# T4.230 Specifications



Power at crankshaft	169.1 kW [230 hp]
Displacement	2.982 l [182 in <sup>3</sup> ]
Configuration	4 cylinders in line
Operation type	4 stroke Diesel
Bore & Stroke	96 x 103 mm [3.78 x 4.06 in]
Compression ratio	15:1
Rated speed	3600 rpm
Idling speed	700 rpm
Peak torque	582.5 Nm
Peak torque speed	2000 rpm
Dry weight	
with TTM50A	393 kg [866 lbs]

Engine base	Toyota
Fuel system	Direct injection High pressure Common Rail Electronically controlled
Air intake	Turbocharged with intercooler
Cooling	Closed cooling with heat exchanger
Max mounting angle	7° Front up 7° Front down
Alternator	12 Volt 100 Amp
Rating	M6
Emission compliance	IMO Annex VI compliant RCD 2013/53/EU EPA marine Tier 3 BSO 2



# T4.230 169.1 kW [230 hp] at 3600 rpm

## **TECHNICAL DESCRIPTION**

#### Engine block

4 cylinders in line 4 valves per cylinder Dual overhead camshafts (DOHC) Watercooled exhaust manifold Internal balancers

#### Fuel system

Common Rail fuel injection system Fuel filter with hand primer Integrated fuel cooler

#### Lubrication system

Replaceable full-flow oil filter Oil dipstick Transmission oil cooler

#### Cooling system

Closed cooling with heat exchanger Gear driven self-priming raw water pump Coolant circulating pump Water cooled exhaust elbow

#### Electrical system & Instrumentation

12V 100A alternator

12V Electrical system

Complete instrumentation including key switch and alarms Extension cable harness with plug-in

connection

#### Air intake

Dry turbocharger Intercooler

#### Other features

Flexible engine mounting

# Optional equipment & accessories

- Complete marine propulsion systems Marine transmission adaptation kits Throttle and shift controls Additional instrumentation, Flying bridge extension harness Water boiler systems
- Complete fuel systems
- Complete exhaust systems
- Trolling valve

#### RATING

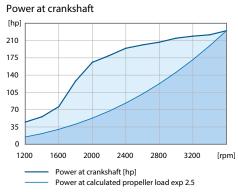
Up to 500 annual operating hours Load factor up to 35% Full power for no more than 30 minutes out of each 8 hours of operation. The remaining operation time must be at or below cruising speed

### TRANSMISSIONS

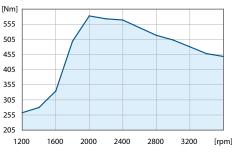
- Shaft line TTM50A ZF45A ZF63A Stern Drive Bravo X One
  - Bravo X Three
- Bravo X Two

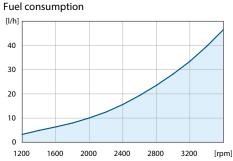
Contact your local dealer for more details and availability for transmission model and type.

# PERFORMANCE CURVES

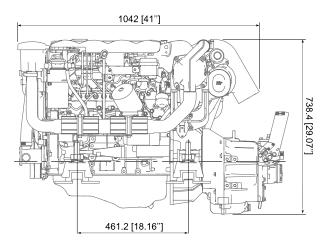


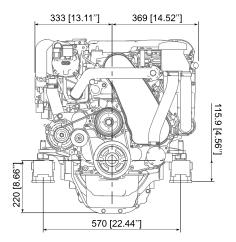
Torque at crankshaft





# DIMENSIONS WITH TTM50A





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Technical data according to ISO 8665. Specifications are subject to change without notice. Images and illustrations may shown non standard equipments. All combination of equipment & accessory are not available. 20151112-A ENG