



# **MARINE DIESEL ENGINES**

# 3YM20

Configuration	In-line, 4-stroke, vertical, water-cooled diesel engine		
Max. output at crankshaft*	15.3 kW@3600 rpm	[21 mhp@3600 rpm]	
No. of cylinders	3 cylinder		
Displacement	0.854 L	52.1 cu in]	
Bore x stroke	70 mm x 74 mm	[2.76 in x 2.91 in]	
Aspiration	Natural		
Combustion system	Indirect injection, in-line pump		
Starting system	Electric starting 12V - 1.4 kW		
Engine management	Mechanical		
Cooling system	Fresh water cooling with heat exchanger		
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	110 kg [24	3 lbs]	
Engine dimensions <sup>†</sup> L x W x H	613 x 463 x 600 mm		
Emission compliance	EU: RCD 2, BSO II, EMC	US: EPA Tier 3, EPA-C	
Flywheel housing size	SAE #6		
Controls	Mechanical		

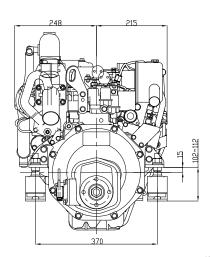
#### NOTE:

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

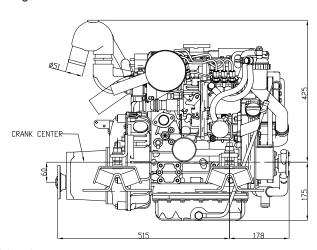
Technical data is according to (ISO 8665) / (ISO 3046)

## DIMENSIONS

#### Rear view



## Rigth side view



3YM20 with KM2P-1 marine gear (Not to be used for engine installation)

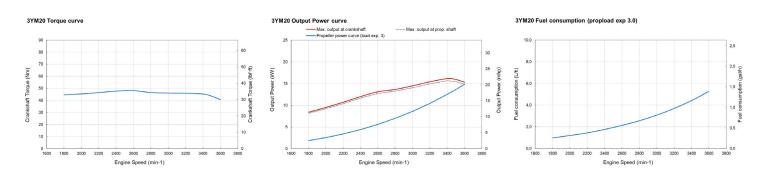
<sup>\*</sup> Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665)

<sup>†</sup>Length includes KM2P-1 marine gear & height includes U-type elbow (Dimensions may vary with other gears/elbow)





#### PERFORMANCE CURVES

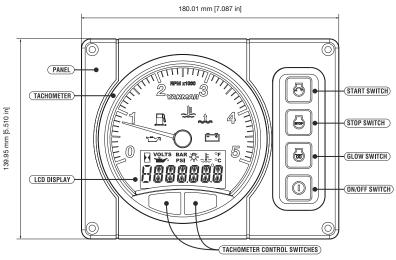


### MARINE GEAR / DRIVE\*

Model	KM2P-1			Saildrive [SD25]
Clutch type	Mechanical cone clutch			Constant mesh gear with dog clutch
Dry weight	9.8 kg [22 lbs]			30 kg [66 lbs]
Reduction ratio [fwd/asn]	2.21/3.06	2.62/3.06	3.22/3.06	2.64/2.64
Direction of rotation [viewed from stern]	Clockwise			Counterclockwise
Lubrication system	Splash lubrication			Splash lubrication
Lube oil specifications	API class: CD or higher, SAE grade: #20 or #30		#20 or #30	API class: CC or higher, SAE grade: 10W-30
Max. lube oil capacity	0.3 L			2.2 L
Dry weight - engine & gear/drive	120 kg [265 lbs]			140 kg [309 lbs]

<sup>\*</sup> Other marine gearboxes and configurations available upon request. Contact your local supplier for more information

## INSTRUMENT PANELS



B20 panel

## ACCESSORIES

## Standard engine package

- Exhaust mixing elbow [L-type]
- Alternator 12V 125A
- B20 panel
- Flexible mounts
- Expansion tank for fresh water cooling system
- Electric stop solenoid
- Belt safety cover

## Optional accessories

- High-riser mixing elbow [instead of L-elbow]
- Extension wire harness [4m, 6m]
- Dual harness [for 2nd station]
- TFX Sidemount control head
- Hot water kit with cocks
- Extension saildrive leg [50 mm]
- Propeller cone nut kit SD25
- On-board spare parts kit

NOTE: All data subject to change without notice. Text and illustrations are not binding.