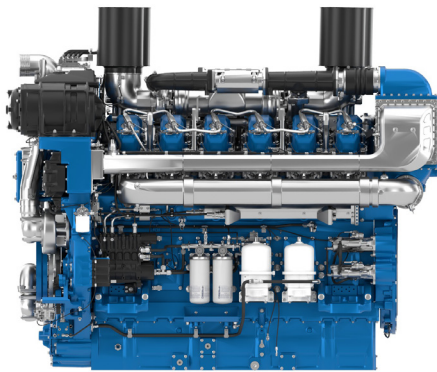




12M55

Common rail diesel engine



Number of cylinders	12
Bore and stroke (mm)	180 x 215
Total displacement (L)	65.6
Cylinders	12V
Engine rotation	counter clockwise
Idle speed	600
Flywheel	21"
Flywheel housing	SAE 00

Customer benefits

Genuine marine design, our engine is designed specifically for Marine applications with Marine components, such as individual cylinder heads and inspection doors that make maintenance easy 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

Latest safe technology including electronic injection dynamic redundancy, high efficient ball bearing turbocharger, integrated circuits with 0 flexible hoses, and more

Life cycle cost efficiency with extended MTBO, modular concept reducing number of components and interfaces

Rated power - Fuel consumption

Duty	kW	HP	RPM	Fuel consumption			IMO
				Optimum value	Rated power		
				g/kWh	g/kWh	l/h	
P1	1800	2450	1600	188	189	409	II
	1912	2600	1800	192	193	462	II
P2	1985	2700	1600	187	188	434	II
	2205	3000	1800	189	194	515	II
P3	2536	3450	1800	187	200	612	II

	P1	P2	P3
Application	Unrestricted	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 5000h	3000-5000h	1000-3000h
Time at full load	Unlimited	8h each 12h	2h 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

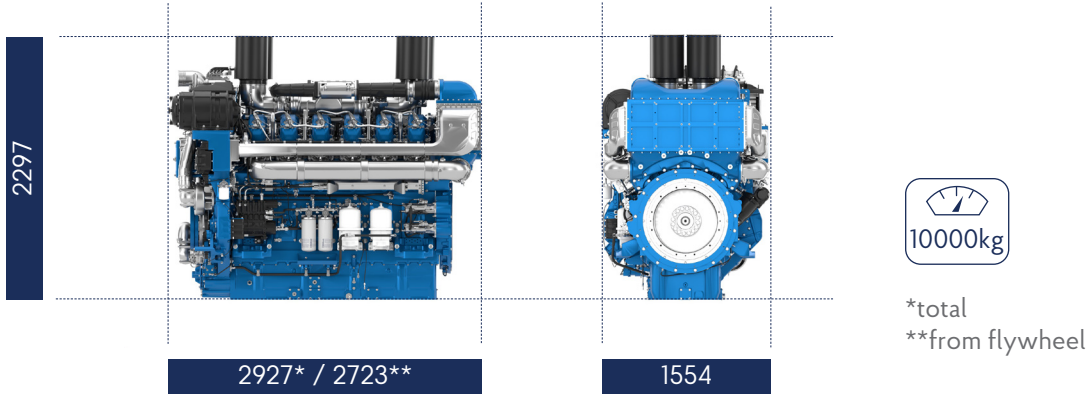
P4 Light Duty Typical applications:

- 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

Dimensions and dry weight (mm/kg)



Standard equipment

Cooling System

Three stage cooling circuit with built in HT thermostatic valve
Integrated fresh water expansion tank
High efficiency plate 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
Electrical draining and pre-lub pump

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

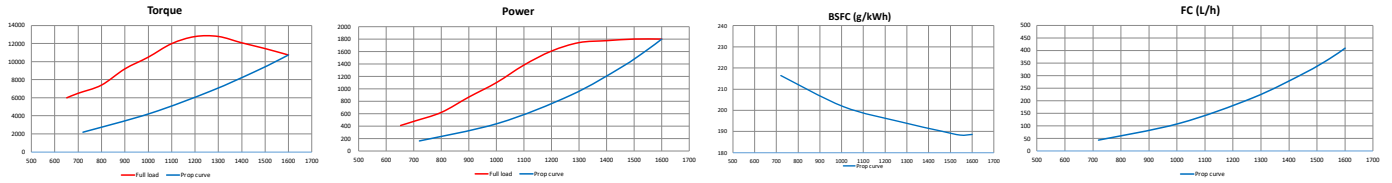
Fresh water cooled charge air cooler module
High efficiency dry turbocharger with ball bearing technology
4 TC Turbocharging system

