Power at crankshaft

# **SPECIFICATIONS**



27.6 kW [37.5 hp]



Engine base

Displacement	1.498   [91 in³]	Fuel system Mech	anical Indirect injection
Configuration	4 cylinders in line	Air intake	Natural
Operation type	4 strokes Diesel	Cooling Closed cool	ing with heat exchanger
Bore & Stroke	78 x 78.4 mm [3.07 x 3.09 in]	Max mounting angle	15° Front down 15° Front up
Compression ratio	23 : 1	Alternator	12 Volt 120 Amp
Rated speed	3000 rpm	Rating	M4
Idling speed	850 rpm	Emission compliance	RCD 2013/53/EU EPA marine Tier 3 BSO 2
Peak torque	94.8 Nm		
Peak torque speed	2200 rpm	Dry weight with TMC40 with Sail Drive SP60	153 kg [337 lbs] 184 kg [405 lbs]



Kubota

#### **ENGINE BLOCK**

- 4 Cylinders in line
- Gear driven valve train
- Watercooled exhaust manifold

### **FUEL SYSTEM**

- Mechanical governor
- Cam driven in-line injection pump
- Fuel feed pump with hand primer
- Fuel filter

#### **LUBRICATION SYSTEM**

- Replaceable full-flow oil filter
- Oil dipstick
- 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 Electrical system
- 12 V / 120 A alternator
- Electric starter motor
- Electric stop function
- Instrumentation panel, including
- Start/Stop, tachometer & alarms
- Extension cable harness with plug-andplay

#### **AIR INTAKE**

• Mounted air cleaner

#### OTHER FEATURES

- Flexible engine mounting
- Bracket for control cables

#### **OPTIONAL EQUIPMENTS & ACCESSORIES**

- Keel cooling adaptation
- Complete marine propulsion systems
- Throttle and shift controls
- Additional instrumentation, Flying bridge extension harness
- Polyester frame (Sail Drive version)
- Engine mounting adaptation
- Two pole electrical system
- Water boiler systems
- Stuffing box connections
- Complete fuel systems
- Complete exhaust systems
- SOLAS approved version

# RATINGS

- Up to 3000 annual operating hours
- Load factor up to 40%
- Full power for no more than 1 hour out of each 12 hours of operation. The remaining time must be at, or below cruising speed

# **TRANSMISSIONS**

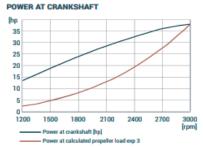
#### **Shaft line**

- TMC40
- TTMC35A TTMC35P
- ZF12 ZF12M
- ZF25A

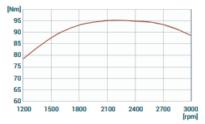
#### Sail Drive

- Sail Drive SP60
- Contact your Nanni representative for more details and availability about transmissions types and models range.

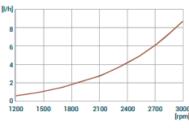
# PERFORMANCE CURVES



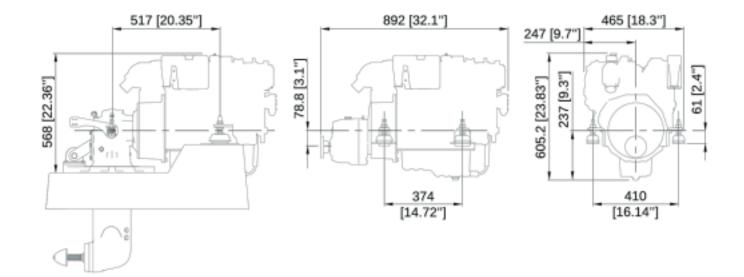
#### TORQUE AT CRANKSHAFT



## FUEL CONSUMPTION



# DIMENSIONS WITH SP60 / TMC40







Power at crankshaft	29.4 kW [40 hp]	Engine base	Kubota
Displacement	1.999 l [122 in³]	Fuel system	Mechanical Indirect injection
Configuration	4 cylinders in line	Air intake	Natural
Operation type	4 strokes Diesel	Cooling	Closed cooling with heat exchanger
Bore & Stroke	83 x 92.4 mm [3.27 x 3.64 in]	Max mounting	g angle 15° Front down 15° Front up
Compression ratio	22.8 : 1	Alternator	12 Volt 120 Amp
Rated speed	2800 rpm	Rating	M4
Idling speed	850 rpm	Emission comp	oliance RCD 2013/53/EU EPA marine Tier 3
Peak torque	100 Nm	Dry weight	
Peak torque speed	2000 rpm	with TTMC35A with Sail Drive	0: 1



