

# 8F21

Common rail diesel engine, 2-stage turbocharging



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Number of cylinders 8

Bore and stroke (mm)  $127 \times 165$ Total displacement (L) 16.7

Engine rotation counter clockwise

Idle speed 700 Flywheel SAE 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

	kW	HP	RPM	Fuel consumption			
Duty				Optimum value	Rated power		IMO
				g/kWh	g/kWh	l/h	
P5	1000	1360	2300	204	223	274	II

	P5		
Application	High performance		
Engine load variations	Important		
Average Engine load factor	60%		
Annual working time	500h		
Time at full load	1h each 12h		

# P5 High performance Duty Typical applications:

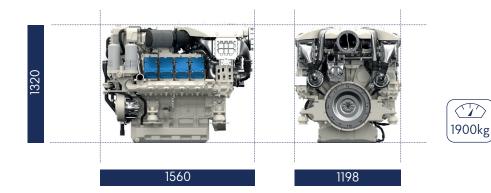
- Private pleasure boats
- Multi-hull pleasure boats

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#### Dimensions and dry weight (mm/kg)





Engine & Block Cast iron cylinder block

Separate cast iron cylinder heads Replaceable valves guides and seats Steel forged crankshaft with 5 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

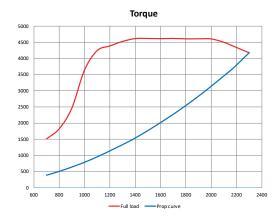




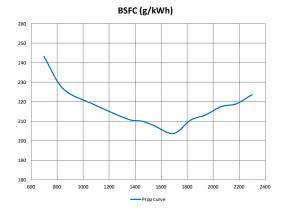
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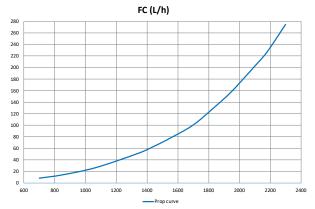
#### **Performance**

P5 - 1000 kW - 2300 rpm









#### **Power definition**

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

# Reference conditions

Ambient temperature  $25^{\circ}\text{C} / 77^{\circ}\text{F}$ Barometric pressure 100 kPaRelative humidity  $30^{\circ}\text{R}$ Raw water temperature  $25^{\circ}\text{C} / 77^{\circ}\text{F}$ 

### Fuel oil

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 Raw water temperature

45°C / 113°F 32°C / 90°F

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