



OMEGA Series

OMEGA Marine Engines

OWTM6 1021, OWTAM6 2021

Power output: 42–240 kW (56–322 bhp)

Variable speed range: 1200–2100 r/min

Heavy-duty turbo/turbo-intercooled marine propulsion engines

Suitable for:

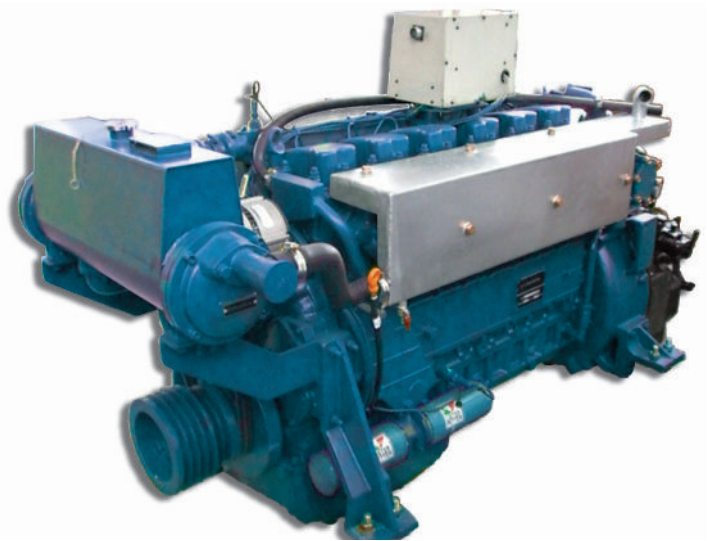
- ✓ Work boats
- ✓ Pleasure boats

Basic Engine Characteristics

- 6 cylinders
- direct injection
- turbocharged (OWTM6)
- turbocharged and intercooled (OWTAM6)
- raw water cooled

Design Features and Equipment

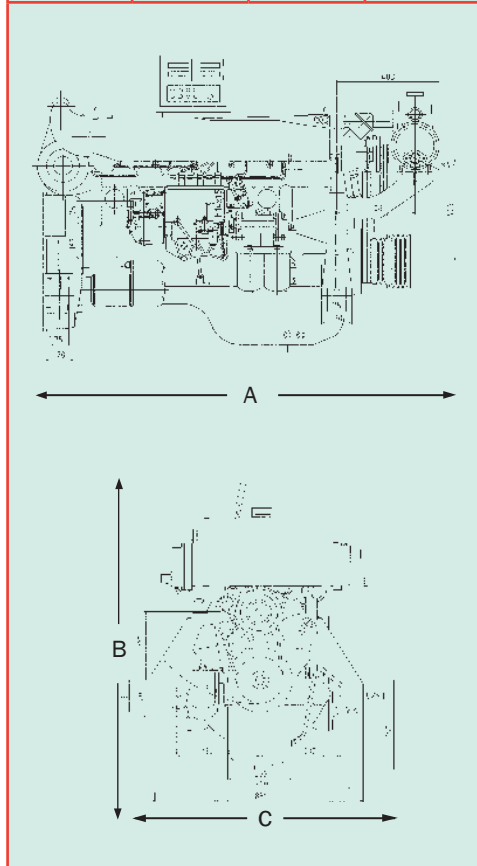
- designed for continuous operation in ambient temperatures up to 50 °C (122 °F)
- variable speed governing
- cold-start aid
- heat exchanger
- water-cooled exhaust manifold jacket
- sea water pump
- high-level dipstick
- twin lubricating-oil filters
- twin fuel filters
- heavy-duty air cleaner
- 24-Volt electric starting; starter motor power: 5.4 kW
- 24-Volt, 35-Amp, battery-charging alternator
- anticlockwise rotation (looking on the flywheel end)
- SAE 14" flywheel
- SAE 1 flywheel housing
- forged steel crankshaft
- Internal crankcase breather system
- Engine support feet
- Intercooler (OWTAM6 only)
- Oil cooler
- Operators' handbook
- 250-hour service intervals



