

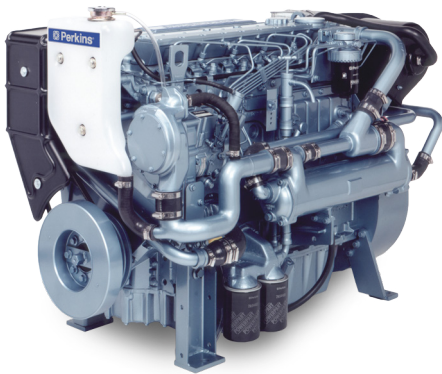
# Marine Auxiliary Engine

---

## 6TWGM

---

1006 Series



Based on Perkins universally acclaimed 1000 Series and renowned throughout the power generation industry for its superior performance and reliability. The Perkins 6TWGM is a turbocharged, charge air-cooled, six cylinder, six litre engine, one of a family of engines ranging from 39.5 to 161 kWm.

Operator and environmentally friendly with low noise, rapid startability and low emissions. This is achieved with the 'FASTRAM' combustion system and fully closed breather system

Competitive engine and parts pricing, extended service intervals and exceptionally low fuel consumption make the 6TWGM a cost effective choice with significant owner savings over alternative engines

You can expect unbeatable expertise and friendly service from Perkins

### Powered By Your Needs

Perkins engines can be tailored specifically for you. These engines offer a choice of standard build configurations to match the needs of customers for a diverse range of applications.

### World Class Product Support

With 80 years experience, we are experts in the engines industry. At Perkins we are constantly researching, developing and investing in our products and services. Strong global support is provided through a network of over 130 distributors and service outlets in 184 countries, providing access to over 50,000 parts and exchange units 24 hours a day, 365 days a year.

### Lower Operating Costs

Service intervals 250 hours as standard and Perkins provides comprehensive warranty cover for 2 years, with 3 years on major engine components.

### Economic Power

One side servicing for reduced service time and cost. Unique Fastram combustion system enables high output with lower fuel consumption and noise. Extended service intervals, including 250 hour (or 12months) oil change period, and competitively priced parts provide low cost of ownership. Electronic governor gives close control and means that the rated speed can be set at site to either 1500 rpm or 1800 rpm allowing standard builds to operate at either 50 Hz or 60 Hz

### Durable Power

Maximum cooling efficiency is provided by a gear driven water pump. Leak free operation is ensured by Viton crankshaft seals and sophisticated controlled swell joints, giving protection in the toughest conditions. Inserted valve seats, oil spraycooled pistons and compact plate cooler give enhanced engine life

### Reliable Power

Suitable for operation in ambient temperatures up to 50°C and sea waters up to 38°C. Fuelled starting aid for temperatures down to -20°C. Approved by classification societies and marine authorities

Engine speed rev/min	Type of operation	Typical output (net)		Power (gross)		Typical fuel consumption		
		kWe	kVa	kW	bhp	UK gals/hr	Litres/hr	US gals/hr
1500	Prime power 110%	116.7	145.9	125.5	168.2	6.9	31.5	8.3
		128.3	160.4	138.0	184.9	7.8	35.3	9.3
1800	Prime power 110%	135.8	169.8	146.0	195.7	7.9	36.1	9.5
		149.7	187.1	161.0	218.8	8.6	39.0	10.3

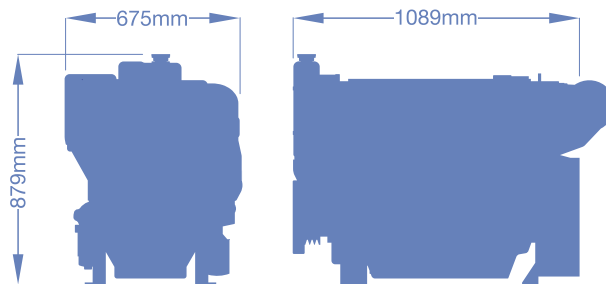
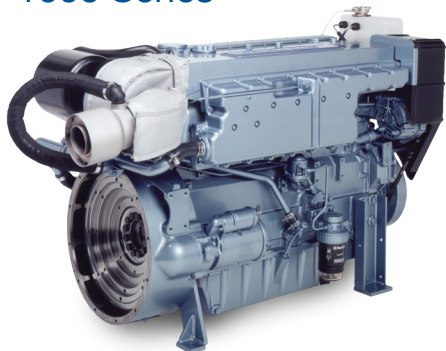
These ratings represent the performance capabilities to conditions specified in ISO 3046/1:1995. Test Conditions Air temperature 25°C (80°F) barometric pressure 100 kPa (29.5 in Hg), relative humidity 30%, maximum exhaust back pressure 6 kPa, maximum inlet restriction 3 kPa. For operation outside of these conditions please consult your Perkins contact. Performance tolerance quoted by Perkins is ± 5%. Electrical ratings assume a power factor of 0.8 and a generator efficiency of 93%.

 **Perkins**<sup>®</sup>

THE HEART OF EVERY GREAT MACHINE

# 6TWGM

## 1006 Series



### Benefits:

- Excellent power to weight
- Ease of Installation
- Clean, quiet, smooth operation
- Excellent fuel economy
- Easy to maintain with 500hr Service interval
- Reliability

### Standard Features

- Cooling system Thermostat controlled fresh water heat exchanger cooling system with gear driven raw and fresh water pumps, deaeration header tank and high quality silicone hoses or engine with gear driven fresh water pump adapted for keel cooling.
- Air intake filter with removable element.
- SAE 3 Backend with SAE 10/11 1/2 in flywheel.
- Fresh water cooled exhaust manifold and rear mounted turbocharger with insulation cover.
- Raw water cooled charge air cooler.
- Rotary type fuel injection pump with electronic governor. Speed control to BS5514 Class AO. Integral energise-to-run stop control.
- High inclination engine sump, short starboard side dipstick and engine mounted sump drain pump.
- Integral plate-type engine lube oil cooler and twin element spin-on oil filters.
- Closed engine breather system.
- High mounted, single element fuel pre-filter and sedimenter.
- Cold start aid.
- Alarm switches

### Optional Equipment

- 12 or 24 volt insulated electrics or 12 volt earth return electrics.
- Heat exchanger or adapted for keel cooling.
- Exhaust outlets-either dry with bellows and silencer or variable position water injected outlet.
- Fuel filters with change over facility.
- Double skinned high pressure fuel pipes with alarmed collector.
- Engine mounting brackets.
- PTO facility.
- 5000 hrs parts kit.
- Toolkit.
- Controller kit (12 or 24volt) providing generator paralleling option

General Data	
Number of cylinders	Vertical in-line 6 cylinder
Bore and stroke	100 mm x 127 mm
Displacement	5.99 litres
Aspiration	Turbocharged, air to water cooled
Cycle	4 stroke
Combustion system	Direct injection
Compression ratio	17:1
Rotation	Anti-clockwise viewed on flywheel
Cooling system	24 litres
Operational angle	25° from horizontal in any direction
Dimensions	Length 1089 mm, Width 675 mm, Height 879 mm
Dry weight	620 kg
Wet weight	659 kg
Final weight and dimensions will depend on completed specification	

### Rating Definitions

#### Prime power

Power for continuous service. Overload of 10% is permitted for 1 hour in very 12 hours' operation.

For further details on definitions please contact your local Perkins distributor.

Distributed by