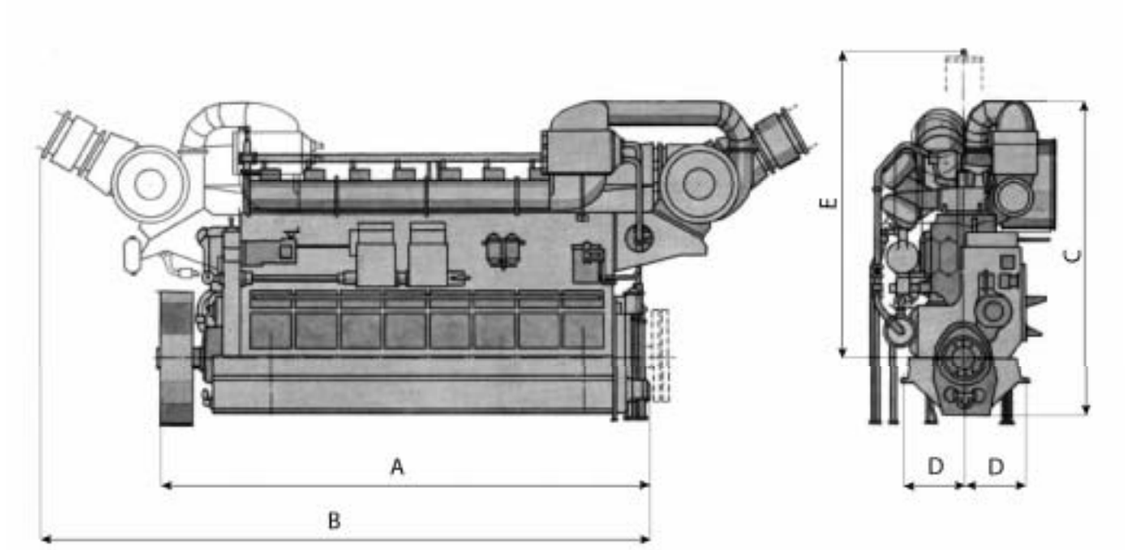
545

353-971 kW at 380 min^{-1}

➢ Dimensions



Engine type		A	B	C	D	E
R/S/V6M545	mm	3605	-	2580	645	3350
R/S/BV6M545	mm	3605	4385	2960	645	3350
R/S/V8M545	mm	4485	-	2580	645	3350
R/S/BV8M545	mm	4485	5445	3190	645	3350

Engine type		R/S/V6M545	R/S/BV6M545	R/S/V8M545	R/S/BV8M545
Net weight	t	17.0	17.0	20.0	21.0

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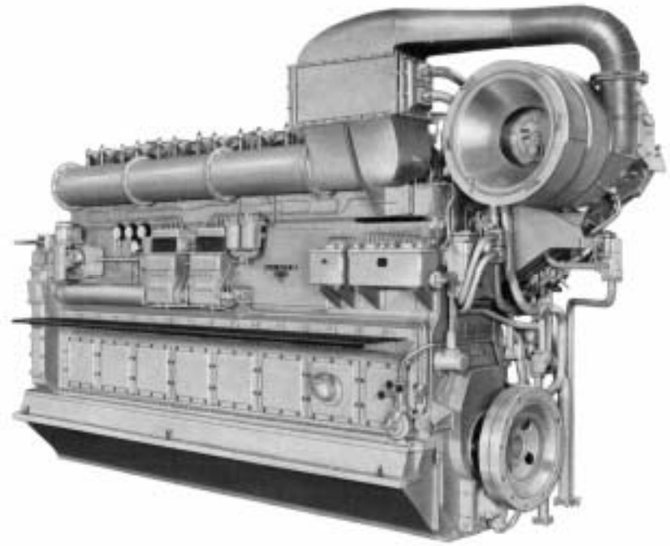
WÄRTSILÄ

Total Service



WÄRTSILÄ DEUTZ marine engines

Characteristics

- Water-cooled 6 and 8 cylinder in-line engine.
- Four-stroke engine.
- Direct fuel injection.
- Suitable for heavy fuel.

Benefits

- Engine can be furnished for direct reversing.
- Robust design.
- Low fuel consumption.
- Easy control and easy maintenance.

WÄRTSILÄ

➢ Engine description

Crankcase	The crankcase is made of grey cast iron and is made of one piece. Large sidewall openings ensure easy access.
Crankshaft	The crankshaft is made of high-quality Siemens-Martin steel.
Torsional vibration damper	Viscous-fluid or rubber vibration damper.
Cylinder liner	The water-cooled cylinder liner is made of special cast iron.
Connecting rod	The connecting rod is made of forged steel. The big end bearing is made of a lead bronze type and the small-end bearing is made of cast iron.
Piston	The piston has 7 piston rings.
Cylinder head	The cylinder head is water-cooled and contains one inlet and one exhaust valve, one injection valve and one starting valve. Expansion bolts secure the cylinder head to the crankcase.
Camshaft	The camshaft has hardened cams.
Injection pump	Block-pump.
Governor	The engine has a mechanical governor.
Fuel system	The engine has a fuel supply pump, duplex change-over filter and block-pump.
Lubricating oil system	Forced oil circulation by engine mounted gear lubricating oil pumps. The system is provided with two pumps, one elevated oil tank, oil-cooler, a duplex change-over filter, overflow valve and manometer. The cylinder liner and injection pumps are lubricated with fresh oil supplied by a mechanical lubricator, which can also be used for pre-lubrication. Surplus oil from the cylinder flows back into the oil tray. A fine filter is optional.
Lube oil filter	Duplex change-over filter.
Starting system	The engine starts with compressed air via starting valves mounted in the cylinder heads.
Cooling water system	The engine is provided with a closed circuit cooling water system. A cooling coil with raw water or cooling ribs with ventilator is used for re-cooling.
Exhaust gas system	The engine has water-cooled exhaust manifolds.
Exhaust gas line	Turbocharged engines have an isolated exhaust gas line.
Turbocharger	The engine types R/S/BV6M545 and R/S/BV8M545 have a water-cooled turbocharger, inlet silencer and insulated exhaust gas line. The turbocharger can be mounted at the driving end or free end of the engine.
Optional	Pneumatic governor for special performance, charge air cooler, cooling water pump aggregate, oil bath air filter, oil cooler for cooling water above 35 °C, built-on cooling water pump, etceteras.

➢ Technical Data

Engine type[1)]		R/S/V6M545	R/S/BV6M545	R/S/V8M545	R/S/BV8M545
Model		in-line	in-line	in-line	in-line
Number of cylinders		6	6	8	8
Bore / stroke	mm	320 /450	320 /450	320 /450	320 /450
Displacement	l	217.15	217.15	289.53	289.53
Compression ratio		13.43	12.3	13.43	12.3
Direction of rotation		clockwise or counter-clockwise			
Power ratings for marine propulsion units and on board generating sets.					
Continuous output A[2)] at 380 min^{-1}	kW	368	736	486	971
Mean effective pressure at 380 min^{-1}	bar	5.3	8.7	5.3	10.6
Specific fuel consumption					
at full load	g/kWh	221	212	221	212
at ¾ load	g/kWh	221	212	221	212
at ½ load	g/kWh	242	220	242	220
Lubricating oil consumption	kg/h	1.22	1.5	1.63	2.0
Idling speed	min^{-1}	80	80	110	110

[1)] Explanation of model designation:
'B' refers to turbocharging principle version
'V' refers to four-stroke.
'R' refers to reversible version
'S' refers to ship version.

[2)] According to DIN 6270

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