#### **ENGINE BLOCK**

- 4 Cylinders in line
- Gear driven valve train
- Watercooled exhaust manifold

#### **FUEL SYSTEM**

- Mechanical governor
- •Cam driven in-line injection pump
- •Fuel feed pump with hand primer
- Fuel filter

#### **LUBRICATION SYSTEM**

- Replaceable full-flow oil filter
- Oil dipstick
- 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 Electrical system
- •12 V / 120 A alternator
- Electric starter motor
- Electric stop function
- Instrumentation panel, including
- •Start/Stop, tachometer & alarms
- Extension cable harness with plug-andplay

#### AIR INTAKE

Mounted air cleaner

#### OTHER FEATURES

- Flexible engine mounting
- Bracket for control cables

### OPTIONAL EQUIPMENTS & ACCESSORIES

- Keel cooling adaptation
- Complete marine propulsion systems
- Throttle and shift controls
- Additional instrumentation, Flying bridge extension harness
- Polyester frame (Sail Drive version)
- Engine mounting adaptation
- Two pole electrical system
- Water boiler systems
- Stuffing box connections
- Complete fuel systems
- Complete exhaust systems
- SOLAS approved version

# RATINGS

- Up to 3000 annual operating hours
- Load factor up to 40%
- Full power for no more than 1 hour out of each 12 hours of operation. The remaining time must be at, or below cruising speed

## **TRANSMISSIONS**

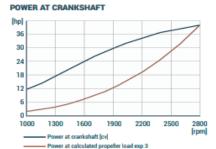
#### Shaft line

- •TM345A TM345H
- •TMC260
- •TMC60
- •TTMC35A TTMC35P
- ZF25

#### Sail Drive

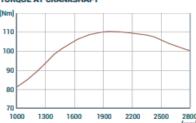
- Sail Drive SP60
- Contact your Nanni representative for more details and availability about transmissions types and models range

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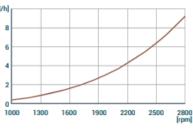


PERFORMANCE CURVES

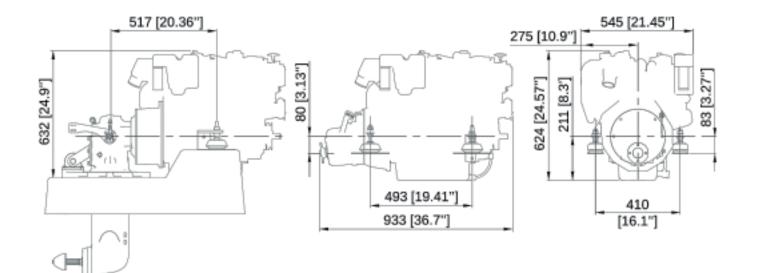
#### TORQUE AT CRANKSHAFT



#### **FUEL CONSUMPTION**



# DIMENSIONS AVEC SP60 / TTMC35A







Power at crankshaft	35.42 kW [47.5 hp]	Engine base	Kubota
Displacement	2.197 l [134 in³]	Fuel system	Mechanical Indirect injection
Configuration	4 cylinders in line	Air intake	Natural
Operation type	4 strokes Diesel	Cooling	Closed cooling with heat exchanger
Bore & Stroke	83 x 92.4 mm [3.27 x 3.64 in]	Max mounting	g angle 15° Front down
Compression ratio	22:1	Alternator	12 Volt 120 Amp
Rated speed	2800 rpm	Rating	M4
Idling speed	840 rpm	Emission com	pliance RCD 2013/53/EU EPA marine Tier 3 BSO2
Peak torque	146 Nm	Dry weight	229 kg [504 lbs]
Peak torque speed	1800 rpm	with TTMC35A	4



#### **ENGINE BLOCK**

- 4 Cylinders in line
- Gear driven valve train
- Watercooled exhaust manifold

#### **FUEL SYSTEM**

- Mechanical governor
- •Cam driven in-line injection pump
- •Fuel feed pump with hand primer
- Fuel filter

# LUBRICATION SYSTEM

- Replaceable full-flow oil filter
- Oil dipstick
- 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 Electrical system
- 12 V / 120 A alternator
- Electric starter motor
- Electric stop function
- Instrumentation panel, including
- Start/Stop, tachometer & alarms
- Extension cable harness with plug-andplay

