T4.230

SPECIFICATIONS



| Power at crankshaft | 169.1 kW [230 hp] |
|---------------------|------------------------------|
| Displacement | 2.982 l [182 in³] |
| Configuration | 4 cylinders in line |
| Operation type | 4 strokes Diesel |
| Bore & Stroke | 96 x 103 mm [3.78 x 4.06 in] |
| Compression ratio | 15:1 |
| Rated speed | 3600 rpm |
| Idling speed | 730 rpm |
| Peak torque | 569.4 Nm |
| Peak torque speed | 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 130 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

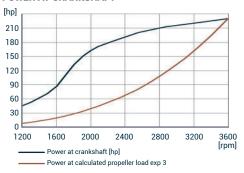
- TTM40A
- TTM50A
- ZF63A

STERN DRIVE

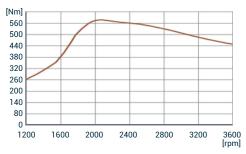
- Bravo X One
- Bravo X Three
- Bravo X Two
- Contact your local Nanni dealer for more details and availability for transmission model and type.

PERFORMANCE CURVES

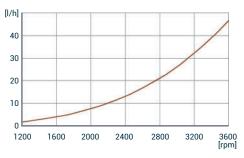
POWER AT CRANKSHAFT



TORQUE AT CRANKSHAFT



FUEL CONSUMPTION



DIMENSIONS WITH TTM50A

