T4.230

SPECIFICATIONS



169.1 kW [230 hp]
2.982 l [182 in³]
4 cylinders in line
4 strokes Diesel
96 x 103 mm [3.78 x 4.06 in]
15:1
3600 rpm
700 rpm
569.4 Nm
2000 rpm

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 down 7° Front up
Alternator	12 Volt 100 Amp
Rating	M6
Emission compliance	IMO Annex VI Compliant RCD 2013/53/EU EPA marine Tier 3 BSO2
Dry weight with TTM50A	393 kg [866 lbs]



T4.230

169.1 kW [230 hp] at 3600 rpm

TECHNICAL DESCRIPTION

ENGINE BLOCK

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

FUEL SYSTEM

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

LUBRICATION SYSTEM

- Replacable 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

- 12 V / 100 A alternator
- 12 V 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 mountings

OPTIONAL EQUIPMENTS & ACCESSORIES

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

RATINGS

- 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 time must be at, or below cruising speed

TRANSMISSIONS

SHAFT LINE

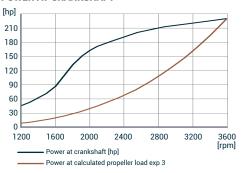
- TTM40A
- TTM50A
- ZF63A

STERN DRIVE

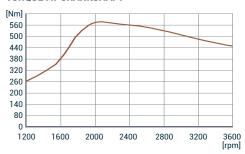
- Bravo X One
- Bravo X Three
- Bravo X Two
- Contact your local Nanni dealer for more details and availability for transmission model and type.

PERFORMANCE CURVES

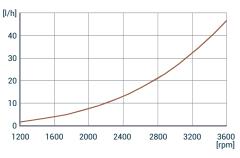
POWER AT CRANKSHAFT



TORQUE AT CRANKSHAFT



FUEL CONSUMPTION



DIMENSIONS WITH TTM50A

