# **12 M33.2**

### 4 Stroke diesel engine, direct injection

Bore and stroke150 x 185 mmNumber of cylinders12VTotal displacement39,2 litresCompression ratio15/1

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)	IMO
P1	956	1300	1800	215	6900 / 1100	II
P1	1029	1400	1800	218	7360 / 1200	II
P2	1103	1500	1800	219	8196 / 1200	II

## **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

	P1	P2	
Application	Unrestricted continuous	Continuous	
Engine load variations	Very little / none	Numerous	
Mean engine load factor	80 - 100%	30 - 80%	
Annual working time	5000 hr +	3000 - 5000 hr	
Time at full load	Unlimited	8 hr every 12 hr	

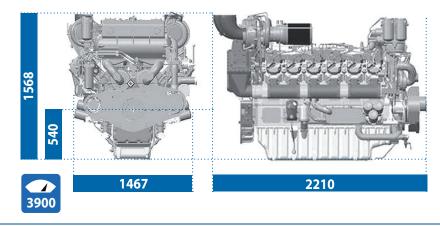
#### **Fuel oil**

Relative density  $0.840 \pm 0.005$ Lower calorifi c power 42700 kJ/kgConsumption tolerances  $0 \pm 5\%$ 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

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





# **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 replaceab

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

#### **Performance**

P1 - 956 kW - 1800 rpm

#### **Performance**

P1 - 1029 kW - 1800 rpm

#### **Performance**

P2 - 1103 kW - 1800 rpm

