

COMMERCIAL APPLICATIONS AND SOLAS APPROVED

# MARINE DIESEL ENGINES BUKH MO 4-Cylinder/BUKH SE 6-Cylinder

Powerful and compact light-weight **Monoblock Marine Diesel Engine** series with a power range from 75 to 290HP.



**BUKH MO 4-Cylinder** 

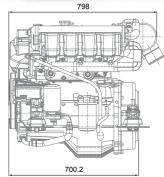
Monoblock Diesel Engine Series for Commercial and SOLAS Applications

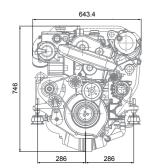
- 75-170HP power range
- Compact light-weight engine
- Monoblock design
- Patented 2-stage UI system
- Robust, reliable technology
- Corrosion resistant materials



CYLINDER!







The BUKH marine engines are manufactured using high alloy materials to provide enduring longevity for all running components. The proven and trusted MO 4-cylinder engine series is a reliable propulsion system based on the patented 2-stage unit injector technology and the unique Monoblock design. It complies with SOLAS regulations, the Recreational Craft Directive (RCD 2003/44), IMO emission specifications as well as BSO II regulations. Depending on the respective MO 4-cylinder engine model, the installation of different driving systems is possible.

For more details on the series and the engine models, please ask for our MO 4-cylinder data sheet or contact your local distributor.

#### **SPECIFICATIONS**

Number of cylinders 4 in-line

Injection system 2-stage unit injector

Displacement (It)

Power range (kW/PS) 55/75 - 125/170 Torque range (Nm) 284 - 330

Dry weight (kg) 25



The BUKH Marine MONOBLOCK engines are designed for high performance and continuous rating. The high pressure UNIT INJECTOR technology enables an excellent torque and speed range.

The complete engine package is conceived for sterndrive, transmission and waterjet systems. Remarkable features of the BUKH marine engines are the dynamic behaviour and immediate response as well as the impressive acceleration.

#### **SERVICE LIFE**

The BUKH marine engines are manufactured using high alloy materials to provide enduring longevity for all running components, and using corrosion resistant materials for the entire seawater system as a standard in the dual circuit cooling system. Consequently designed solutions to meet the criteria of marine environment guarantee the best corrosion protection for any auxiliaries and electronic components in marine ambience.

#### COMFORT

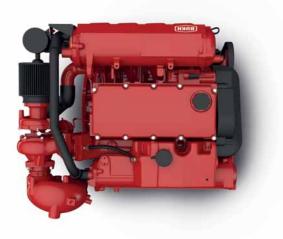
The patented 2-stage UNIT INJECTOR technology ensures a worldwide approved and smooth operation noise. The additional elastic separation of the MONOBLOCK against the aluminum cast engine housing reduces the engine related vibration transmitted into the hull, therefore the noise level on board is further reduced. Torque and speed range characteristics enable optimal matching to individual application while maintaining transmission, gear ratio and propeller dimensions. The big choice of matched accessories fulfills the highest level of quality and comfort for you on board your vessel.

#### **EXHAUST EMISSIONS**

The trend-setting UNIT INJECTOR system is most environmentally friendly. It fulfills the RCD 2003/44 as well as current EPA and IMO emission regulations.

#### **TRANSMISSION**

BUKH marine engines allow the installation with different driving systems in your boat. Adaptation for marine transmission with different output configuration (direct, horizontal down-angle 8°, V-drive 12°), to choose from as well as an intermediate housing for propeller shaft and kits for installation to MerCruiser Bravo I, Bravo II and Bravo III sterndrives. Also awailable as direct drive for jet application.



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**BUKH SE 6-Cylinder** 

Monoblock Diesel Engine Series for **Commercial and SOLAS Applications** 

- 120-292HP power range
- Compact light-weight engine
- **Enduring and robust**
- Monoblock design
- Patented 2-stage UI system
- Excellent torque and speed range
- Corrosion resistant materials





The BUKH SE 6-cylinder series is an efficient and flexible marine propulsion system for leisure and commercial applications. The Monoblock design is key to a most compact core engine while the surrounding housings, manifolds and auxiliaries can be easily adapted to many requirements. Compared to larger and heavier engines, the SE 6-cylinder series is a high-performer while remaining lightweight, compact and robust.

As a standard feature, all BUKH marine engines are built with corrosion resistant materials for the entire seawater system in the dual circuit cooling system. Furthermore, the engines show a similar form factor across a wide power range. Consequently, they are perfectly applicable in fleet logistics, ensuring lean logistic practices due to a wide variety of models and many interchangeable parts.



The unrivaled cooling capacity, direct intercooling and diverse options for oil sumps, front-end accessory drives and transmission flanges are additional features of the SE 6-cylinder engine series. A variety of other options is available to equip the engines according to specific needs, including but not limited to:

- preparation for keel cooling systems to increase cooling capability and simplify installation by eliminating hull fittings, strainers and hoses
- block heating device (enabling a launch temperature
- BUKH Hybrid Drive System (in-line hybrid with 4 operational modes)
- additional alternators (12 V/24 V)
- engine system (24 V)
- two pole electrical systems
- A/C compressor
- power take-off pulley
- hydraulic pump

#### **SPECIFICATIONS**

Number of cylinders 6 in-line Injection system

2-stage unit injector 3.2

Displacement (It)

88/120 - 215/292 Power range (kW/PS) 390-600 Torque range (Nm) 340 Dry weight (kg)





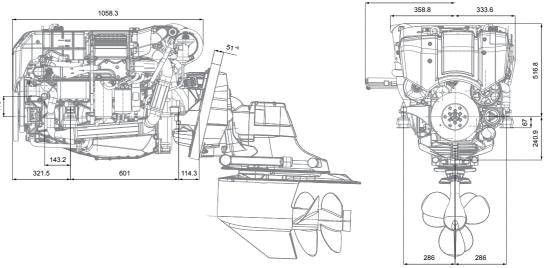
#### **PROPULSION SYSTEMS**

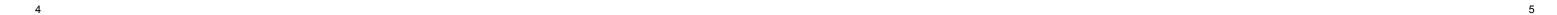
The SE 6-cylinder engine series allows the installation of different propulsion systems. Special marine diesel packages with BRAVO I, II or III and also repower kits for most common sterndrives are available.

- Direct shaft/Bobtail
- Sterndrive
- Waterjet



#### **STERNDRIVE**







## SE series also available in USA

Designed for durability and light or medium duty HSC rating.

Among the standard features of all models are common rail direct injection and a laptop based diagnostic tool, which makes control of the engines easy and reliable. Work boat owners will also appreciate their multi-fuel working capacity.

The unique UNIT INJECTOR makes it a very environmentally friendly system.

The BUKH SE engines meet the current EPA TIER 3 standards for all engines installed on US flag vessels. They are on the USCG list of approved engines and fulfill the IMO emission specifications as well as RCD 2003/44.

# **Certificates and approvals**

Det Norske Veritas Management System Certificate DS/EN ISO 9001:2008

Det Norske Veritas EC Type-Examination Certificate

Det Norske Veritas QS Certificate of Assessment - EC

United States Coast Guard Accepted Lifeboat/Rescue Boat Engines meeting US EPA emmission requirements



#### www.bukh.dk

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### **BUKH PRODUCT RANGE**

MARINE DIESEL ENGINES

BUKH A/S 6340 Krusaa, Denmark

BUKH ASIA - Sales and Service Jiangyin City 214400, China

www.bukh.dk

Please find your local distributor on our website.

BUKH 009Ø5027





BUKH powering marine safety