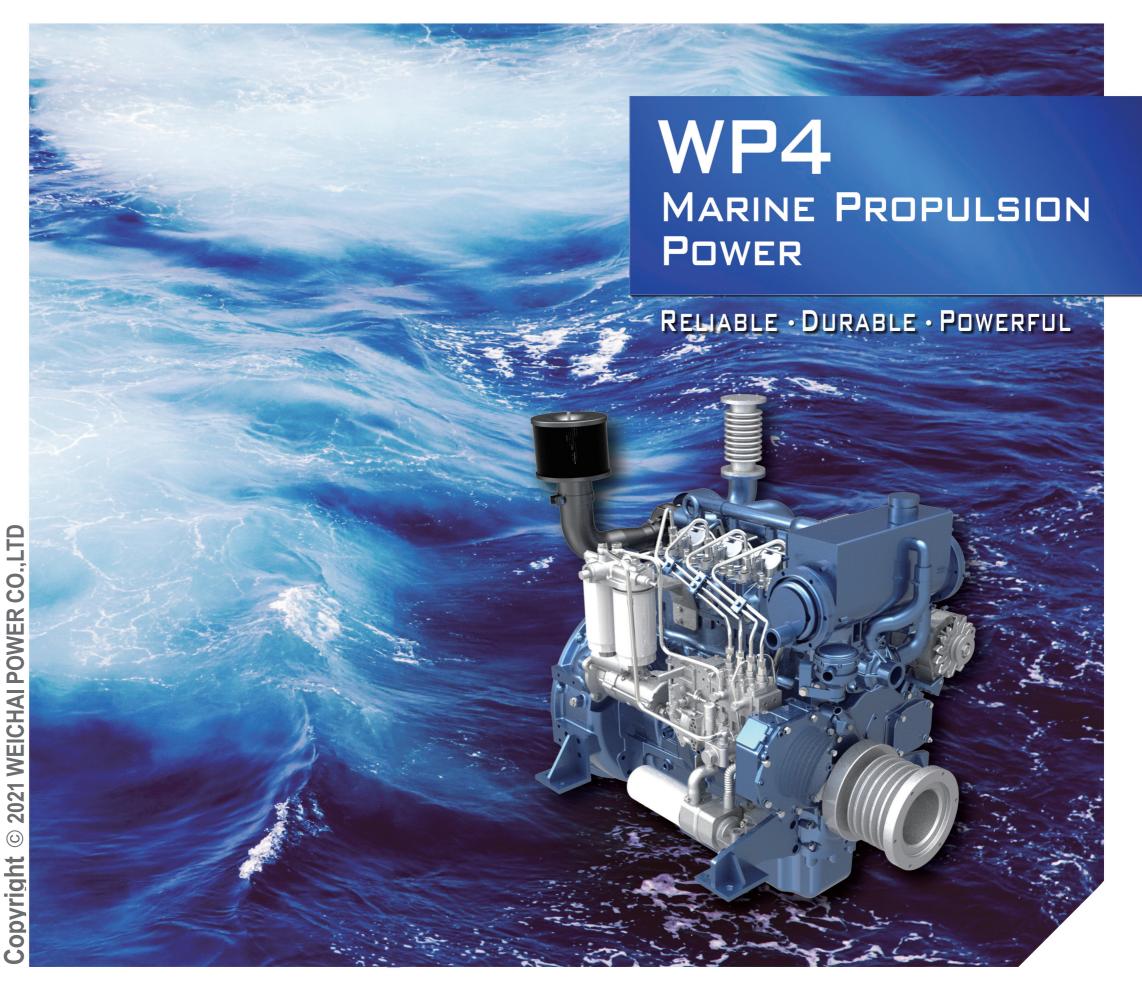
WEICHAI pursues an active policy of product development and improvement. For this reason the company reserves the right to change specifications without prior notice.