#### AIR INTAKE

Mounted air cleaner

#### OTHER FEATURES

- Flexible engine mounting
- Bracket for control cables

### **OPTIONAL EQUIPMENTS & ACCESSORIES**

- Keel cooling adaptation
- Complete marine propulsion systems
- Throttle and shift controls
- Additional instrumentation, Flying bridge extension harness
- Polyester frame (Sail Drive version)
- Engine mounting adaptation
- Two pole electrical system
- Water boiler systems
- Stuffing box connections
- Complete fuel systems
- Complete exhaust systems
- SOLAS approved version

# RATINGS

- Up to 3000 annual operating hours
- Load factor up to 40%
- Full power for no more than 1 hour out of each 12 hours of operation. The remaining time must be at, or below cruising speed

## **TRANSMISSIONS**

#### Shaft line

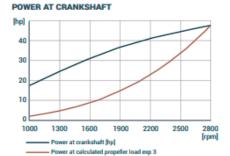
- TTM345A TM345H
- •TMC260
- TMC60
- TTMC35A TTMC35P
- ZF25 ZF25M

#### Sail Drive

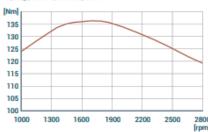
- Sail Drive
- Contact your Nanni representative for more details and availability about transmissions types and models range

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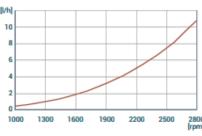
PERFORMANCE CURVES



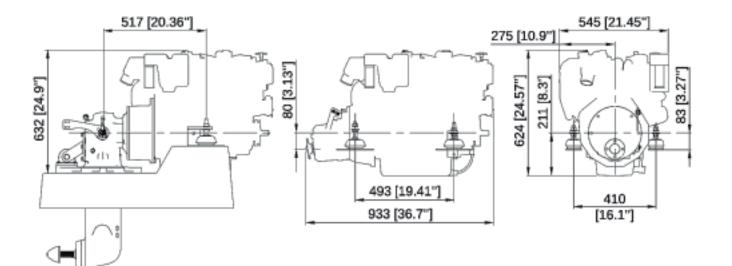
#### TORQUE AT CRANKSHAFT



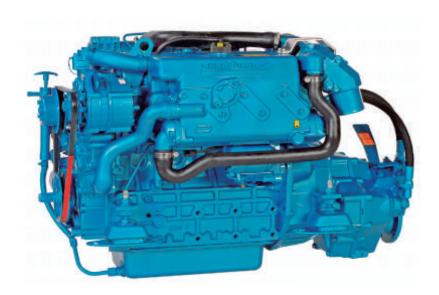
#### **FUEL CONSUMPTION**



# **DIMENSIONS WITH TTMC35A**







Power at crankshaft	43.4 kW [59 hp]	Engine base	Kubota
Displacement	2.434   [148.5 in <sup>3</sup> ]	Fuel system	Mechanical Indirect injection
Configuration	4 cylinders in line	Air intake	Turbocharged
Operation type	4 strokes Diesel	Cooling	Closed cooling with heat exchanger
Bore & Stroke	87 x 102.4 mm [3.43 x 4.03 in]	Max mountin	g angle 15° Front down
Compression ratio	23:1	Alternator	12 Volt 120 Amp
Rated speed	2700 rpm	Rating	M4
Idling speed	850 rpm	Emission com	npliance IMO Annex VI Compliant RCD 2013/53/EU BSO2
Peak torque	168 Nm	Dry weight	248 kg [546.75 lbs]
Peak torque speed	1800 rpm	with TTMC35/	A



#### **ENGINE BLOCK**

- 4 Cylinders in line
- •2 Valves per cylinder
- •Gear driven valve train
- Watercooled exhaust manifold

#### FUEL SYSTEM

- •Indirect E-TVCS injection system
- Fuel filter

#### **LUBRICATION SYSTEM**

- Replaceable full-flow oil filter
- •Oil dipstick

### 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 Electrical system
- 12 V / 120 A alternator
- Complete instrumentation including key switch and alarms
- Extension cable harness with plug-andplay **AIR INTAKE**
- Turbocharged

# OTHER FEATURES

- Flexible engine mounts
- Internal balancers
- Single side serviceability

## **OPTIONAL EQUIPMENTS & ACCESSORIES**

- Keel cooling adaptation
- Dry exhaust elbow
- Complete marine propulsion systems
- Marine transmission adaptation kits
- Throttle ansd shift controls
- Additional instrumentation, Flying bridge extension harness
- Rigid engine mounting
- Power take off

