

P126TI G-DRIVE

© POWER RATING

Engine	Type of	Engine	Power
Speed	Operation	Engine Power	
rev/min	Operation	kWm	Ps
1800	Prime Power	278	378
1800	Standby Power	298	405
1500	Prime Power	241	328
1300	Standby Power	272	370



- -. The engine performance corresponds to ISO 3046, BS 5514 and DIN 6271.
- -. Ratings are based on ISO 8528. (If you need more information, contact the sales organization.)
 - → **Prime power** is available for an unlimited number of hours per year in a variable load application.

 The permissible average power output over 24 hours of operation shall not exceed 70% of the prime power rating.
 - → **Standby power** is available in the event of a utility power outage or under test conditions for up to 200h of operation per year. The permissible average power output over 24 hours of operation shall not exceed 70% of the standby power rating. No overload is permitted.

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© FUEL CONSUMPTION

 Engine Model 	P126TI	• Prime Power (lit/hr)	1,500 rpm	1,800 rpm
○ Engine Type	In-line 4cycle, water cooled	25%	16.4	20.3
	Turbo charged & intercooled (air to air)	50%	30.0	36.2
○ Combustion type	Direct injection	75%	43.6	52.3
○ Cylinder Type	Replaceable dry liner	100%	58.1	70.3
 Number of cylinders 	6	Standby Power (lit/hi	1,500 rpm	1,800 rpm
○ Bore x stroke	123(4.84) x 155(6.1) mm(in.)	25%	18.3	21.5
○ Displacement	11.051(674.5) lit.(in3)	50%	33.4	38.7
○ Compression ratio	17:1	75%	49.1	56.3
○ Firing order	1-5-3-6-2-4	100%	66.2	76.5
○ Injection timing	16° BTDC			
 Compression pressure 	Above 28 kg/cm2(398 psi) at 200rpm	◎ FUEL SYSTEM		
O Dry weight	Approx. 910 kg (2,006 lb)	○ Injection pump	Zexel in-line "P	" type
O Dimension	1,383 x 870 x 1,207 mm	○ Governor	Electric type	
(LxWxH)	(54.4 x 34.3 x 47.5 in.)	○ Feed pump	Mechanical type)
○ Rotation	Counter clockwise viewed from Flywheel	○ Injection nozzle	Multi hole type	
○ Fly wheel housing	SAE NO.1	Opening pressure	220 kg/cm2 (3,1	29 psi)
○ Fly wheel	Clutch NO.14	○ Fuel filter	Full flow, cartrid	dge type
		○ Used fuel	Diesel fuel oil	

◎ MECHANISM

© LUBRICATION SYSTEM

○ Type	Over head valve		○ Lub. Method	Fully forced pressure feed type
O Number of valve	Intake 1, exhaust 1 p	per cylinder	○ Oil pump	Gear type driven by crankshaft
O Valve lashes at cold	Intake 0.30 mm (0	0.0118 in.)	○ Oil filter	Full flow, cartridge type
	Exhaust 0.30 mm (0	0.0118 in.)	Oil pan capacity	High level 23 liters (6.1 gal.)
				Low level 20 liters (5.3 gal.)
© VALVE TIMING			 Angularity limit 	Front down 25 deg.
	Opening	Close		Front up 25 deg.
○ Intake valve	18 deg. BTDC	34 deg. ABDC		Side to side 15 deg.
○ Exhaust valve	46 deg. BBDC	14 deg. ATDC	○ Lub. Oil	Refer to Operation Manual



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© COOLING SYSTEM

• Cooling method Fresh water forced circulation

○ Water capacity 19 liters (5.02 gal.)

(engine only)

Pressure system Max. 0.5 kg/cm2 (7.11 psi) Water pump Centrifugal type driven by gear

○ Water pump Capacity 320 liters (84.5 gal.)/min

at 1,800 rpm (engine)

○ Thermostat Wax – pellet type

Opening temp. 71°C Full open temp. 85°C

○ Cooling fan Blower type, plastic

755 mm diameter, 7 blade

© ELECTRICAL SYSTEM

○ Charging generator○ Voltage regulator24V x 45A alternatorBuilt-in type IC regulator

○ Starting motor 24V x 6.0kW

○ Battery Voltage 24V

○ Battery Capacity 150 AH (recommended)

○ Starting aid (Option) Block heater

© ENGINEERING DATA

○ Water flow	265 liters/min @1,500 rpm
• Heat rejection to coolant	25.5 kcal/sec @1,500 rpm
 Heat rejection to CAC 	7.2 kcal/sec @1,500 rpm
○ Air flow	16.4 m3/min @1,500 rpm
 Exhaust gas flow 	42.9 m3/min @1,500 rpm
○ Exhaust gas temp.	560 °C @1,500 rpm
○ Water flow	320 liters/min @1,800 rpm
 Water flow Heat rejection to coolant	320 liters/min @1,800 rpm 29.0 kcal/sec @1,800 rpm
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○ Heat rejection to coolant	29.0 kcal/sec @1,800 rpm
Heat rejection to coolantHeat rejection to CAC	29.0 kcal/sec @1,800 rpm 12.0 kcal/sec @1,800 rpm

• Max. permissible restrictions

-.Intake system 220 mmH2O initial

635 mmH2O final

-.Exhaust system 600 mmH2O max.

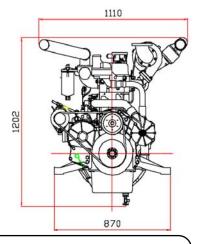
○ Max. permissible altitude 1500 m

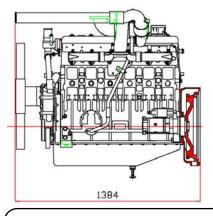
♦ CONVERSION TABLE

 $\begin{aligned} &\text{in.} = \text{mm x } 0.0394 & \text{lb/ft} = \text{N.m x } 0.737 \\ &\text{PS} = \text{kW x } 1.3596 & \text{U.S. gal} = \text{lit. x } 0.264 \\ &\text{psi} = \text{kg/cm2 x } 14.2233 & \text{kW} = 0.2388 \text{ kcal/s} \end{aligned}$

in3 = lit. x 61.02 lb/PS.h = g/kW.h x 0.00162 hp = PS x 0.98635 cfm = m^3 /min x 35.336

 $1b = kg \times 2.20462$





Head office

7-11, Hwasu-Dong, Dong-Gu, Incheon, Korea

TEL: 82-32-211-2246, 2222 FAX: 82-32-761-2759

Seoul Office

Doosan Infracore Co. Ltd.,

22nd Floor, Doosan Tower, 18-12, Euljiro 6-ga, Jung-gu,

Seoul, Korea.

TEL: 82-2-3398-8521~8535 FAX: 82-2-3398-8509

Web site: www.doosaninfracore.com

※ Speccifications are subject to change without prior notice