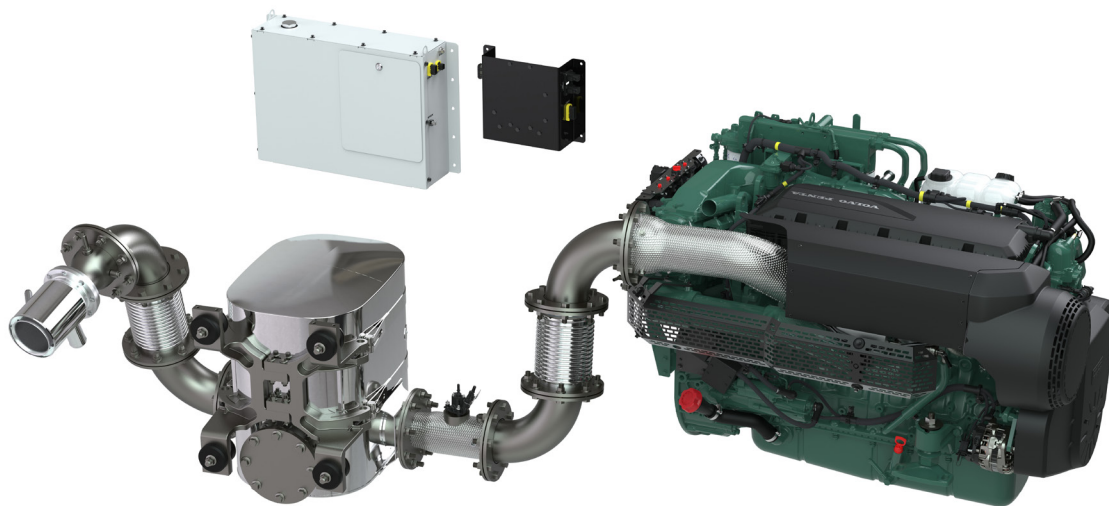


## VOLVO PENTA INBOARD DIESEL

# D8-MH

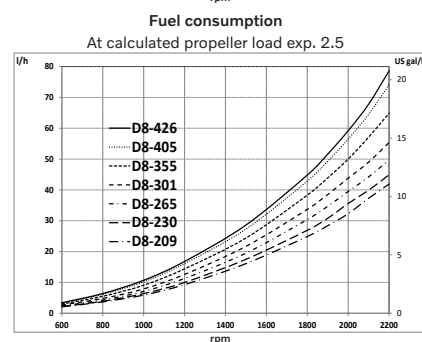
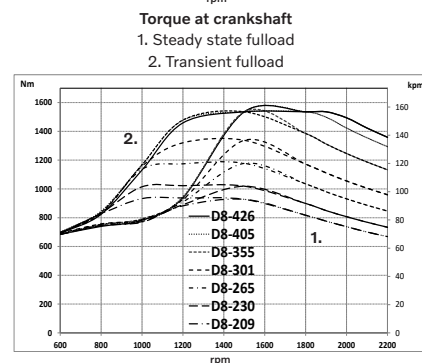
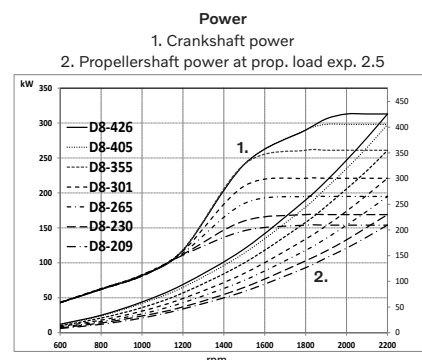
7.7 liter, in-line 6 cylinder with Exhaust aftertreatment system



### Technical Data

Engine designation	D8 -MH						
Number of cylinders	in-line 6						
Method of operation	4-stroke, direct-injected, turbocharged diesel engine with aftercooler						
Displacement, l (in <sup>3</sup> )	7.7 (469.7)						
Compression ratio	16.5:1						
Dry weight bobtail, kg (lb)	880 (1940)						
Rating	R1	R1	R1	R1	R1	R2	R2
Engine speed, rpm	1800 - 2200			2100 - 2200			
Crankshaft power, kW (hp)	154 (209)	169 (230)	195 (265)	221 (301)	261 (355)	298 (405)	313 (426)
Max. torque, Nm (lbf.ft)	928 (684)	1019 (752)	1178 (869)	1338 (987)	1536 (1133)	1536 (1133)	1536 (1133)
Emission compliance	IMO III,	IMO III,	IMO III,	IMO III,	IMO III,	IMO III,	IMO III,
	USEPA Tier3,	USEPA Tier3,	USEPA Tier3,	USEPA Tier3,	USEPA Tier3,	USEPA Tier3,	USEPA Tier3
	EU NRMM (IWW) Stage V	EU NRMM (IWW) Stage V	EU NRMM (IWW) Stage V	EU NRMM (IWW) Stage V	EU NRMM (IWW) Stage V	EU NRMM (IWW) Stage V	-
Flywheel housing/SAE size	SAE 1 and SAE 2						
Specific fuel consumption,							
@ 1800 rpm, g/kWh	210	208	204	201	197	-	-
@ 2100 rpm, g/kWh	-	-	-	-	-	207	209
@ 2200 rpm, g/kWh	230	225	216	212	211	210	213
Recommended fuel to conform to	ASTM-D975, EN 590, JIS K2204 or HVO EN15940.						

