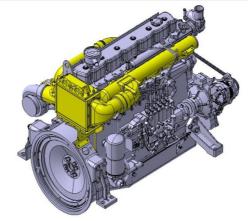


# **PU126TI FIRE PUMP ENGINE**

#### © POWER RATING

Intermittent rating kW(PS) / rpm	Max. torque N.m(kg.m) / rpm	Fuel consumption g/kW.h(g/PS.h) / rpm
294 (400) / 2,100	1588 (162) / 1,400	217 (160) / 2,100

- 1. The engine performance corresponds to ISO 3046.
- 2. Continuous power rating is to 250kW(340ps) @2100rpm.



# **© MECHANICAL SYSTEM**

○ Engine Model

○ Engine Type In-line 4 cycle, water cooled

Turbo charged & intercooled

 $\circ \, Combustion \, \, type \,$ Direct injection

O Cylinder Type Replaceable dry liner

• Number of cylinders

O Bore x stroke 123(4.84) x 155(6.1) mm(in.)

O Displacement 11.051(674.5) lit.(in3)

O Compression ratio 17:1 ○ Firing order 1-5-3-6-2-4 • Injection timing 14° BTDC

○ Compression pressure Above 28 kg/cm<sup>2</sup>(398 psi) at 200rpm

Approx. 925 kg (2039 lb) O Dry weight O Dimension 1,223 x 890 x 1,095 mm (LxWxH) (48.1 x 35.0 x 43.1 in.)

○ Rotation Counter clockwise viewed from flywheel

OFly wheel housing SAE NO.1M Clutch NO.14M ○ Fly wheel

#### **◎ MECHANISM**

○ Type Over head valve

Intake 1, exhaust 1 per cylinder O Number of valve O Valve lashes at cold Intake 0.30 mm(0.0118 in) Exhaust 0.30 mm(0.0118 in.)

#### **© VALVE TIMING**

	Opening	Close
○ Intake valve	18 deg. BTDC	34 deg. ABDC
○ Exhaust valve	46 deg. BBDC	14 deg. ATDC

### **© OPTION & ACCESSORY PARTS**

O Engine parts Fly wheel & housing

Intake & exhaust manifold

 Accessory parts Raditor, silencer & air cleaner O Electrical parts Gauge panel & stop solenoid

#### © FUEL SYSTEM

○ Injection pump Zexel in-line "P" type ○ Governor RSV type(all speed control)

○ Feed pump Mechanical type ○ Injection nozzle Multi hole type

 Opening pressure 220 kg/cm2 (3,129 psi) ○ Fuel filter Full flow, cartridge type

O Used fuel Diesel fuel oil

#### © LUBRICATION SYSTEM

○ Lub. Method Fully forced pressure feed type Oil pump Gear type driven by crankshaft Oil filter Full flow, cartridge type

Oil pan capacity High level 23 liters (6.1 gal.)

Low level 20 liters (5.3 gal.)

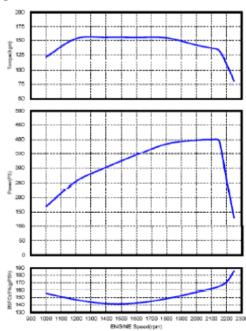
○ Angularity limit Front down 25 deg.

Front up 25 deg.

Side to side 15 deg.

○ Lub. Oil Refer to Operation Manual

#### © PERFORMANCE CURVE





# **PU126TI FIRE PUMP ENGINE**

#### © COOLING SYSTEM

○ Cooling method Fresh water forced circulation

• Water capacity 19 liters (5.02 gal.)

(engine only)

Pressure system Max. 0.5 kg/cm<sup>2</sup> (7.1 psi)
 Water pump Centrifugal type driven by gear

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

at 2,100 rpm (engine)

○ Thermostat Wax – pellet type

Opening temp. 83°C Full open temp. 95°C

○ Intercooler Water Cooled

### © ELECTRICAL SYSTEM

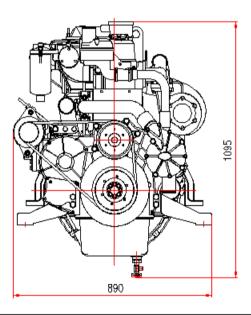
○ Charging generator
 ○ Voltage regulator
 24V x 45A alternator
 ○ Built-in type IC regulator

○ Starting motor 24V x 6.0kW

○ Battery Voltage 24V

○ Battery Capacity 150 AH (recommended)

○ Starting aid (Option) Block heater





#### © ENGINEERING DATA

○ Water flow

○ Heat rejection to coolant

○ Air flow

○ Exhaust gas flow

○ Exhaust gas temp.

310 liters/min @2,100 rpm

27 kcal/sec @2,100 rpm

27 m³/min @2,100 rpm

57 m³/min @2,100 rpm

460°C @2,100 rpm

○ Max. permissible restrictions

-.Intake system 220 mmH<sub>2</sub>O initial

635 mmH<sub>2</sub>O final

-.Exhaust system 1,000 mmH<sub>2</sub>O max.

# **© INTERCOOLER DATA**

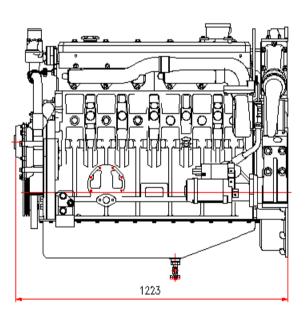
○ Heat rejection to coolant 16 kcal/sec @2,100 rpm

# **♦ CONVERSION TABLE**

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

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

 $1b = kg \times 2.20462$ 



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