



powering **marine** safety

D170

BUKH SOLAS MARINE DIESEL ENGINE

170ps [125kW] acc. to ISO 8665



Photo: Umee Schat-Harding Equipment AS

Solenoid controlled common rail injection system delivers 170ps and 36kg · m torque from the 2.2 liter i4 CRDI engine.

The common rail multiple injection features improved i4 D-series on environmental aspects by minimizing the emissions of particulates and NOx.

Designs for optimizing fuel injection and intake port, and combustion performance improved low temperature combustion stability through lean air-fuel rationing. This satisfies the world's strictest exhaust emission standards.

Technical Description:

Material

- Cast iron engine cylinder block
- Aluminium head
- Oil cooled piston
- Hydraulic lash adjusters
- Integrated water jacket
- Balance shaft
- Timing / drive belt auto tensioner

Engine Mounting

- Adjustable engine mount

Lubrication System

- Electric oil extraction pump
- Crankcase gases vented into air inlet

Fuel System

- Common rail direct injection (Solenoid injector)
- Fuel filter with sensor detecting water in fuel
- Electric fuel pump
- Dual pressure control valve
- Low and high pressure fuel pump

Electrical System

- 12 volt system and 120A alternator
- Auxiliary engine stop button
- Glow plugs for trouble-free cold start

Cooling System

- Camshaft directly connected to seawater pump
- Seawater cooled intercooler, heat exchanger
- Connector prepared for cabin heater



Engine Operating Indicator

- Engine self protection and diagnosis
- Display CAN information
- Display engine diagnostic error code
- Audible alarm and control lamps



Air Inlet System

- Oil-wetted air cleaner
- Crankcase gases vented into the air inlet

Exhaust System

- Thermal insulated exhaust manifold
- Seawater cooled exhaust elbow

Turbocharger

- Variable Geometry Turbine (VGT)

Engine Coupler

- Life-long and rattle free rubber roller coupler for sterndrive
- Torsion spring type for gearbox

Emissions

- EPA Tier 2, IMO and RCD compliant

Pass-by Noise Level

- 69.0dB (RCD Standard 75dB)

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BUKH SEASALL SOLAS MARINE ENGINE



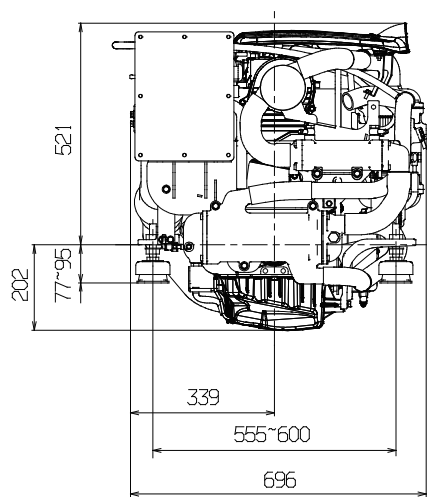
D170 Specifications

Engine type	D170J
Engine duty rating	Pleasure & Light Commercial
Configuration:	4-Stroke, 4-Valve
	VGT with intercooler, fresh water cooling
Output [ps(kW)] acc. to ISO 8665	170 (125)
Rpm@full load	3800
Cylinders	In-line 4
Displacement [cc]	2188
Bore [mm]	87
Stroke [mm]	92
Compression ratio	17.3:1
Max. torque [kgm]	34
At speed [rpm]	3500
Injection system	Common Rail Direct Injection (Solenoid injector)
Alternator [A]	120
Electronic engine diagnostic	YES
Max. Fuel consumption [L/h]	36.0
Weight [kg]	261
Propulsion system	Shaftdrive / Waterjet

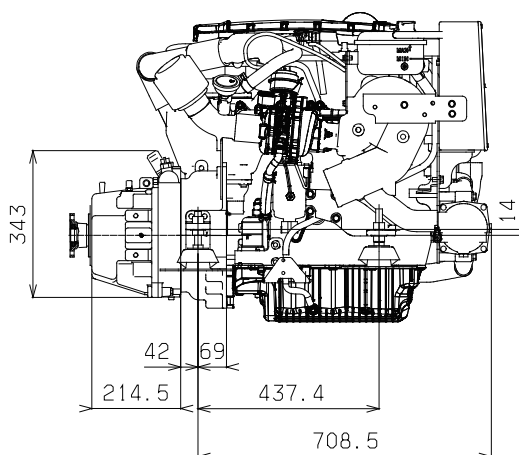
As BUKH is always endeavouring to improve the engines, specifications mentioned are subject to alterations without previous notice.

D170J Dimensions

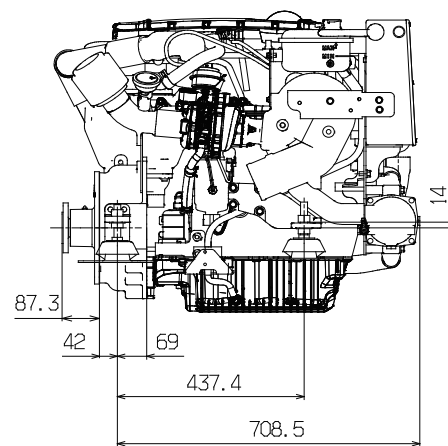
ZF 45 C + Jet Adapter (without transmission)



Front view

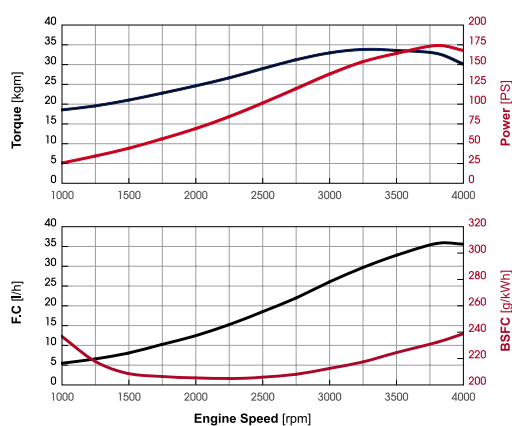


Side view



Side view (Jet Adapter)

D170J Performance Curves



Marine Gear

Model ZF 45 C for D170J:

Gear Ratio: 1 : 1
Weight (kg): 31



SOLAS approved by Det Norske Veritas
Notified Body: No. 0575