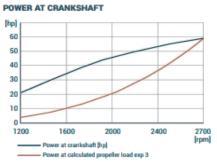
# **RATINGS**

- Up to 3000 annual operating hours
- Load factor up to 40%
- Full power for no more than 1 hour out of each 12 hours of operation. The remaining time must be at, or below cruising speed

## **TRANSMISSIONS**

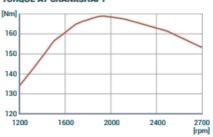
- •Shaft line
- •Sail Drive
- •Contact your Nanni representative for more details and availability about transmissions types and models range.

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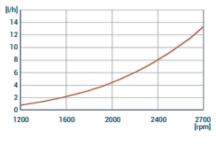


PERFORMANCE CURVES

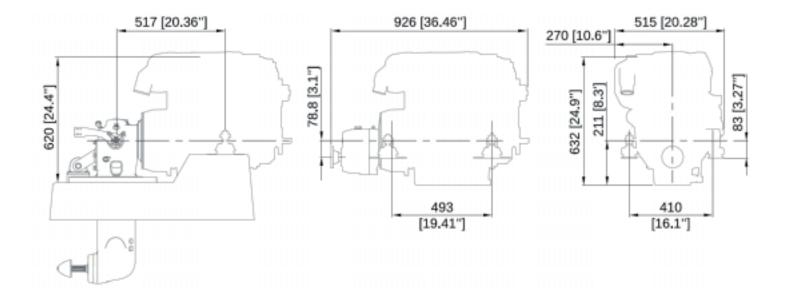




#### **FUEL CONSUMPTION**



# **DIMENSIONS WITH TM345A**









shaft line sail drive	57.4 kW [79 hp] 52.9 kW [72 hp]
Displacement	2.434 l [148.5 in³]
Configuration	4 cylinders in line
Operation type	4 strokes Diesel
Bore & Stroke	87 x 102.4 mm [3.43 x 4.03 in]
Compression ratio	23:1
Rated speed	2700 rpm
Idling speed	850 rpm
Peak torque	220 Nm
Peak torque speed	1800 rpm

Engine base	Kubota
Fuel quetem	Indirect E-TVCS
Fuel system	(Three Vortex Combustion System)
Air intake	Turbocharger & Intercooler
Cooling	Closed cooling with heat exchanger
Cooming	Air cooler
Max mounting angle	
shaft line	7° Front down / 7° Front up
sail drive	15° Front down / 15° Front up
Alternator	12 Volt
Alternator	120 Amp
Rating	M5
	EPA marine Tier 3
Emission compliance	RCD2013/53/EU
Emission compilation	BS02
D	
Dry weight	fees o # 1
with TM345A	275 kg [606.3 lbs]
with SD12	296 kg [652.6 lbs]



#### **ENGINE BLOCK AND HEAD**

- 4 Cylinders in line
- 2 Valves per cylinder
- Gear driven valve train
- Watercooled exhaust manifold
- Cylinder block and cylinder head manufactured from high grade cast iron. Crankcase features a rigid tunnel block design.
- Chrome molybdenum forged crankshaft, statically and dynamically balanced with integral counterweights. Pistons are cast from high silicon aluminum, are heat treated and fitted with two cast iron, chromium faced compression rings and a single oil ring
- Replaceable, hardened valve seats
- Elastic coupling on flywheel
- Engine mounting tuned front and rear cushiontype rubber mounts. Adjustable.

#### FUEL SYSTEM

- Indirect E-TVCS injection system
- Fuel filter
- Feed pump with hand primer
- Spin-on type fine fuel filter
- Auxiliary stop lever on engine

### LUBRICATION SYSTEM

- Spin-on full-flow oil filter
- Oil dipstick
- Closed circuit crankcase ventilation
- One top oil filling position

# COOLING SYSTEM

- Closed cooling with heat exchanger
- Gear driven self-priming raw water pump
- Coolant circulating pump
- Freshwater cooled exhaust manifold and water cooled exhaust elbow
- Freshwater cooling system governed by thermostat
- Tubular heat exchanger with integral expansion tank
- Easily accessible sea water pump and impeller

