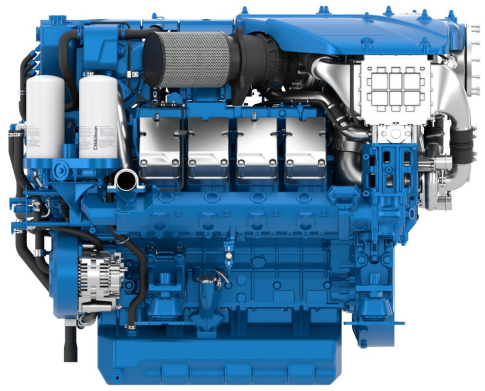
MOTEURS Baudouin

8F21

Common rail diesel engine, 2-stage turbocharging

8F21

Common rail diesel engine,
2-stage turbocharging



Number of cylinders	8
Bore and stroke (mm)	127 x 165
Total displacement (L)	16.7
Engine rotation	counter clockwise
Idle speed	700
Flywheel	14"
Flywheel housing	SAE 1

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

Duty	kW	HP	RPM	Fuel consumption			IMO
				Optimum value	Rated power		
				g/kWh	g/kWh	l/h	
P3	809	1100	2300	211	215	212	II
P4	919	1250	2300	207	223	250	II
P5	1000	1360	2300	204	223	274	II

	P3	P4	P5
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
Typical applications:

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

P2 Heavy Duty
Typical applications:

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

P3 Intermittent Duty
Typical applications:

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

P4 Light Duty
Typical applications:

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

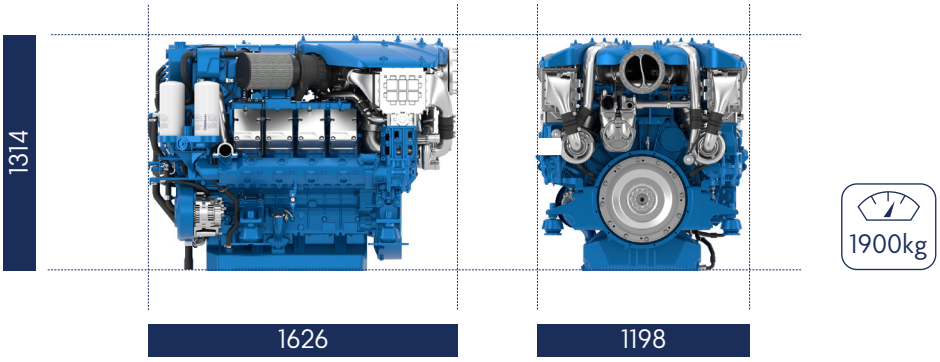
P5 High performance Duty
Typical applications:

- Private pleasure boats
- Multi-hull pleasure boats

8F21

Common rail diesel engine,
2-stage turbocharging

Dimensions and dry weight (mm/kg)



Standard equipment

Engine & Block

Cast iron cylinder block, with replaceable cylinder liners
Separate cast iron cylinder heads
Replaceable valves guides and seats
Steel forged crankshaft with 7 bearings
Lube oil cooled light steel piston with 3 high performance piston rings

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 raw 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

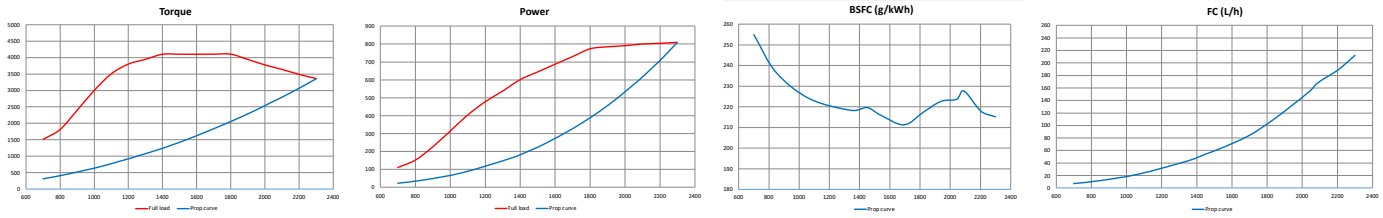
Contact us for further information regarding our options.

8F21

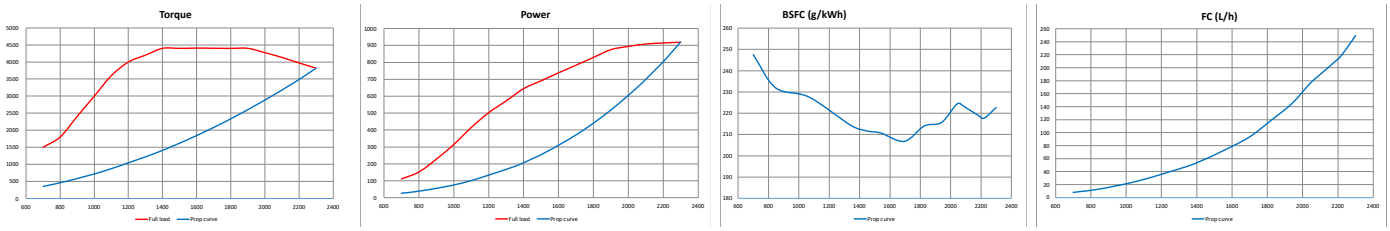
Common rail diesel engine,
2-stage turbocharging

Performance

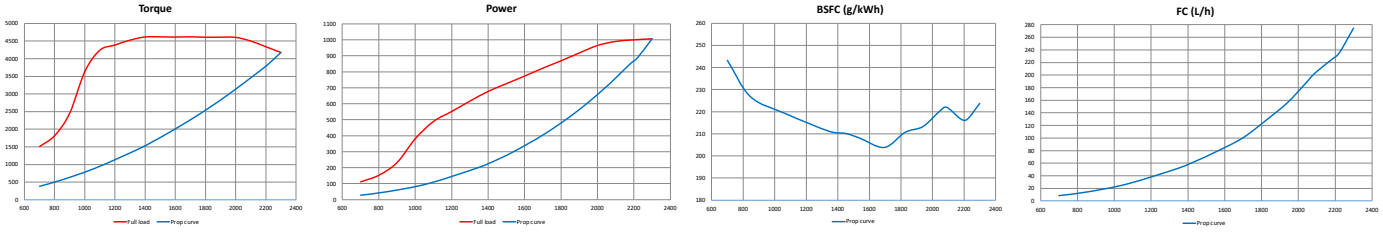
P3 - 809 kW - 2300 rpm



P4 - 919 kW - 2300 rpm



P5 - 1000 kW - 2300 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