Technical Data		
	OWTM6 1021	OWTAM6 2021
Type of fuel injection	Direct	Direct
Number of cylinders	6	6
Aspiration	Turbocharged	Turbocharged, intercooled
Direction of rotation	Anticlockwise looking on flywheel	
Nominal cylinder bore	126 mm	126 mm
Stroke	130 mm	130 mm
Total cylinder capacity	9.726 litre	9.726 litre
Compression ratio	15.5 : 1	17 : 1
Minimum speed	1200 r/min	1200 r/min
Off-load idle speed	600 r/min	600 r/min
Fuel consumption (approx.) at 2000 r/min	213 g/kWh 0.350 lb/hph	200 g/kWh 0.329 lb/hph
Oil sump capacity	19 litres	24 litres
Lubricating oil pressure (mean) with the oil at 110 °C (230 °F)	3.5 bar 51 lbf in ²	3.5 bar 51 lbf in ²
Installation angle (gearbox down)	30° max.	30° max.

OMEGA Series: OWTM6 and OWTAM6 Engines Technical Data Sheet

Dimensions and Weight			
Model		OWTM6	OWTAM6
Length (A)	mm	1580	1580
	in	62.2	62.2
Height (B)	mm	1171	1171
	in	46.1	46.1
Width (C)	mm	890	890
	in	35.0	35.0
Dry Weight	kg	850	900
	lb	1874	1984



Power Outputs							
		r/min	1200	1400	1600	1800	2100
OWTM6 1021	Fuel-stop power	kWm	45	55	87	121	185
		bhp	60.3	73.8	116.7	162.3	248.1
OWTAM6 2021	Fuel-stop power	kWm	42	73	110	152	240
		bhp	56.3	97.9	147.5	203.8	321.8

Torque							
		r/min	1200	1400	1600	1800	2100
OWTM6 1021		Nm	250	375	475	625	850
OWTAM6 2021		Nm	350	500	650	800	1085

Rating Definitions, to ISO 3046

ISO Standard Conditions

Barometric pressure 100 kPa
 Relative humidity 30%
 Ambient temperature at air inlet manifold 25°C

1. Fixed speed power: continuous power (ICN)

The power in kW which the engine is capable of delivering continuously at the stated crankshaft speed, under ISO standard conditions, measured at the flywheel without power-absorbing accessories, provided that the engine is overhauled and maintained in good operating condition and that fuel to BS EN 590 Class A1 or A2, and lubricating oils to the correct performance specification and viscosity classification as recommended by Lister Petter Limited, are used.

2. Fixed speed power: overload power (ICXN)

The maximum power in kW which the engine is capable of delivering intermittently at the stated crankshaft speed for a period not exceeding one hour in any period of twelve hours' continuous running, immediately after working at the continuous power, under ISO standard conditions and with the provisions specified in (1) above.

3. Variable speed: fuel-stop power, continuous power (IFN)

The maximum power in kW which an engine is capable of delivering continuously at stated crankshaft speed, under ISO standard conditions and with the provisions specified in (1) above, with the fuel limited so that the fuel stop power cannot be exceeded.

4. Variable speed: fuel-stop power, intermittent power (IOFN)

The maximum power in kW which an engine is capable of delivering intermittently at the stated crankshaft speed, for a period not exceeding one hour in any period of twelve hours' continuous running, with the fuel limited so that the fuel stop power cannot be exceeded, immediately after running at the rating in (3) above, under ISO standard conditions and with the provisions specified in (1) above.

5. De-rating

For non-standard site conditions, reference should be made to relevant BS, ISO and DIN standards. The overload capability applies to a fully run-in engine. This is normally attained after a running period of about 50 hours.

Distributor's Address

Lister Petter have made efforts to ensure that the information in this data sheet is accurate but reserve the right to amend specifications and information without notice and without obligation or liability.



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