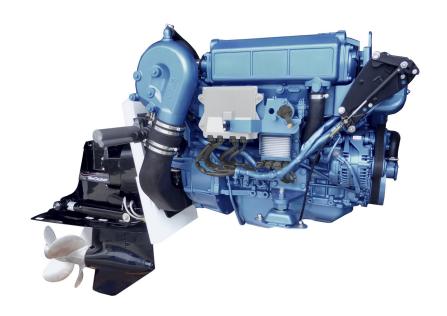
# Z4.230 Specifications



Power at crankshaft	169.1 kW [230 hp]
Displacement	2.982 I [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 Bravo X Three	476 kg [1049.4 lbs]

Engine base	Toyota
Fuel system	Direct injection High pressure Common Rail Electronically controlled
Air intake	Turbocharged with intercooler
Cooling	Closed with heat exchanger
Max mounting angle	0° Front up 0° Front down
Alternator	12 Volt 100 Amp
Rating	M6
Emission compliance	IMO Annex VI Compliant RCD2013/53/EU EPA marine Tier 3 BSO2



# Z4.230

# 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
- Transom (Trim system, Bull-horn & Mercathode)
- Trim indicator.

#### Optional equipments & accessories

- Throttle and shift controls
- Additional instrumentation & Fly bridge extension harness
- Water boiler systems
- Complete fuel systems
- Complete exhaust systems.

#### **RATING**

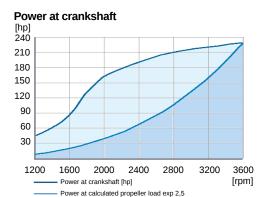
- Up to 500 annual operating hours
- Load factor up to 35%
- Fuel power for no more than 30 minutes out of each 8 hours of operation. The remaining operation time must be at or below cruising speed.

#### **TRANSMISSIONS**

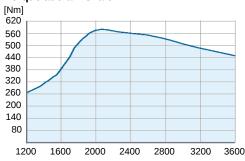
#### Stern Drive

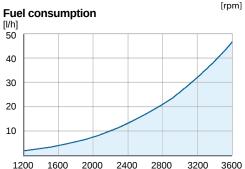
- Bravo X One
- Bravo X Three
- Bravo X Two
- Contact your local Nanni representative for more details and availability for transmission model and type.

#### PERFORMANCE CURVES



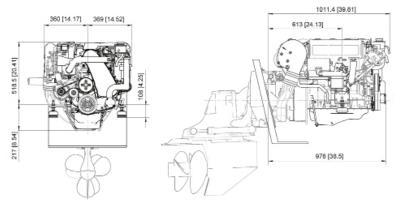
#### Torque at crankshaft





[rpm]

### **DIMENSIONS WITH BRAVO X THREE**



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