### ELECTRICAL SYSTEM & INSTRUMENTATION

- 12 V electrical system
- 120 A marine alternator
- Complete instrumentation including key switch and alarms
- Extension cable harness with plug-and-play
- Charging regulator with electronic sensor for voltage drop compensation
- Electric starter motor (2.0 kW output)
- Electrical stop

#### AIR INTAKE

Turbocharged with intercooler

#### OTHER FEATURES

Single side serviceability

#### OPTIONAL EQUIPMENTS & ACCESSORIES

- 24V alternator as option
- Dry exhaust elbow
- Complete marine propulsion systems
- Marine transmission adaptation kits
- Throttle and shift controls
- Additional instrumentation, Flying bridge extension harness
- Rigid engine mounting
- Power take off
- Separate instruments for fuel level, temperature and voltage
- Option SI4: NMEA interactive control displays, intuitive, interactive and the most tiny of all controllers (170x104mm)

#### RATINGS

- Up to 1000 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
- Recreational boats, tactical military vessels and rescue boats

# TRANSMISSIONS

#### SHAFT LINE

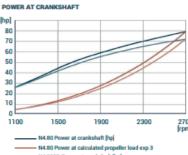
= TM345A

# SAIL DRIVE

- = SD12
- Option SPP12: pivoting leg, joystick maneuvering, plug and play components and electric pre-wired parts

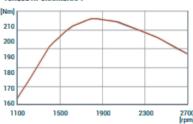
Contact your Nanni
representative for more details
and availability about transmissions types and
model range.

# PERFORMANCE CURVES

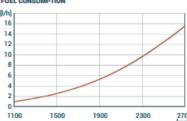


N4.80SD Power at crankshaft [hp]
N4.80SD Power at calculated propeller load exp 3

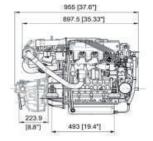
#### TORQUE AT CRANKSHAFT

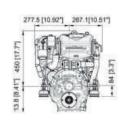


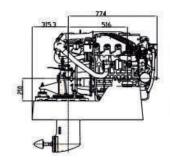
#### FUEL CONSUMPTION

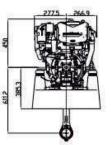


# DIMENSIONS SHAFT LINE & SAIL DRIVE













Power at crankshaft	84.6 kW [115 hp]	Engine base	•	Kubota
Displacement	3.769 l [230 in³]	Fuel system	Mecha	nical Indirect injection
Configuration	4 cylinders in line	Air intake	Turboch	arged with intercooler
Operation type	4 strokes Diesel	Cooling	Closed coolin	g with heat exchanger
Bore & Stroke	100 x 120 mm [3.94 x 4.72 in]	Max mountir	ng angle	7° Front down 7° Front up
Compression ratio	19.1 : 1	Alternator		12 Volt 120 Amp
Rated speed	2600 rpm	Rating		M4
Idling speed	825 rpm	Emission cor	mpliance	RCD 2013/53/EU EPA marine Tier 3 BSO2
Peak torque	387 Nm	Dry weight		378 kg [833 lbs]
Peak torque speed	1600 rpm	with TM345A	4	



# 84.6 KW [115 HP] AT 2600 RPM

# TECHNICAL DESCRIPTION

#### **ENGINE BLOCK**

- 4 Cylinders in line
- 4 Valves per cylinder
- •Gear driven valve train
- Watercooled exhaust manifold

#### **FUEL SYSTEM**

- Mechanical governor
- ·Cam driven in-line injection pump
- Fuel feed pump
- •Fuel filter with hand primer

# **LUBRICATION SYSTEM**

- Replaceable full-flow oil filter
- •Oil dipstick
- ·Oil drain pump

# 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 Electrical system
- 12 V / 120 A alternator
- Electric starter motor
- Electric stop function
- Instrumentation panel, including Start/ Stop, tachometer, coolant temperature & oil pressure indicators, alarms
- Extension cable harness with plug-andplay

#### **AIR INTAKE**

- Tubocharged with intercooler
- Mounted air cleaner

### OTHER FEATURES

- Flexible engine mounting
- Bracket for control cables

#### **OPTIONAL EQUIPMENTS & ACCESSORIES**

- Keel cooling adaptation
- Complete marine propulsion systems
- Throttle and shift controls
- Additional instrumentation, Flying bridge extension harness
- Alternator 24 V 55 A
- •24 V Electrical system
- Engine mounting adaptation
- Two pole electrical system
- Complete exhaust systems
- Trolling valve

# RATINGS

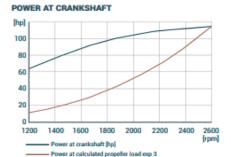
- Up to 3000 annual operating hours
- •Load factor up to 40%
- Full power for no more than 1 hour out of each 12 hours of operation. The remaining time must be at, or below cruising speed

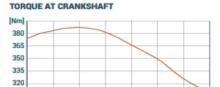
### **TRANSMISSIONS**

#### SHAFT LINE

- •TM345 TM345A
- TTM40A
- •TTMC5A
- ZF25 ZF25A26
- ZF45A
- Contact your local Nanni dealer for more details and availability for transmission model and type.

