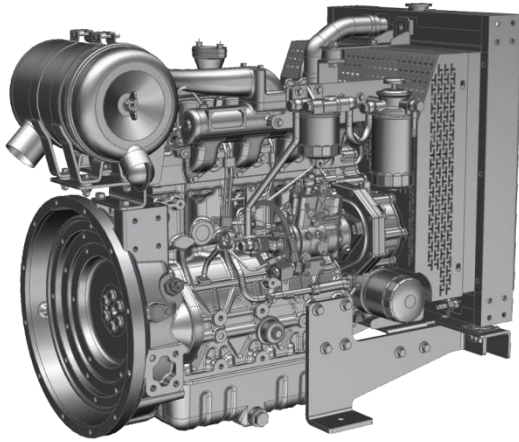


# Water Pump Application



## General Engine Data

Family name	4D24T
Type	Vertical In-line, Water Cooled, diesel Four Stroke
Combustion System	Direct Injection
Cylinder NO.	4
Bore x Stroke	87 mm x 103 mm
Displacement	2.45 litres
Compression Ratio	17.8:1
Induction System	Turbocharged
Firing Order	1 - 3 - 4 - 2
Flywheel (inch)	7.5"
Flywheel Housing	SAE #4
Emission Level	Stage IIIA

## Water Pump Performance

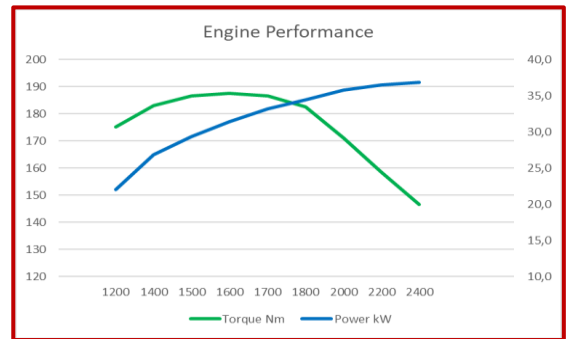
### Raywin Engine Power

Model	Max Power (*) @ engine speed (kW / rpm)
4D24T00/A	37 @ 2400

**Note:** Oil consumption (% fuel):  $\leq 0.1$

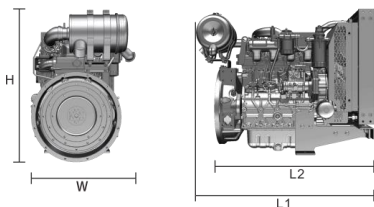
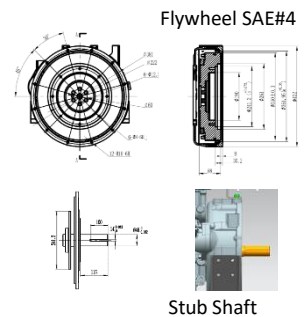
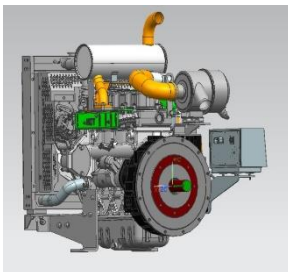
(\*): Net power at flywheel according to 97/68 EC (including fan), after 50 hours running, 3% tolerance Fuel Diesel EN590

**Test conditions:** 25°C air temperature, 100kPA atmospheric pressure, 30% relative humidity



### Characteristic

1. Turbocharged engine, compact in structure, small in size and light in weight;
2. The tunnel type with no cylinder liner block body, good rigidity and low oil consumption (the fuel oil ratio is less than 0.1%);
3. Original Stanadyne fuel pump, low swirl rate air flue, porous small aperture injector, strong power and excellent performance.
4. With NVH optimization, low noise, low vibration, small heat load, to achieve the international advanced level of similar models.
5. Equipped with muffler (loose), air filter and radiator configuration.
6. 12V electrical system, equipped with rotational speed, water temperature and oil gauge sensor.
7. Available with SAE #4 (standard) or #3 flywheel Housing or with stub shaft.



## Installation Information: Engine Dimension & Weight

Model	Weight (kg)	Dimensions (mm)			
		L1	L2	W	H
4D24T00/A	265	999	852	515	804

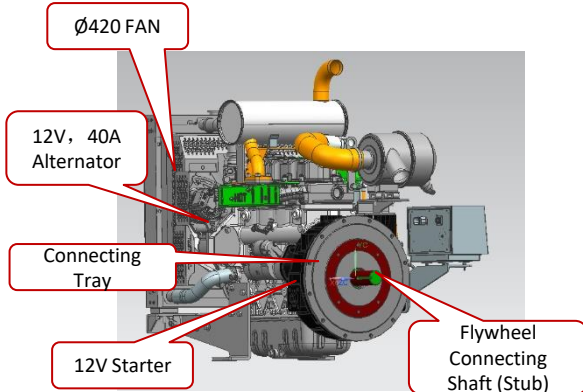
# Water Pump Application

## Raywin Engine Scope of Supply

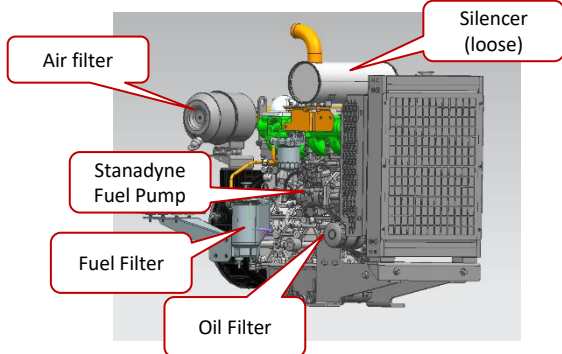
### Standard & Options Scope of delivery

**Standard:** Rigid Supports, Air/Water radiator mounted, double V-belts, moving guards, air filter, oil filter, fuel filter, fuel pre-filter, SAE#4/7,5 inch, HWT alarm & sensor, LOP alarm & sensor, 12V electric system, electrical feed pump;

**Options:** Silencer (*given loose*), SAE#3/11,5 inch, Stub shaft, control panel, 24V electric system



Raywin Engine Features	
Startability & Operating Temperatures	
Unaided Starting	-10°C
Aided Starting	-30°C
Ambient operating temperatures	-30°-45°C
Options: Solutions for more than 45°C and below -30°C	



Raywin Engine Features	
Easy Service Features	
Same side maintenance: Oil, Fuel and Air filter are on the same side	
Fuel filter change interval (hr)	250 or each 12 months
Oil filter change interval (hr)	250 or each 12 months
Alternator belt replacement (hr)	800 or each 24 months
Coolant change (months)	24



**Note:** As per technology improvements, the above parameters will continue to evolve in accordance with new legislations. The information in this brochure may be changed or upgraded without prior notice