







Number of cylinders Bore and stroke (mm) Total displacement (L) Engine rotation Idle speed Flywheel housing Flywheel 6 in line 127 X 165 12.5 counter clockwise 700 SAE 1 SAE 14"

Customer benefits

Most advanced Common Rail technology and high-end injection system (2200 bar), key to achieve strict emissions regulations and competitive performances.

Highly efficient turbochargers optimized to operate with high performance keeping fuel consumption under control.

Individual cylinder heads allowing easy maintenance.

Key components made of highly reliable materials.

Rated power - Fuel consumption

	kW	HP	RPM	Fuel consumption				
Duty				Optimum value	Rated power		IMO	EPA
				g/kWh	g/kWh	l/h		
P3	599	815	2300	202	220	155	II	3-REC
P4	662	900	2300	201	223	174		3-REC
P5	735	1000	2300	186	228	197	II	3-REC

	Р3	P4	Р5
Application	Intermittent	Light	High performance
Engine load variations	Important	Very important	Important
Average Engine load factor	60%	60%	60%
Annual working time	1000-3000h	less than 1500h	500h
Time at full load	2h each 12h	1h each 12h	1h 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 boatsDisplacement sailboats
- Displacen
 Trawlers
- Bow thrustor

• Bow thrusters

P4 Light Duty

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

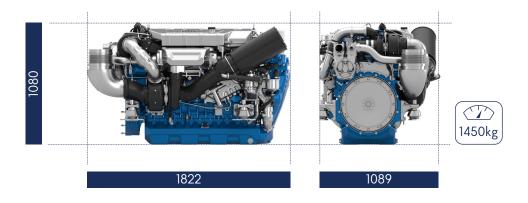
P5 High performance Duty

- Private pleasure boats
- Multi-hull pleasure boats

2



Dimensions and dry weight (mm/kg)



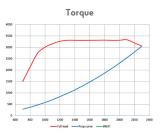
Standard equipment

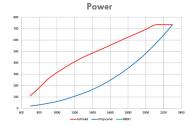
Cooling System	Two - stage cooling circuit with built - in HT thermostatic valve Integrated fresh water expansion tank High efficiency tubular heat exchanger Gear driven centrifugal fresh water pump Self priming raw water pump with bronze impeller
Lubrication System	Full flow lube oil filters duplex type Fresh water cooled lube oil heat exchanger
Fuel System	Common-rail electronic injection High pressure pump with shielded high pressure injection rail and 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 with ball bearing technology Two Stage Turbocharging system
Electrical System	Voltage: 24V DC insulated Electrical starter 190A battery alternator
Optional Equipment	Wet exhaust PTO elastic coupling Additional pulley Electric drain system Standard PTO for hydraulic pump Electrical rotary actuator

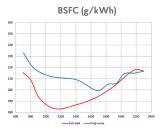
6F21 **Propulsion Diesel Engine**

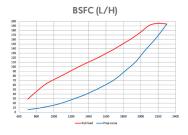
Performance

P5 735@2300

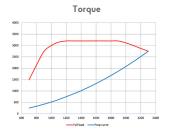


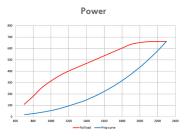


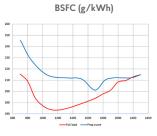




P4 662@2300



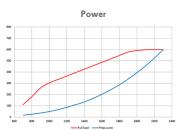


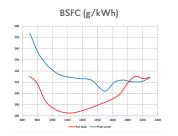


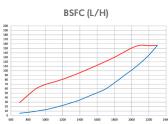
BSFC (L/H)

P3 599@2300









Power definition

(Standard ISO 3046/1 - 1995 (F))

Reference conditions

Ambient temperature		
Barometric pressure		
Relative humidity		
Raw water temperature		

Fuel	oil
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25°C / 77°F

25°C / 77°F

100 kPa

30%R

Relative density Lower calorific power Consumption tolerances

Inlet limit temperature

0,840 ± 0,005 42 700 kJ/kg + 5% (DIN ISO 3046-1) 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

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