://www.yanmarmarine.com) there will be further information available to the dealers, helping to ensure that your boating is trouble-free, or, should a problem arise, you are up and running again as quickly as possible.

The engines and support products are designed with respect for marine ecology and manufactured in plants that hold important approvals from many respected environmental authorities around the world. They are backed by full-scale sales and support facilities in more than 130 countries. You are supported wherever your boating might take you.

Go to [www.yanmarmarine.com](http://www.yanmarmarine.com) for warranty information and a dealer network overview.



Engine model	Number of cylinder	Fuel injection	Output at crankshaft(1)	Rated speed	Displacement	Combustion system	Aspiration	Electronic management	Alternator standard(7)
			kW / mhp	rpm	L / cu in				V / Amp
1GM10	1	INL	6.6 / 9	3600	0.318 / 19.4	IDI	N	-	12 / 35
2YM15	2-inline	INL	10 / 13.6	3600	0.570 / 34.7	IDI	N	-	12 / 80
3YM20	3-inline	INL	15.3 / 21	3600	0.854 / 52.1	IDI	N	-	12 / 80
3YM30	3-inline	INL	21.3 / 29	3600	1.115 / 68	IDI	N	-	12 / 80
3JH5E	3-inline	MP	28.7 / 39	3000	1.640 / 100	DI	N	-	12 / 80
4JH5E	4-inline	MP	39.6 / 54	3000	2.19 / 134	DI	N	-	12 / 80
4JH4-TE	4-inline	VE	55.2 / 75	3200	1.995 / 122	DI	T/4V	-	12 / 80
4JH4-HTE (1)	4-inline	VE	80.9/110 (73.5/100)	3200	1.995 / 122	DI	T/A/4V	-	12 / 80
4JH3-DTE	4-inline	VE	89.1 / 121	3800	1.995 / 122	DI	T/A	-	12 / 80
4LHA-HTP	4-inline	INL	118 / 158	3300	3.455 / 211	DI	T/A	O	12 / 80
4LHA-STP	4-inline	INL	147 / 198	3300	3.455 / 211	DI	T/A/W	O	12 / 80
4LHA-DTP	4-inline	INL	177 / 237	3300	3.455 / 211	DI	T/A	O	12 / 80
4BY2-150	4-inline	CR	110 / 150	4000	1.995 / 122	DI	T/A/W/4V	O	12 / 150
4BY2-180	4-inline	CR	132 / 180	4000	1.995 / 122	DI	T/A/W/4V	O	12 / 150
6BY2-220	6-inline	CR	162 / 220	4000	2.993 / 183	DI	T/A/W/4V	O	12 / 150
6BY2-260	6-inline	CR	191 / 260	4000	2.993 / 183	DI	T/A/W/4V	O	12 / 150
6LPA-STP2	6-inline	2SI	222 / 315	3800	4.164 / 254	DI	T/A/W/4V	-	12 / 80
8LV-320	V8-90°	CR	235 / 320	3800	4.46 / 272.2	DI	T/A/W/4V	O	12 / 180
8LV-370	V8-90°	CR	272 / 370	3800	4.46 / 272.2	DI	T/A/W/4V	O	12 / 180
6LY3-UTP	6-inline	E2SI	279 / 380	3300	5.813 / 354	DI	T/A/W/4V	O	12 / 80 (24 / 35 ■)
6LY3-STP	6-inline	E2SI	324 / 440	3300	5.813 / 354	DI	T/A/W/4V	O	12 / 80 (24 / 35 ■)
6LY3-ETP	6-inline	E2SI	353 / 480	3300	5.813 / 354	DI	T/A/W/4V	O	12 / 80 (24 / 35 ■)
6CX-530	6-inline	CR	390 / 530	2900	7.413 / 452	DI	T/A/W/4V	O	12 / 120
6SY-650	6-inline	EUI	481 / 655	2300	11.7 / 714	DI	T/A/W/4V	O	24 / 65 (2-pole)
6SY-720	6-inline	EUI	530 / 720	2300	11.7 / 714	DI	T/A/W/4V	O	24 / 65 (2-pole)
8SY-900	V8-90°	CR	662 / 900	2300	15.6 / 952	DI	T/A/W/4V	O	24 / 140 (2-pole)

Legende

N = Naturally aspirated  
T = Turbo charger  
W = Wastegate  
A = Aftercooler  
4V = 4 Valves per cylinder  
INL = Inline Pump

IDI = Indirect Injection  
DI = Direct Injection  
CR = Common Rail Fuel Injection  
EUI = Electronic Unit Injectors  
2SI = 2 Stage Injection  
E2SI = Electronic 2 Stage Injection