Electrical System

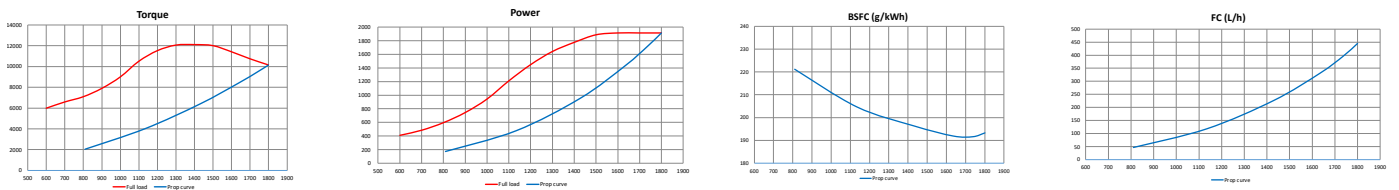
Voltage: 24V DC insulated
Electrical starter
55A battery alternator
ECO BMS with IV5 display

Performance

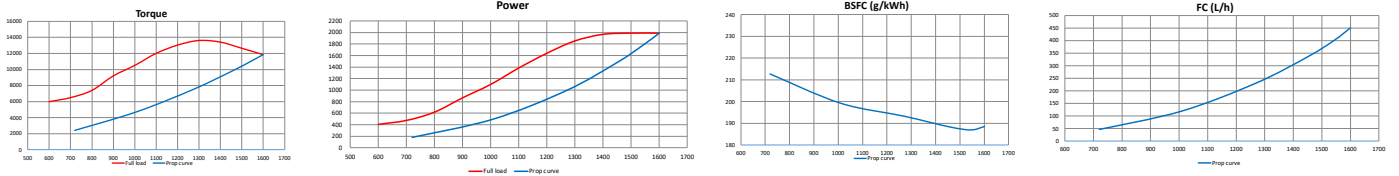
P1 - 1800 kW - 1600 rpm



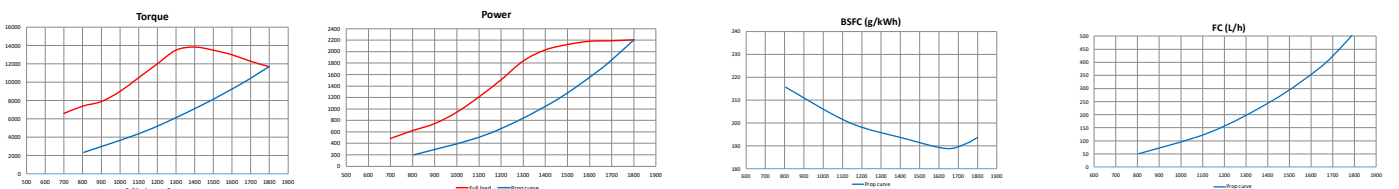
P1 - 1912 kW - 1800 rpm



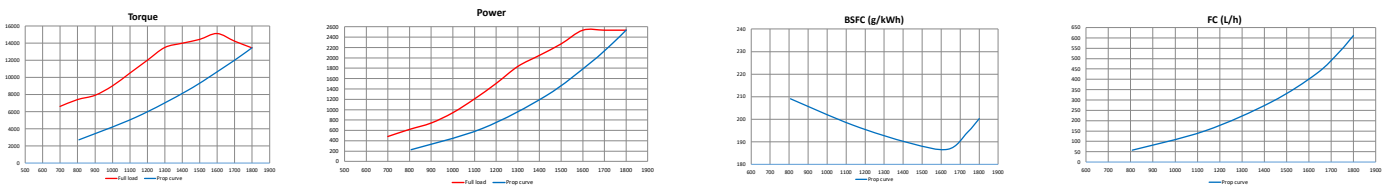
P2 - 1985 kW - 1600 rpm



P2 - 2205 kW - 1800 rpm



P3 - 2536 kW - 1800 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