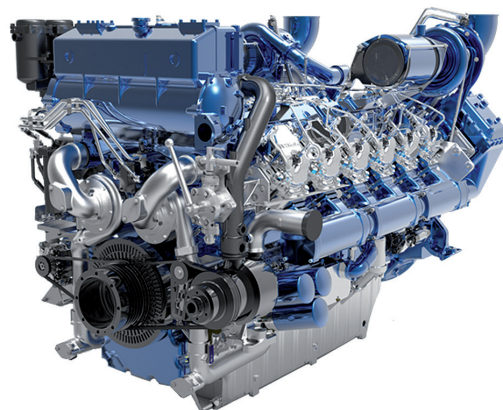


Marine Engines

I2 M33.2

4 Stroke diesel engine, direct injection

| | |
|-------------------------------------|------------------|
| Bore and stroke | 150 x 185 mm |
| Number of cylinders | 12V@ 90° |
| Total displacement | 39,2 litres |
| Compression ratio | 15/1 |
| Engine rotation (ISO 1204 standard) | counterclockwise |
| Idle speed | 650 rpm |
| Flywheel housing | SAE 0 |
| Flywheel | SAE 18" |



Customer benefits

Continuous compact power with reference torque performance in its category

Global environment care with low exhaust emissions and controlled fuel consumption at any running cycle

Simple technology with mechanical injection

Life cycle cost efficiency with extended mean time between overhauls (MBTO)

Rated power - Fuel consumption

| Duty | kW | hp | rpm | Fuel consumption g/kWh | Peak torque / speed (N.m / rpm) | I/h | IMO |
|------|------|------|------|---------------------------|------------------------------------|-----|-----|
| P1 | 956 | 1300 | 1600 | 210 | 6520 / 1100 | 245 | II |
| P1 | 956 | 1300 | 1800 | 215 | 6900 / 1100 | 245 | II |
| P1 | 1029 | 1400 | 1800 | 218 | 7360 / 1200 | 267 | II |
| P2 | 1103 | 1500 | 1800 | 219 | 8196 / 1200 | 288 | II |

| | P1 duty | P2 duty |
|----------------------------|-------------------------|----------------|
| Application | unrestricted continuous | continuous |
| Engine load variations | very little or none | Numerous |
| Average engine load factor | 80 to 100 % | 30 to 80 % |
| Annual working time | 5000 hr + | 3000 to 5000 h |
| Time at full load | unlimited | 8 h each 12 h |

Power definition

Standard ISO 3046/1

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 | 0 ± 5% |
| 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 |



Standard equipment

Cooling system

Fresh / raw water heat exchanger with integrated thermostatic valves and expansion tank
Cast iron centrifugal fresh water pump, mechanically driven
Bronze self-priming raw water pump, mechanically driven

Lubrication system

Full flow screwable oil filters
Fresh water cooled lube oil cooler
Lube oil purifier with replaceable cartridge
Manual prelubricating oil pump

Fuel system

In-line injection pump with flanged mechanical governor
Double wall injection bundle with leakage collector
Duplex fuel filters replaceable while engine running