MP = Mono Plunger Pump  
VE = VE Rotary Pump  
O = Standard  
■ = Optional

## MARINE ENGINE OVERVIEW

Freshwater cooling	Kanzaki standard	Weight with gearbox(4)	Dry weight without gearbox	Length with gearbox(4)	Width with gearbox (4)	Height with gearbox(4)	Saildrive	Sterndrive(3)	Environmental status
		Kg / lbs	Kg / lbs	mm / in	mm / in	mm / in			
-	KM2P	81 / 179	71 / 157	554 / 22	410 / 16	485 / 19	SD20	-	b, c, e
O	KM2P	113 / 249	103 / 227	613 / 24	487 / 19	528 / 21	SD20	-	b, c, d, e
O	KM2P	130 / 287	120 / 266	693 / 27	487 / 19	528 / 21	SD20	-	b, c, d, e
O	KM2P	133 / 293	123 / 271	715 / 28	487 / 19	545 / 22	SD20	-	b, c, d, e
O	KM35P	185 / 408	173 / 381	777 / 31	560 / 22	623 / 25	SD50	-	b, d, e
O	KM35P	213 / 469	201 / 443	871 / 34	560 / 22	618 / 24	SD50	-	b, d, e
O	KM4A	237 / 522	207 / 456	903 / 36	616 / 24	659 / 26	SD50-T	-	b, c, d, e
O	KM4A	248 / 547	217 / 478	933 / 37	616 / 24	659 / 26	-	-	a, b, c, (d) e
O	KMH4A	260 / 573	229 / 505	886 / 35	581 / 23	660 / 26	-	-	b, c, e
O	KMH50A	404 / 891	360 / 794	1044 / 41	680 / 27	741 / 29	-	-	b, c, e
O	KMH50A	410 / 904	365 / 805	1044 / 41	686 / 27	741 / 29	-	-	b, c, e
O	KMH50A	409 / 902	365 / 804	1044 / 41	686 / 27	741 / 29	-	-	b, c, e
O	KMH40A	292 / 644	258 / 569	881 / 35	746 / 29	740 / 29	-	■	a, b, c, e
O	KMH40A	292 / 644	258 / 569	881 / 35	746 / 29	740 / 29	-	■	a, b, c, e
O	KMH50A	358 / 789	315 / 694	1064 / 42	746 / 29	740 / 29	-	■	a, b, c, e
O	KMH50A	358 / 789	315 / 694	1064 / 42	746 / 29	740 / 29	-	■	a, b, c, e, f
O	KMH50A	449 / 990	408 / 899	1190 / 47	666 / 26	739 / 29	-	■	a, b, c, e, f
O	KMH50A	476 / 1049	435 / 959	1341 / 53	884 / 35	784 / 1784	-	■	a, b, e, *
O	KMH50A	476 / 1049	435 / 959	1341 / 53	884 / 35	784 / 1784	-	■	a, b, e, *
O	KMH61A	718 / 1583	640 / 1411	1458 / 57	801 / 32	793 / 31	-	-	a, b, e, f
O	KMH61A	718 / 1583	640 / 1411	1458 / 57	801 / 32	793 / 31	-	-	a, b, e, f
O	KMH61A	718 / 1583	640 / 1411	1458 / 57	801 / 32	793 / 31	-	-	a, b, e, f
O	KMH70 A	914 / 2015	837 / 1845	1504 / 59 (5)	824 / 32 (a)	905 / 36 (a)	-	-	a, b, e
O	Bobtail	1280 / 2822 (6)	1150 / 2536	1910 / 75 (6)	870 / 34 (b)	1038 / 41 (b)	-	-	a, b, e
O	Bobtail	1280 / 2822 (6)	1150 / 2536	1910 / 75 (6)	870 / 34 (b)	1038 / 41 (b)	-	-	a, b, e
O	Bobtail	1906 / 4202 (6)	1650 / 3638	1609 / 63 (5)	1172 / 46 (a)	1069 / 42 (a)	-	-	a, b, e

(1) = Power rating is according to ISO 8665. Fuel temperature 40°C at inlet of the fuel injection pump

(2) = Various gearboxes and configurations available from Yanmar, ZF and Twin-Disc. Contact your local Yanmar supplier for more information

(3) = Various Sterndrive configurations available upon request. Contact your local Yanmar supplier for more information

(4) = Measured with Kanzaki gearbox

(5) = Measured without gearbox

(6) = Measured with ZF gearbox

(7) = Optional primary and secondary alternators available upon request

Bobtail = Without gearbox

a = EPA Tier 2  
b = EU RCD  
c = BSO II  
d = EPA Tier 3  
e = EMC  
f = Marpol 73/78 Annex VI

\* Engine is capable of meeting EPA Tier 3 emission regulations.

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