# PERFORMANCE CURVES





1400 **FUEL CONSUMPTION** 

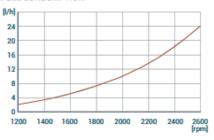
1600

305

290

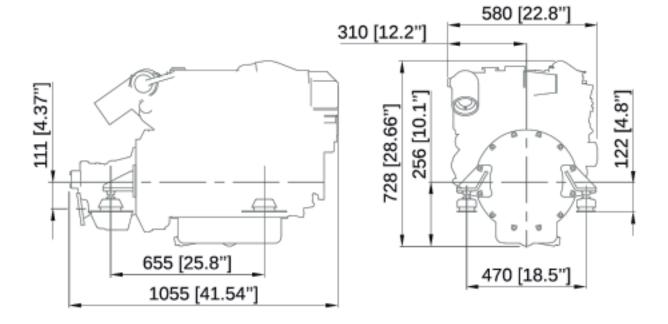
275

1200



2200

# **DIMENSIONS WITH TM345A**







Power at crankshaft	99.4 kW [135 hp]
Displacement	3.769 I [230 in <sup>3</sup> ]
Configuration	4 cylinders in line
Operation type	4 strokes Diesel
Bore & Stroke	100 x 120 mm [3.94 x 4.72 in]
Compression ratio	19.1 : 1
Rated speed	2600 rpm
Idling speed	825 rpm
Peak torque	453.6 Nm
Peak torque speed	1600 rpm

Engine base	Kubota	
Fuel system	Mechanical Direct injection	
Air intake	Turbocharged with intercooler	
Cooling	Closed cooling with heat exchanger	
Max mounting angle	7° Front down 7° Front up	
Alternator	12 Volt 120 Amp	
Rating	M4	
Emission compliance	RCD 2013/53/EU EPA marine Tier 3 BSO 2	
Dry weight	353 kg [778 lbs]	



#### **ENGINE BLOCK**

- 4 Cylinders in line
- 4 Valves per cylinder
- •Gear driven valve train
- •Watercooled exhaust manifold

#### **FUEL SYSTEM**

- Mechanical governor
- •Cam driven in-line injection pump
- •Fuel feed pump
- •Fuel filter with hand primer

# **LUBRICATION SYSTEM**

- Replaceable full-flow oil filter
- •Oil dipstick
- ·Oil drain pump

# 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 Electrical system
- 12 V / 120 A alternator
- Electric starter motor
- Electric stop function
- Instrumentation panel, including Start/ Stop, tachometer, coolant temperature & oil pressure indicators, alarms
- Extension cable harness with plug-andplay

#### AIR INTAKE

- Tubocharged with intercooler
- Mounted air cleaner

#### OTHER FEATURES

- Flexible engine mounting
- Bracket for control cables

## **OPTIONAL EQUIPMENTS & ACCESSORIES**

- Keel cooling adaptation
- Complete marine propulsion systems
- Throttle and shift controls
- Additional instrumentation, Flying bridge extension harness
- Alternator 24 V 55 A
- 24 V Electrical system
- Engine mounting adaptation
- Two pole electrical system
- Complete exhaust systems
- Trolling valve

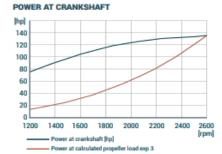
# **RATINGS**

- Up to 3000 annual operating hours
- Load factor up to 40%
- Full power for no more than 1 hour out of each 12 hours of operation. The remaining time must be at, or below cruising speed

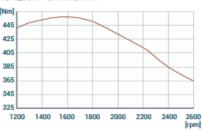
### **TRANSMISSIONS**

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

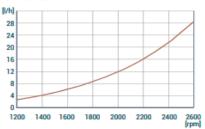
# PERFORMANCE CURVES







#### **FUEL CONSUMPTION**



**DIMENSIONS WITH TM345A** 