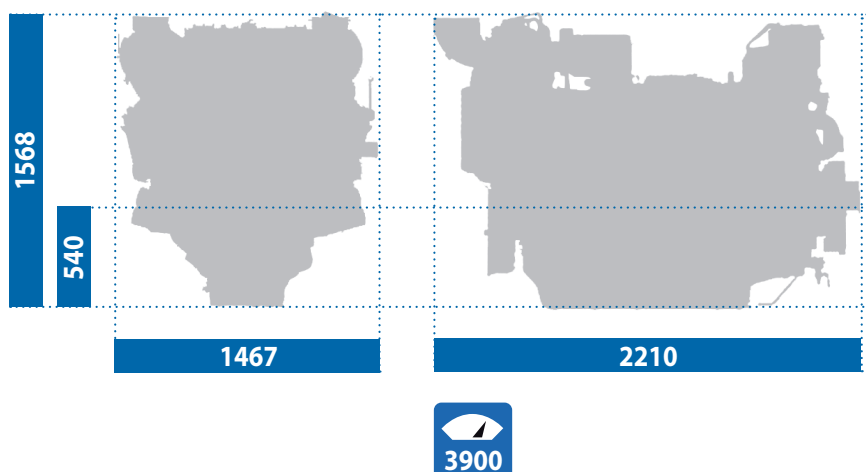
Intake air and exhaust system

Fresh water cooled turbo blower
Fresh water cooled exhaust gas manifold

Electrical system

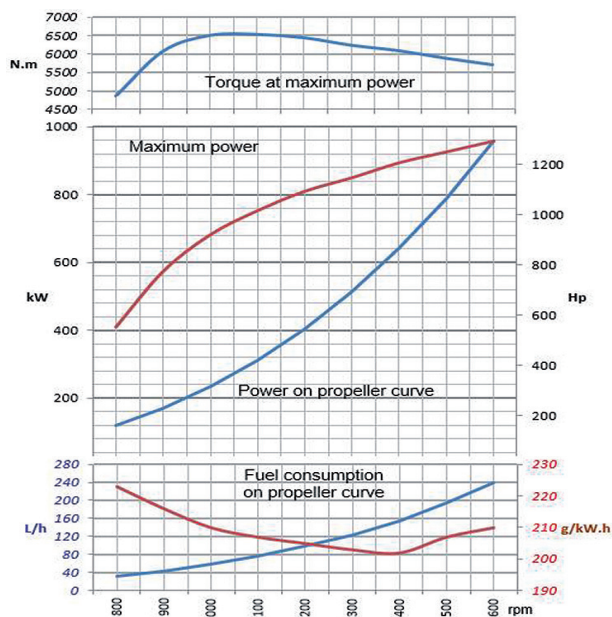
Voltage: 24V DC
Electrical starter on flywheel crown
175A battery charger
Engine room and bridge panels

Dimensions and dry weight (mm / kg)

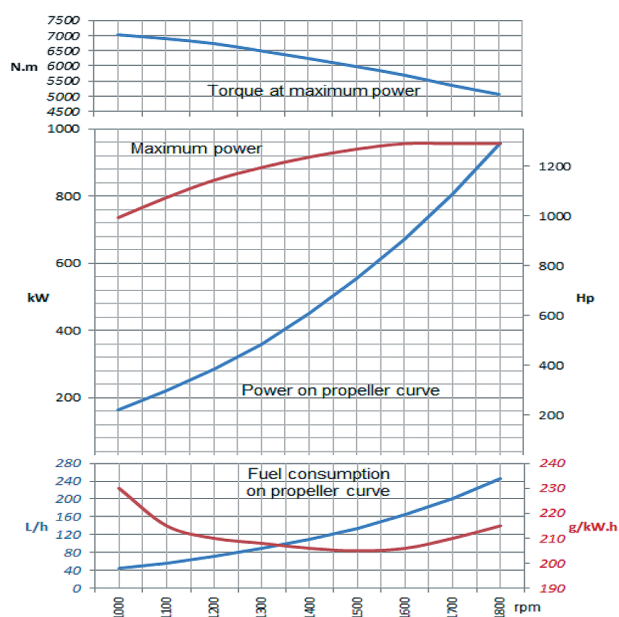


Performance

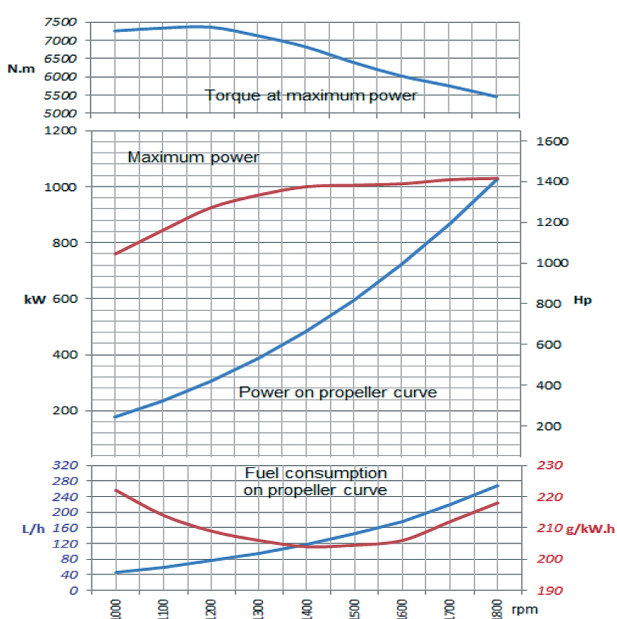
P1 - 956 kW - 1300 hp @1600 rpm



P1 - 956 kW - 1300 hp @1800 rpm



P1 - 1029 kW - 1400 hp @1800 rpm



P2 - 1103 kW - 1500 hp @1800 rpm