Contact your local dealer for more information regarding WEICHAI engine and optional equipment/accessories



Scan QR Code for Brochure





# **Technical Data**

Engine model	WP4C85-15	WP4C95-18	WP4C102-21	WP4C120-18	WP4C130-21
Rated power, Ps(kW)	82(60)	95(70)	102(75)	120(88)	130(95)
Rated speed, r/min	1500	1800	2100	1800	2100
Power rating			P1		
Min. fuel consumption, g/(kW·h)			205		
No. of cylinders			In-line 4		
Description		4-stroke,direct-	injected,turbocharged	diesel engine	
Bore x Stroke, mm (in)		1	05 x 130(4.17 x 5.12)		
Displacement, L (in <sup>3</sup> )			4.5(274.6)		
Compression ratio			18:1		
Dry weight, kg (lb)			600(1323)		
Emission			IMO Tier II		
Firing order			1-3-4-2		
Idle speed, r/min			$650\pm30$		
Flywheel housing/Flywheel			SAE 1/14"or 3/11.5"		

# **Class Definition**

Р	ower Classification	Time at full load	Mean engine load factor	Annual working time	Typical applications
P1	Continuous Duty	Unlimited	70% ~ 100%	recommended but not limited to 5000h-8000h	Ocean vessel Engineering vessel
P2	Heavy Duty	8h per 12h	40% ~ 80%	recommended but not limited to 5000h	Ferries, High speed passengers boats, Trawlers, Inland waterway transport boats, Tugboat, offshore trade vessel, Purse seine vessel
P3	Intermittent Duty	4h per 12h	40% ~ 80%	recommended but not limited to 3000h	Offshore service boats, Seasonal cruise ship, Official vessels with high utilization rate
P4	Light Duty	2h per 8h	60%	recommended but not limited to 1000h	Fishery patrol ship,Maritime surveillance ship,Patrol boat,Life boat,Stormships used by local governments
P5	High Performance Duty	0.5h per 5h	60%	recommended but not limited to 500h	Leisure yachts

#### **Power Definition**

Standard ISO 3046-1

Reference conditions

Ambient temperature 25 °C / 77 °F

Barometric pressure 100 kPa

Relative humidity 30%

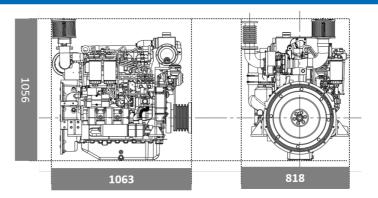
Raw water temperature 25 °C / 77 °F

Fuel oil

Relative density 0,840 ± 0,005g/ml Lower calorific power 42,700 kJ/kg Consumption tolerance 0 ± 5% Inlet limit temperature 35 °C / 95 °F Our ratings also comply with classification societies maximum temperature definition without power derating.

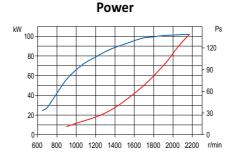
Ambient temperature 45 °C / 113 °F Raw water temperature 32 °C / 90 °F

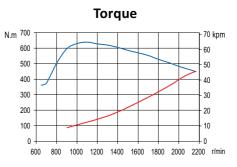
# **Engine Dimensions**

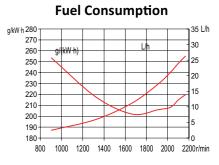


Dimensions may vary based on selected engine configuration

# Performance Curves(WP4C130-21)







Full load speed characteristics ————

Propeller characteristics

# Technical Description

# Engine and block

- Cylinder block made of cast ironIndividual cast-iron cylinder head
- Replaceable wet cylinder liners and valve seats/guides
- Drop forged crankshaft with induction hardened bearing surfaces and fillets with five main bearings
- Two-valve-per-cylinder layout with middle positioned camshaft and center position of fuel injectors
- Gallery oil-cooled cast aluminum alloy pistons with three piston rings

#### Engine mounting

· Flexible engine mounting

#### Lubrication system

 Middle positioned single full flow oil filter of spin-on type filter Fuel system

- Mechanical high pressure fuel injection pump
- · Gear-driven fuel pump and injection timing
- Twin full flow fuel filter of spin-on type and by-pass filter

#### Air inlet and exhaust system

- · Turbo technology with air cooler
- · Air filter with replaceable inserts
- · Dry exhaust pipe

#### Cooling system

- · Seawater-cooled tube heat exchanger
- · Coolant system prepared for hot water outlet
- Easily accessible seawater pump in front end of engine

#### Electrical system

- · 28V/35A double-wire system alternator
- 24V/6kW double-wire system starter

#### Instruments/controls (option)

 Complete instrumentation including water temperature, oil temperature, oil pressure and speed alarm

