

## Specifications

Thermodynamic cycle		Diesel 4 stroke
Air handling		TAA
Arrangement		6L
Bore x Stroke	mm	135 x 150
Total displacement	l	12.9
Valves per cylinder	n°	4
Cooling		liquid
Direction of rotation (viewed facing flywheel)		CCW
Compression ratio		16.5 : 1
Injection system		Electronic Common Rail

## Performance

Peak power [*]	kW(HP)	412 (560)
At speed	rpm	1900
Peak torque	Nm(kgm)	2500 (255)
At speed	rpm	1000 - 1575
Maximum no load governed speed at max rating	rpm	2320 ± 50
Minimum idling speed	rpm	550 ± 50
Minimum starting temperature without auxiliaries	°C	-15
Oil and oil filter maintenance interval for replacement [**]	km	150000
Dry weight (standard configuration without: oil, cooling, starter, clutch, A/C Compressor, alternator)	kg	1230

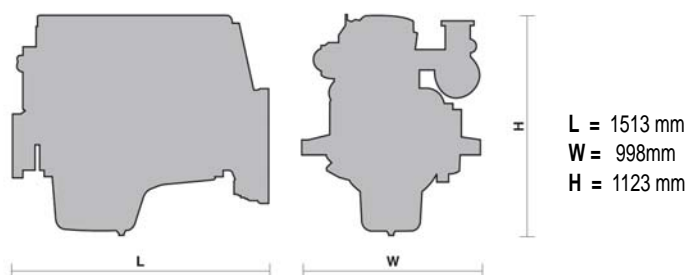
FOR INFORMATION ON THE AVAILABLE RATINGS NOT LISTED IN THIS DOCUMENT PLEASE CONTACT THE FPT SALES NETWORK.

[\*] Power at: flywheel according to 97/68 EC (without fan), after 50 hours running, 3% tolerance, fuel Diesel EN 590.

[\*\*] Oil type: ACEA E9, SAE 10W40 low SAPS - ACEA E6, SAE 5W30 low SAPS

Test conditions: ISO 3046/1, 25 °C air temperature, 100 kPa atmospheric pressure, 30 % relative humidity - Applicable also to DIN 6271, BS 5514, SAE J1349 Standards.

## Dimensions:



Std. application used as a reference

# Preliminary

## Standard configuration

Flywheel housing	type	SAE 1 - aluminium
Flywheel size	inch	17"
Intake manifold location		middle high / right side
Exhaust manifold location		middle high / left side / back
Turbocharger		Electronic Variable Geometry Turbocharger with exhaust flap
Turbocharger location		centre / left side
Fan transmission ratio		1.3 : 1
Distance between fan - crankshaft centers	mm	x = -20 ; y = 225
Fuel filter		single cartridge - left side
Oil filter		single cartridge - right side
Oil sump		suspended sheet steel /front sump
Oil vapours blow-by circuit		close case ventilation
Oil heat exchanger		integrated into the block
Oil filler		on valve cover
Starter		24V - 5.5kW
Alternator		24V - 90A
Air Compressor	cm <sup>3</sup>	352
Hydraulic steering pump - available versions	liters/min	16 - 20 - 25
Maximum torque available from crankshaft pulley		800 Nm
Engine stop device		by electronic control unit
Wiring harness		interface wiring loom with accessories
Painting	colour	grey

## Not included in the standard configuration

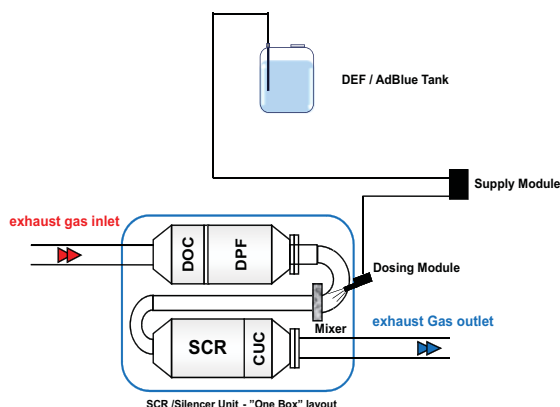
Battery - minimum capacity recommended [*]	24 V - 473 Ah
Battery - minimum cold cranking capacity recommended [*]	24 V - 662 Ah
PTO - transmission ratio	1 : 1.14
PTO - maximum available torque from rear gear	800 Nm

[\*] at -25°C with SAE 5W30 oil

### LEGEND:

n.a. = not applicable  
n.av. = not available

## Aftertreatment System



### SCR (Selective Catalytic Reduction) system Main components - Functional Scheme

- Supply Module
- Dosing Module
- SCR Catalyst with integrated CUC\*
- DOC\*\*
- DEF\*\*\* /AdBlue Tank
- DPF\*\*\*\*

\*CUC: Clean Up Catalyst  
\*\*DOC: Diesel Oxidation Catalyst  
\*\*\*DEF: Diesel Exhaust Fluid  
\*\*\*\*DPF: Diesel Particulate Filter

FPT OFFERS THE WIDEST AVAILABILITY OF ENGINE BUILD OPTIONS TO CUSTOMER SPECIFIC REQUIREMENTS WITHIN THE ENGINE SUPPLY.  
TO FIND OUT MORE ABOUT THE CONFIGURATIONS AND ACCESSORIES WHICH ARE AVAILABLE, CONTACT THE FPT SALES NETWORK