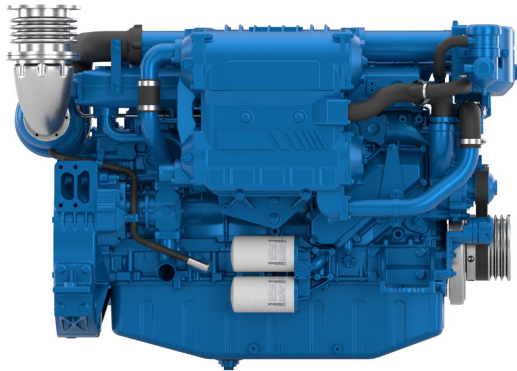




# 6M21.3

Propulsion Diesel Engine



Number of cylinders	6
Bore and stroke (mm)	127 X 165
Total displacement (L)	12.54
Cylinders	L6
Engine rotation	counter clockwise
Idle speed	700
Flywheel	14"
Flywheel housing	SAE 1

## Customer benefits

**Genuine marine design**, our engine is designed specifically for Marine applications with Marine components, such as individual cylinder heads that make maintenance easier even in the smallest of engine rooms

**Global environment care** with low exhaust emissions at any running cycle

**Continuous compact power** with reference performances in its category

**Life cycle cost efficiency** with extended maintenance intervals

## Rated power

Duty	kW	HP	RPM	Fuel consumption			IMO
				Optimum value	Rated power		
				g/kWh	g/kWh	l/h	
P1	368	500	1800	194	207	92	II
P2	405	550	1800	194	207	101	II
P3	441	600	2100	203	213	113	II

	P1	P2	P3
Application	Unrestricted Continuous	Heavy	Intermittent
Engine load variations	Very Little To None	Continuous	Important
Average Engine load factor	80-100%	30-80%	50%
Annual working time	More Than 5000 H	3000 -5000 H	1000 - 3000 H
Time at full load	Unlimited	8h Each 12h	2h Each 12h

### P1 Continuous Duty

- Deep sea trawlers
- Shrimps trawlers
- Sea going tug boats
- River tug boats
- Push boats
- Freighters
- Dredges
- LCT
- Ferries

### P2 Heavy Duty

- Deep sea trawlers
- Shrimps trawlers
- Sea going tug boats
- River tug boats
- Push boats
- Freighters
- Dredges
- LCT
- Ferries

### P3 Intermittent Duty

- Seasonal passenger vessels
- Fishing boats
- Pilot boats
- Commercial pleasure boats
- Pump boats
- Displacement sailboats
- Trawlers
- Bow thrusters

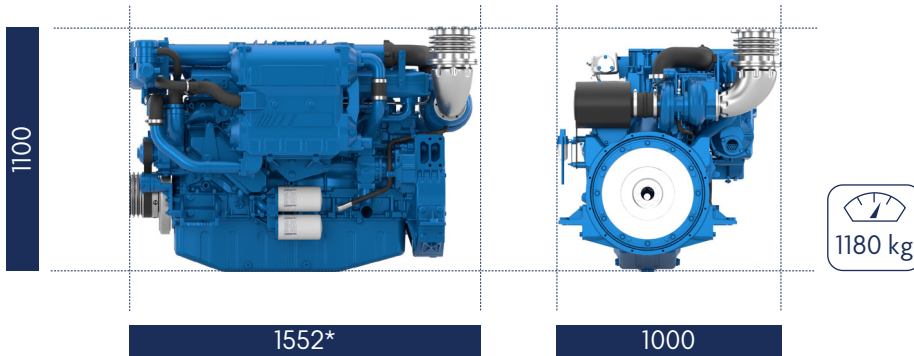
### P4 Light Duty

- Private pleasure boats
- Multi-hull pleasure boats
- Survey or rescue fast vessels
- Military fast vessels.