Technical data according to ISO 8665. With fuel having an LHV of 42700 kJ/kg and density of 840 g/liter at 15 °C (60 °F). Merchant fuel may differ from this specification which will influence engine power output and fuel consumption.



# D8-MH

7.7 liter, in-line 6 cylinder with Exhaust aftertreatment system

## Technical description

### Engine and block

- Cylinder block made of cast iron
- One-piece cast-iron cylinder head
- Ladder frame fitted to engine block
- Replaceable dry cylinder liners and valve seats/guides
- Drop forged crankshaft with induction hardened bearing surfaces and fillets with seven main bearings
- Four-valve-per-cylinder layout with over-head camshaft
- Each cylinder features cross-flow inlet and exhaust ducts
- Gallery oil-cooled cast aluminum alloy pistons with three piston rings
- Rear-end transmission

### Engine mounting

- Flexible engine mounting (option)

### Lubrication system

- Seawater-cooled tubular oil cooler
- Twin switchable oil filters as standard

### Fuel system

- Common rail fuel injection system
- Gear-driven fuel pump and injection timing

- Engine Management System (EMS)
- Twin switchable fuel filters as standard

### Air inlet and exhaust system

- Mid-positioned twin entry turbocharger with aftercooler
- Air filter with replaceable inserts
- Wet exhaust elbow (option)
- Loss of sea water alarm

### Cooling system

Two options available:

1. HE (Heat Exchanger)
  - Seawater-cooled tubular heat exchanger
  - Coolant system prepared for hot water outlet
  - Easily accessible seawater impeller pump in rear end
2. KC (Keel Cooling)
  - 1,5-circuit cooling system
  - Belt-driven centrifugal cooling water pump in HT circuit
  - Engine mounted expansion tank in HT circuit
  - Gear driven rubber impeller cooling water pump in CAC LT circuit

### Electrical system

- 24V with extra 12V/115A or 24V/80A alternator

### Electronic control systems

- Volvo Penta offers two options of type-approved systems for on-board electronic control
- Electronic Vessel Control (EVC) fully integrates the engines, electronics and a range of optional features
- The Marine Commercial Control System (MCC) is easily integrated into the ship's control system

### Reverse gear

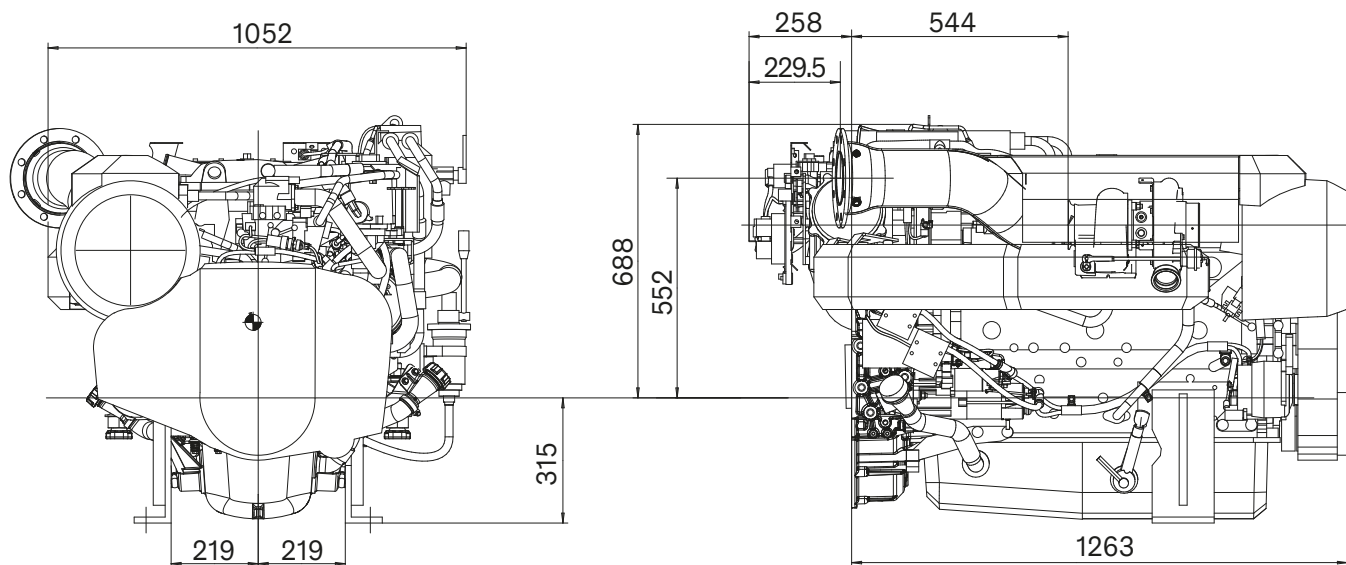
- Optional transmission harness for MGX and ZF

### Exhaust aftertreatment system

- SCR (Selective Catalytic Reduction)
- Aqueous UREA solution 32.5%
- Complete system – developed, certified, and serviced by one company
- Fully integrated capabilities
- SCR unit reduces noise by up to 35 dBA
- Wide range of installation options available

## Dimensions D8 MH

Not for installation



Not all models, standard equipment and accessories are available in all countries. All specifications are subject to change without notice. The engine illustrated may not be entirely identical to production standard engines.

Contact your local Volvo Penta dealer  
for more information regarding Volvo  
Penta engines and optional equipment/  
accessories or visit  
[www.volvopenta.com](http://www.volvopenta.com)



**AB Volvo Penta**  
SE-405 08 Göteborg, Sweden  
[www.volvopenta.com](http://www.volvopenta.com)