

# MONOBLOCK DIESEL



[ Marine engine series - SE 6 cylinder ]











**SE 6 cyl.** | 88-215 kW

## **MONOBLOCK DIESEL**

## SE 6 cylinder





The STEYR 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 Water Jet systems. Remarkable features of the STEYR Marine Engines are the dynamic behaviour and immediate response as well as the impressive acceleration.

#### SERVICE LIFE

The STEYR Marine Engines are manufactured using high alloy materials to provide enduring longevity for all running components. 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 STEYR 2-stage UNIT INJECTOR technology ensures a worldwide approved and smooth operation noise. The additional elastic separation of the MONOBLOCK against the aluminum casted 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 the actual EPA and IMO emission regulations.

#### TRANSMISSION

STEYR 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.

#### **TECHNICAL DESCRIPTION**

#### **ENGINE MONOBLOCK**

The unique and robust MONOBLOCK design, engine block and cylinder head made from high grade alloy cast iron, without limitation in cooling and unrivaled roundness of the cylinder, give exceptional life time for the liner.

- > Chrome-Molybdenum forged crankshaft, dynamically balanced
- > Pistons are cast from high silicon aluminum, with oil cooling gallery and a ceramic coated top ring
- > Hardened valve-seats high performance NIMONIC valve material
- > Elastic coupling on flywheel, design matched depending on application

#### **ENGINE MOUNTING**

Adjustable front and rear silent blocks capable to take propeller thrust

#### **LUBRICATION SYSTEM**

- > Exchangeable oil filter cartridge
- > Oil scavenging through dipstick pipe
- > Closed crankcase breathing system

#### **FUEL SYSTEM**

- Integrated high pressure UNIT INJECTOR up to 2,000 bar with dual stage fuel injection technology, operated by overhead camshaft and rocker arms
- > Electric fuel pump (automatic bleeding capability)
- > Exchangeable fuel filter cartridge incl. water separator

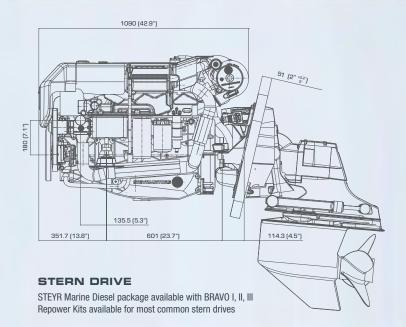
#### **EXHAUST SYSTEM**

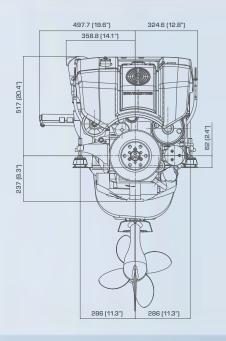
Freshwater cooled exhaust manifold and seawater cooled exhaust elbow

#### **COOLING SYSTEM**

- > Freshwater cooling system with thermostat control and expansion tank
- > Heat exchanger with integrated expansion tank system
- > Connection prepared for boiler/cabin heating system
- > Sea water pump with impeller, integrated and replaceable wear plates







Dimensions may differ according to engine types and are not for installations. Technical modifications as well as misprints and typeset errors are subjects to change.

Engine type	SE126E25	SE156E26	SE196E35	SE236E40	SE236S36	SE266E40	SE266S36	SE286E40	SE306J38
Output [crankshaft] kW (HP)	88 (120)	110 (150)	140 (190)	170 (231)	170 (231)	190 (258)	190 (258)	205 (279)	215 (292)
	4-stroke, turbocharged, intercooled, direct-injection, fresh water cooling								
rated speed [rpm]	2500	2600	3500	4000	3600	4000	3600	4000	3800
full power speed range [rpm] 1)	2175 - 2550	2350 - 2650	3050 - 3550	3550 - 4100	3350 - 3650	3550 - 4050	3350 - 3650	3500 - 4100	3600 - 3850
Cylinders	6 in line	6 in line	6 in line	6 in line	6 in line	6 in line	6 in line	6 in line	6 in line
Displacement [cm³]	3200	3200	3200	3200	3200	3200	3200	3200	3200
Bore [mm]	85	85	85	85	85	85	85	85	85
Stroke [mm]	94	94	94	94	94	94	94	94	94
Compression ratio	17:1	17:1	17:1	17:1	17:1	17:1	17:1	17:1	17:1
Max. torque [Nm]	390	450	445	470	540	530	600	570	588
at speed [rpm]	1800	1800	2050	2550	1800	2300	1800	2550	3300
Max. torque [lbs-ft]	288	332	328	347	398	391	443	420	434
Rating	P/HO/INT/MCD	P/HO/INT/MCD	P/HO/INT/MCD	P/HO/INT/MCD	P/H0	P/HO/INT	P/H0	P/HO/INT	P/HO/INT
Weight [kg] 2)	340	340	340	340	340	340	340	340	340
Weight per unit of power [kg/HP]	2,83	2,27	1,79	1,48	1,48	1,31	1,31	1,21	1,13
Weight per unit of power [lbs/HP]	6,25	5,00	3,95	3,26	3,26	2,88	2,88	2,68	2,50
Emission standard	EPA Tier III, RCD, 9768EC Rhein, BSO 2, IMO Nox, RINA, IMO Solas EPA Tier III, RCD, IMO Nox, RINA								
Injection system	two stage unit injectors								
Alternator [A]	Standard: 120 A / 12 V (Optional: 150 A / 12 V or 100 A / 24 V)								
Electronic engine diagnostic	yes								

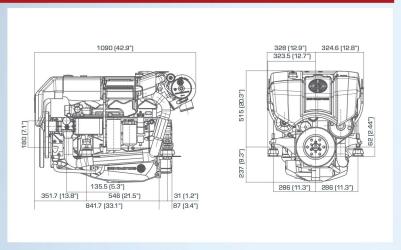
1) exact setting depending on application 2) dry weight with Bobtail set (may vary according to model and options) P... Pleasure HO...High Output INT...Intermediate Duty MCD...Medium Commercial Duty







#### **▼▼** 6-cylinder, Bobtail



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## SCC - STEYR CONTROL CENTER

#### REPRESENTS THE STATE OF THE ART

Engine Interface and Multipurpose Touch Screen-Display based on SAE J1939 CAN2.0 Databus

#### Features are:

- Intuitive and logical user-interface
- Integrated Engine Diagnostic
- Electronic switches for external inputs / outputs
- GPS: speed / position / course / time
- On-Bord-Diagnosis: water temperature, oil pressure, voltage, propeller slip,...
- Fuel management: current fuel consumption, driving range, load
- Metric, British & US values
- 5,5" Colour Display active, polarized, transflective Active Matrix TFT screen
- Comes with GPS-Sensor, installation, brackets and cables
- Casing Water proof IP 67



