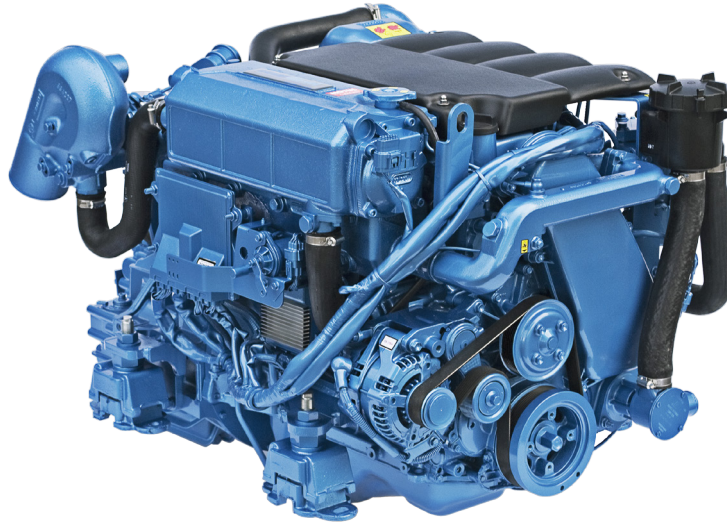


# T4.230

## Specifications



Power at crankshaft	169.1 kW [230 hp]	Engine base	Toyota
Displacement	2.982 l [182 in <sup>3</sup> ]	Fuel system	Direct injection High pressure Common Rail Electronically controlled
Configuration	4 cylinders in line	Air intake	Turbocharged with intercooler
Operation type	4 stroke Diesel	Cooling	Closed with heat exchanger
Bore & stroke	96 x 103 mm [3.78 x 4.06 in]	Max mounting angle	7° Front up 7° Front down
Compression ratio	15:1	Alternator	12 Volt 100 Amp
Rated speed	3600 rpm	Rating	M6
Idling speed	700 rpm	Emission compliance	IMO Annex VI Compliant RCD2013/53/EU EPA marine Tier 3 BSO2
Peak torque	582.5 Nm		
Peak torque speed	2000 rpm		
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 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%
- Fuel 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

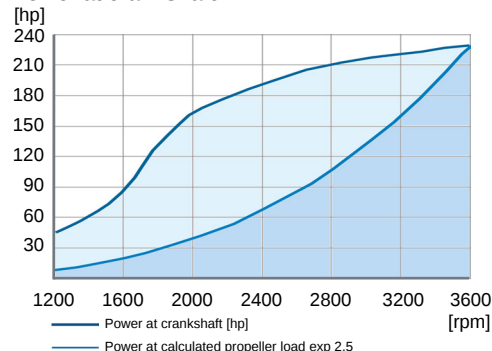
- TTM40A
- TTM50A
- ZF45A
- ZF63A

### Stern Drive

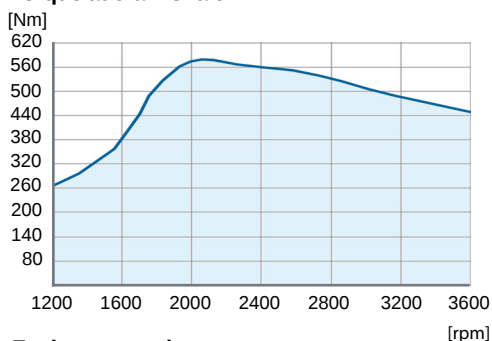
- Bravo X One
- Bravo X Three
- Bravo X Two
- Contact your local Nanni representative for more details and availability for transmission model and type

## PERFORMANCE CURVES

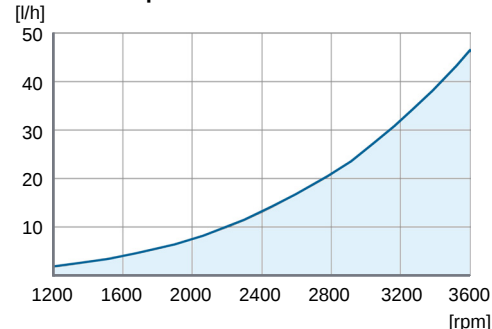
### Power at crankshaft



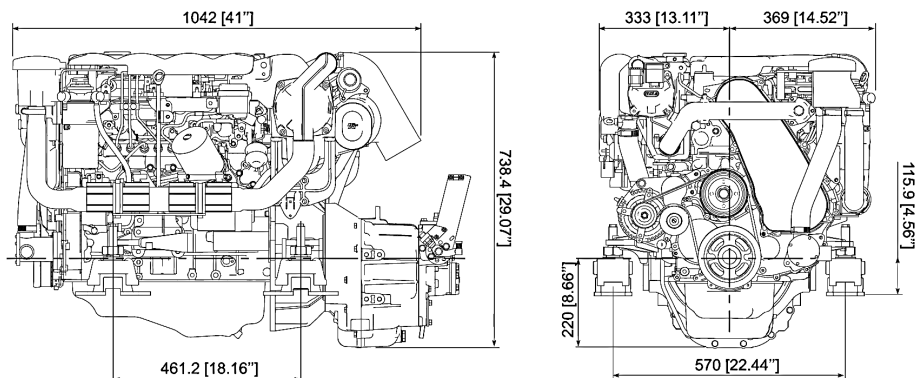
### Torque at crankshaft



### Fuel consumption



## DIMENSIONS WITH TTM50A



### Nanni Industries S.A.S. France

11, Avenue Mariotte - Zone Industrielle  
33260 La Teste - France  
Tel: +33 (0)5 56 22 30 60  
Fax: +33 (0)5 56 22 30 79

### Nanni Trading S.R.L

Via Degli Olmetti, 5/B  
00060 Formello (RM) - Italia  
Tel: +39 06 30 88 42 51/52/53  
Fax: +39 06 30 88 42 54

Technical data according to ISO 8665. Specifications are subject to change without notice. Images and illustrations may show non standard equipments. All combination of equipment & accessory are not available.  
20171804A ENG