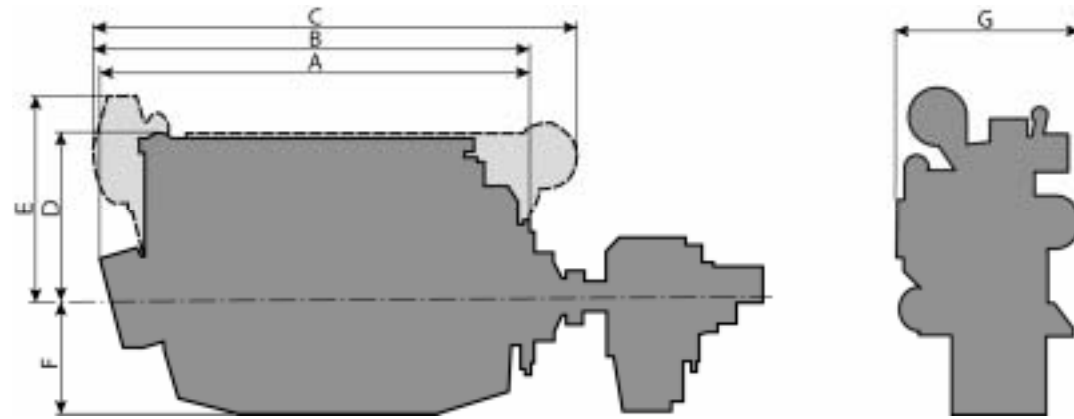


➤ Dimensions



Engine type		A	B	C	D	E	F	G
D601-6	mm	1750	1870	-	900	980 ⁷⁾	530	850
TD601-6	mm	1900 ⁶⁾	-	2020	980 ⁶⁾	980 ⁷⁾	530	850
TBD601-6(S)	mm	1900 ⁶⁾	-	2020	980 ⁶⁾	980 ⁷⁾	530	850
TBD601-6(K)	mm	1900 ⁶⁾	-	2020	980 ⁶⁾	980 ⁷⁾	530	850

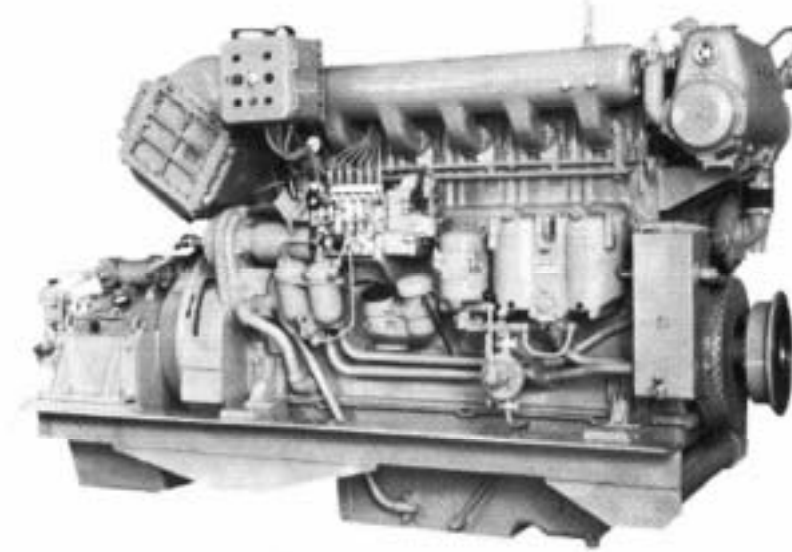
Engine type Weight (t)

D601-6	2.15
TD601-6	2.25
TBD601-6(S)	2.35
TBD601-6(K)	2.50

⁶⁾ with turbochargers

⁷⁾ with heat exchanger

Total Service



WÄRTSILÄ DEUTZ marine engines

Characteristics

- Water-cooled 6-cylinder in-line engines.
- Direct fuel injection.
- Mechanical or hydraulic governing.
- Two cooling water systems: indirect cooling and outboard/keel cooling.
- Turbochargers, air and piston cooling depends of the needed engine output.
- The engine block has internal oil channels.

Benefits

- Compact and robust engines designed for high-performances.
- Low maintenance costs due to good accessibility of all engine components.
- Low fuel consumption.
- Easy engine operation.
- Easy maintenance.
- Easy overhaul.

