



MARINE COMMON RAIL ENGINES

6LY Series - 400 / 440

Configuration	In-line, 4-stroke, vertical, water-cooled diesel engine				
Max. output at crankshaft*	294 kW@3300 rpm 324 kW@3300 rpm	[400 mhp@3300 rpm] [440 mhp@3300 rpm]			
No. of cylinders	6 cylinder				
Displacement	5.813 L [354 cu in]				
Bore x stroke	106 mm x 110 mm	[4.17 in x 4.33 in]			
Aspiration	Turbocharged & intercooled				
Combustion system	Direct injection, Denso common rail system				
Starting system	Electric starting 12V - 2.5 kW				
Engine management	Electronic				
Cooling system	Fresh water cooling by centrifugal fresh water pump Seawater cooling by rubber impeller seawater pump				
Alternator	12V - 125A				
Lubrication system	Enclosed, forced lubricating system				
Engine lube oil specifications	API class: CD or higher, SAE grade: 10W-30 or 15W-40				
Direction of rotation at crankshaft	Counterclockwise (CCW) viewed from stern				
Dry weight without gear	585 kg [12	90 lbs]			
Engine dimensions† L x W x H	1440 x 748.5 x 773.8 mm				
Emission compliance	EU: RCD 2, EMC, IMO/GL	US: EPA Tier 3, EPA-C			
Flywheel housing size	SAE #3				
Controls	Electronic				

NOTE: Fuel condition: Density at $15^{\circ}C = 0.84 \text{ g/cm}^3$: 1 kW = 1.3596 mhp = 1.3410 HP

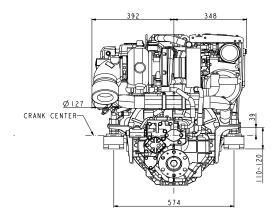
Technical data is according to (ISO 8665) / (ISO 3046)

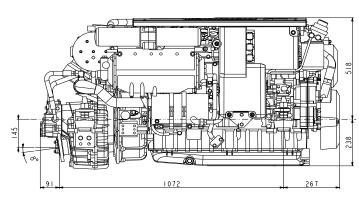
†Length measured with with KMH61A-2 gearbox & high-riser elbow (Dimensions may vary with other gears/elbow)

DIMENSIONS

Rear view

Right side view





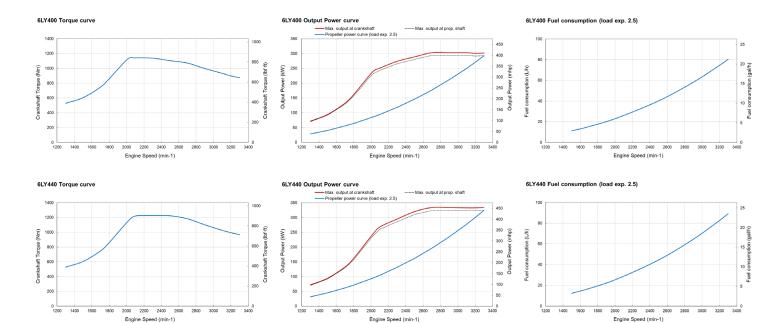
6LY440 with KMH61A2 marine gear (Not to be used for engine installation)

^{*} Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665: 2006)





PERFORMANCE CURVES



MARINE GEAR*

Model	KMH61A2 [down angle: 8°]			KMH61V2 [V-drive]			ZF280-1A [parallel]	ZF280-1A [down angle 7°]
Clutch type	Hydraulic multi-disc			Hydraulic multi-disc			Hydraulic multi-disc	
Dry weight	76 kg [168 lbs]			108 kg [238 lbs]			86 [190 lb	
Reduction ratio [fwd/asn]	1.55/1.55	2.04/2.04	2.43/2.43	1.12/1.12	1.26/1.26	2.04/2.04	Gear ratio's as available from ZF	
Direction of rotation [viewed from stern]	Clockwise & counterclockwise		Clockwise & counterclockwise			Clockwise & counterclockwise		
Lubrication system	Forced lubrication			Forced lubrication			Forced lubrication	
Lube oil specifications	API class: CF or higher, SAE grade: #30			API class: CF or higher, SAE grade: #30			API class: CF or higher, SAE grade: #30	
Max. lube oil capacity	2.8 L			8 L			3.3 L	
Dry weight - engine & gear	661 kg [1457 lbs]			693 kg [1527 lbs]			671 kg [1479 lbs]	

Engine Speed (min-1)

ACCESSORIES

Standard engine package

- Exhaust mixing elbow [L-type]
- Alternator 12V 120A
- VC20 Vessel Control System
- Fresh water expansion tank

Optional accessories

- High-riser mixing elbow [instead of L-elbow]
- Flexible mounts Barry
- Flexible mounts Bridgestone
- Secondary alternator 12V 120A or 24V 45A
- Secondary alternator 12V 130A or 24V 110A including smart regulator
- Extension harness [3m, 5m, 10m]
- Second station
- JC20 Inboard Joystick
- NMEA2000 Engine monitoring system
- SOLAS including Certificate [factory fit only]
- Hot water kit
- Water separator
- Lu oil drain pump
- Bilge pump [12V]

^{*} Other marine gearboxes and configurations available upon request. Contact your local supplier for more information.