### P5 High performance Duty

- Private pleasure boats
- Multi-hull pleasure boats

## Dimensions and dry weight (mm/kg)



\* 1442 from flywheel

## Standard equipment

### Cooling System

- Two - stage cooling circuit with built - in HT thermostatic valve
- Integrated fresh water expansion tank
- High efficiency tubestack heat exchanger
- Gear driven centrifugal fresh water pump
- Self priming raw water pump with rubber impeller

### Lubrication System

- Full flow lube oil filters duplex type
- Fresh water cooled lube oil cooler intergrated in cylinder block

### Fuel System

- Common-rail electronic injection
- High pressure pump with double walled high pressure pipes
- Fuel oil filter duplex type
- External fuel pre-filter with water separator

### Intake Air and Exhaust System

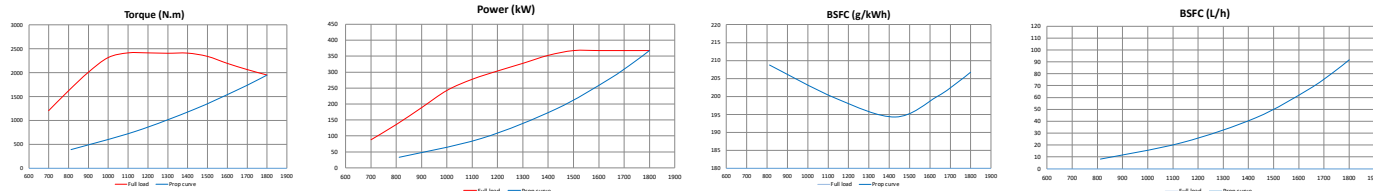
- Double flow raw water cooled intake air heat exchanger module
- High efficiency dry turbocharger
- Water cooled exhaust manifold

### Electrical System

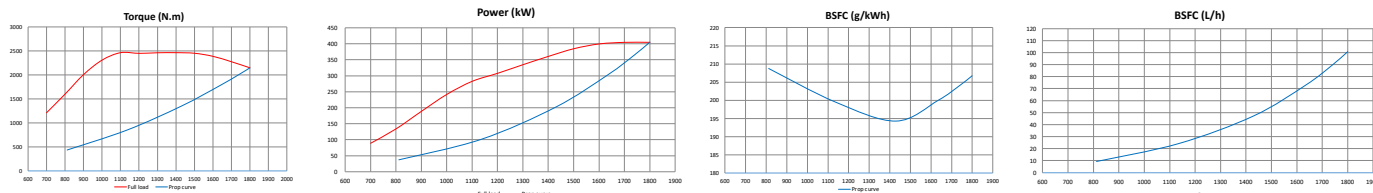
- Voltage: 24V DC insulated
- Electrical starter
- 120A battery alternator

### Performance

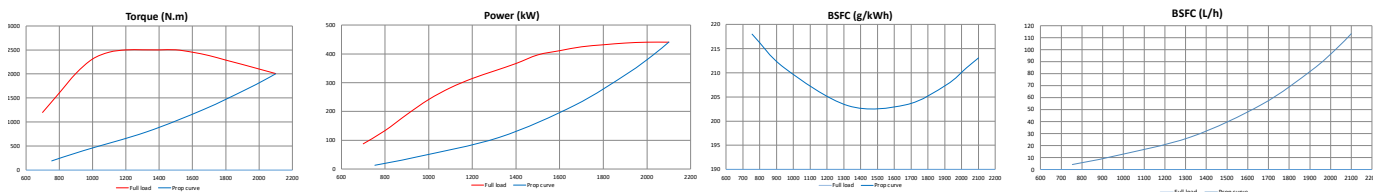
P1 - 368 kW - 1800 rpm



P2 - 405 kW - 1800 rpm



P3 - 441 kW - 2100 rpm



### Power definition (Standard ISO 3046/1 - 1995 (F))

#### Reference conditions

Ambient temperature	25°C / 77°F
Barometric pressure	100 kPa
Relative humidity	30%R
Raw water temperature	25°C / 77°F

#### Fuel oil

Relative density	0,840 ± 0,005
Lower calorific power	42 700 kJ/kg
Consumption tolerances	+ 5%
	(DIN ISO 3046-1)
Inlet limit temperature	35°C / 95°F

**Our ratings also comply with classification societies maximum temperature definition without power derating.**

Ambient temperature	45°C / 113°F
Raw water temperature	32°C / 90°F