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➤ Engine description

Crankcase	The crankcase with reinforced ribs is made of grey cast iron.
Crankshaft	The crankshaft is made of high-grade steel and inductive tempered at the bearing positions.
Torsional vibration damper	A viscous-fluid damper is mounted on the crankshaft.
Cylinder liner	The engine has a water-cooled cylinder liner made of a centrifugally cast iron alloy.
Connecting rod	The connection rod is made of high-grade Cr-steel. It can be dismantled via the cylinder liner.
Piston	The piston is made of a special light-metal alloy and has four piston ring grooves. It has three compression rings and one oil scraper ring. The upper compression ring is chrome plated.
Cylinder head	The cylinder head is made of special grey cast iron. The cylinder head has either two inlet and two exhaust valves or one inlet and one exhaust valve. This depends on the engine output. All valves are supplied with valve rotators.
Camshaft	The camshaft is made in one piece and has hardened cams and journals. The camshaft bearing bushes are interchangeable.
Injection pump	The engine has a block pump with internal camshaft.
Governor	A mechanical or hydraulic governor, mounted at the block pump, controls the engine speed.
Fuel system	A fuel supply pump and a single or duplex filter are mounted in the fuel system.
Lubricating oil system	Forced oil circulation by engine mounted gear lubricating oil pump. Pre-lubrication by hand. Automatic pre-lubrication is optional.
Lube oil filter	Single filter or switch-over duplex filter with paper inserts in main flow. Optional: centrifugal filter in partial flow.
Starting system	Electric starter (24 V). Compressed air starter is optional.
Cooling water system	The engine can have the following cooling water systems: <ul style="list-style-type: none"> • Two-circuit cooling water with a freshwater centrifugal pump and a raw water pump, seawater resistant heat exchanger and cooling water thermostat. • Outboard cooling with freshwater pump and cooling water thermostat. Charge air cooling on engine types with a 'B' after the 'T'.
Turbocharging	Turbochargers are mounted on engine types beginning with a 'T'.
Optional	<ul style="list-style-type: none"> • Generator • Coupling • Etceteras
Classification	By all established classification societies.

➤ Technical Data

Engine type		D601-6	TD601-6	TBD601-6(S) ⁵⁾	TBD601-6(K) ⁵⁾
Model		in-line	in-line	in-line	in-line
Number of cylinders		6	6	6	6
Bore / stroke	mm	160 / 165	160 / 165	160 / 165	160 / 165
Displacement	l	19.9	19.9	19.9	19.9
Compression ratio		16	15	15	14.6
Direction of rotation ¹⁾		counter-clockwise			

Power ratings for marine propulsion units and on board generating sets

Rated speed	min ⁻¹	1000-1800	1000-1800	1000-1800	1000-1800
Engine output ²⁾	kW	110-180	151-240	185-320	240-425
Mean effective pressure	bar	6.16-6.78	8.22-9.25	10.95-11.35	14.6
Fuel consumption ³⁾	g/kWh	215-231	214-222	211-218	212-218
Lubricating oil consumption ⁴⁾	kg/h	0.23-0.37	0.25-0.50	0.30-0.70	0.40-0.87
Idling speed	min ⁻¹	600	600	600	600
Total oil capacity of engine	l	86	86	86	86

1) According to ISO 1204

2) Continuous power according to DIN 6270, exceedable by 10% for 1 hour within an operating period of 12 hours refers to rating 'A' without raw water pump.

3) Fuel consumption figures are based on the engine output, using a fuel with a calorific value of at least 41,868 kJ/kg (10,000 kcal/kg).

4) Without taking into account lube oil changes.

5) Indication 'S': engine with 2-valve cylinder head and piston cooling.

Indication 'K': engine with 4-valve cylinder head and piston cooling.

No indication: engine with 2-valve cylinder head and without piston cooling.

Power declaration based on the following ambient conditions:

Atmospheric pressure: 981 mbar

Intake air pressure temperature: 20 °C (at 60% air humidity)

Water temperature at charge air cooler inlet (if applicable): 30 °C

The values given in this data sheet are for information purposes only and not binding. The data in the offer is decisive.