

Marine Engine- WP13 Series



General Specifications

Bore & Stroke	127x165 mm
Displacement	12.5 L
Cylinder Number	6
Compression Ratio	16:1
Fuel System	Mechanical Pump
Aspiration	TA
Emission Standard	IMO Tier II

Duty	Model	HP	kW	RPM
P1	WP13C450-18	450	330	1800
P1	WP13C500-18	500	368	1800

Standard Equipments

Engine and block

- Cast iron frame style body structure
- One-piece forged Crankshaft
- Separate cast iron cylinder heads and dry liners
- Split-cap forged steel connecting rods
- Aluminium alloy pistons with gallery oil cooling

Cooling system

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

Lubrication system

- Full flow duplex type oil filters replaceable engine running
- Fresh water cooled lube oil cooler plate type

Fuel system

- P type in line injection pump
- Dual-skinned fuel pipe with alarm and leakage collector
- Duplex fuel filters replaceable engine running
- Water separator

Intake air and exhaust system

- Washable air filter & exhaust expansion joint
- Insulated dry type or water jacket exhaust manifold

Electrical system

- 24V electric starter motor and battery charging alternator
- Voyage safeguard monitor and 5m harness

Flywheel and housing

- SAE 1 flywheel housing and SAE 14 flywheel

Certification

- CCS and EIAPP

Optional Equipments

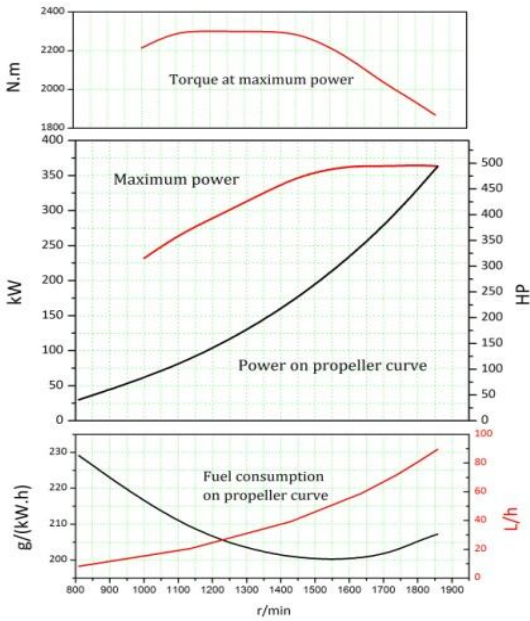
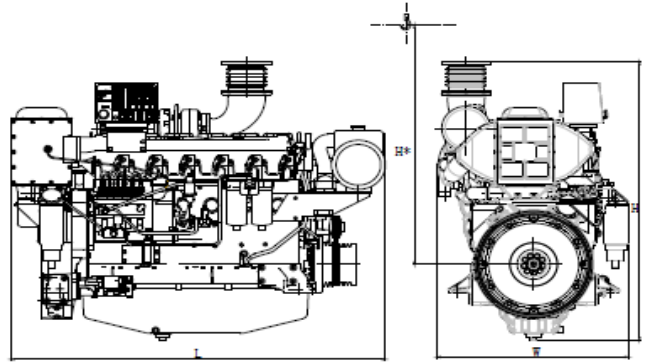
- Different harness length of remote monitor
- Free and PTO

- Equipment and factory trial according to Major Classification Societies rules

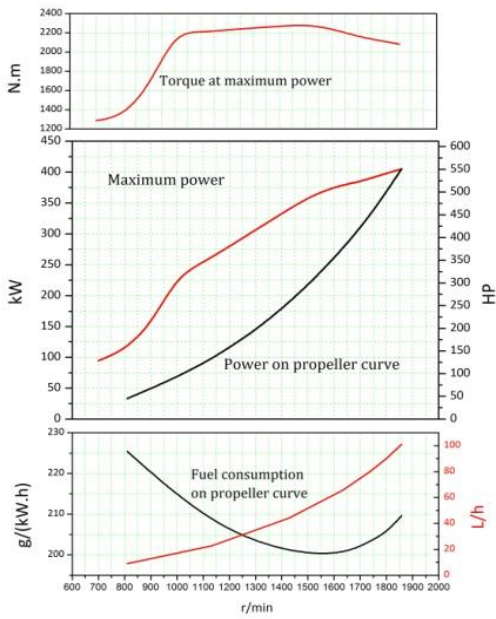
	P1 Duty	P2 Duty	P3 Duty	P4 Duty
Application	Unrestricted continuous	continuous	intermittent	high performance
Engine load variations	Very little or none	continuous	important	very important
Mean engine load factor	80 to 100%	30 to 80%	50%	30%
Annual working time	More than 5000 h	3000 to 5000 h	1000 to 3000 h	less than 1000 h
Time at full load	unlimited	8 h each 12 h	2 h each 12 h	1 h each 12 h

Dimensions and Weight

Length	1583 mm
Width	841 mm
Height	1388 mm
Dry Weight	1200 kg



WP13C450-18



WP13C500-18

Power definition

Standard ISO 3046/1-1995(F)

Reference conditions

Ambiant temperature	25 °C
Barometric pressure	100 kPa
Relative humidity	30%
Raw water temperature	25 °C

Fuel Oil

Relative density	0,840 ± 0.005
Lower calorific power	42 700 kJ/kg
consumption tolerances	0 ± 5 %

Lub oil

Recommend grade	CF-4 15W/40
-----------------	-------------



PT. JARUM MAS INDONESIA

Jl. Pantai Indah Selatan
 Komplek Sentra Industri Terpadu Tahap III Blok F20-21
 Pantai Indah Kapuk, Jakarta Utara 14470
 Telp. (021) 5698 2888 Fax. (021) 5698 3188
www.jarummas.com