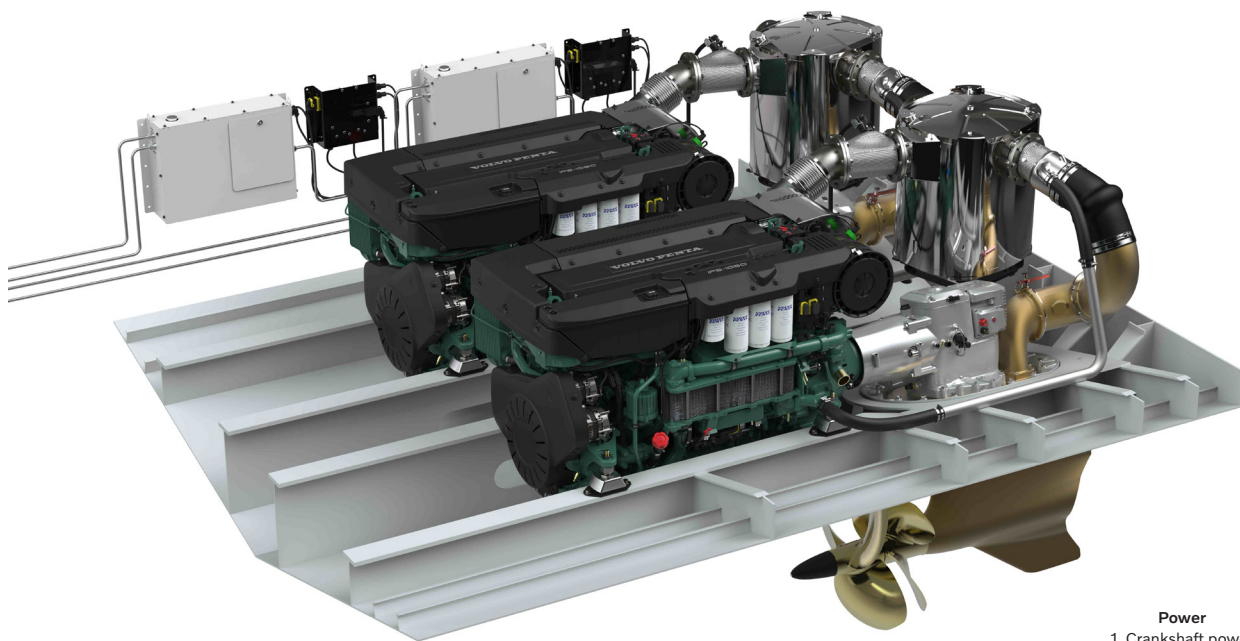


VOLVO PENTA INBOARD PERFORMANCE SYSTEM

D13-IPS 900/1050

Emission compliance: IMO Tier III and US EPA Tier 3



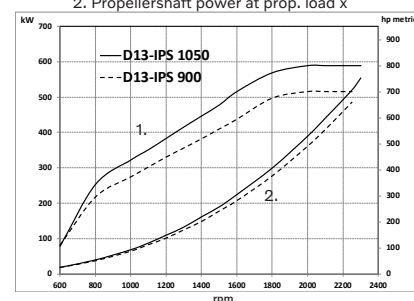
General Data

System designation	D13-IPS900	D13-IPS1050
Engine displacement, l (in ³)	12.8 (780)	12.8 (780)
Configuration	in-line 6	in-line 6
Crankshaft power, kW (hp) @ rated speed	515 (700) @2250 rpm	588 (800) @2300 rpm
Propshaft power, kW (hp) @ rated speed	485 (659) @2250 rpm	554 (753) @2300 rpm
Aspiration	Dual stage turbo with twin charge air coolers	
Rating	R3*	R4*
Package dry weight with IPS30, approx. kg (lb)	2470 (5445)	2470 (5445)
Propeller series	Q1–Q7, QS5, QE1-4	Q1–Q7, QS5, QE1-4
Voltage	24V	24V
Emission compliance	IMO Tier III, US EPA Tier 3	IMO Tier III, US EPA Tier 3
Application	Twin/multiple engine installation in planing and semi planing hulls	
Speed range	21 to 39 knots	26 to 40 knots

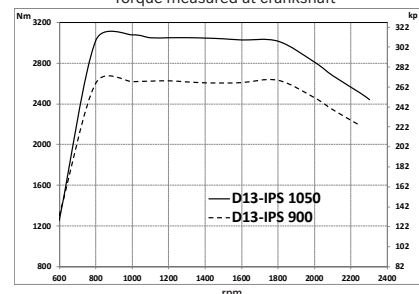
Technical data according to ISO 8665. With fuel having an LHV of 42700 kJ/kg and density of 840 g/liter at 15 °C (60 °F). Merchant fuel may differ from this specification which will influence engine power output and fuel consumption.

*Ratings R3 & R4, see explanation in Volvo Penta's Product Guide.

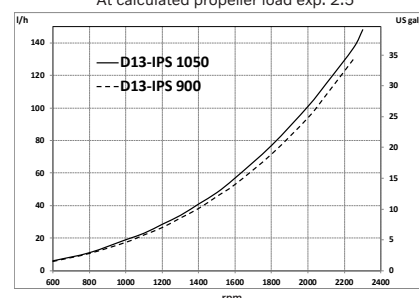
Power
1. Crankshaft power
2. Propellershaft power at prop. load x^{2,5}



Torque
Torque measured at crankshaft



Fuel consumption
At calculated propeller load exp. 2.5



D13-IPS 900/1050

Technical description

Engine and block

- Cylinder block made of cast iron
- One-piece cast-iron cylinder head
- Ladder frame fitted to engine block
- Replaceable wet 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 overhead camshaft and center position of unit injectors
- Each cylinder features cross-flow inlet and exhaust ducts
- Monotherm steel pistons
- Rear-end transmission

Engine mounting

- Flexible engine mounting

Lubrication system

- Integrated oil cooler in cylinder block
- Rear positioned twin full flow oil filter of spin-on type and by-pass filter

Fuel system

- Electronic high pressure unit injectors
- Gear-driven fuel pump and injection timing

- Electronically controlled central processing system (EMS – Engine Management System)
- Single fine fuel filter of spin-on type

Air inlet and exhaust system

- Twin entry turbo technology with freshwater-cooled charge air cooler
- Air filter with replaceable inserts
- Wet exhaust elbow/riser (option)
- Loss of sea water alarm

Cooling system

- Seawater-cooled plate heat exchanger
- Coolant system prepared for hot water outlet
- Easily accessible seawater pump in rear end of flywheel housing

Electrical system

- 24V/110A plus an optional extra 12V/115A alternator

Electronic Vessel Control (EVC)

- Fully integrates the engines, electronics and the unique set of EVC features, such as Joystick Docking, Dynamic Positioning System, Glass Cockpit and more

IPS transmission

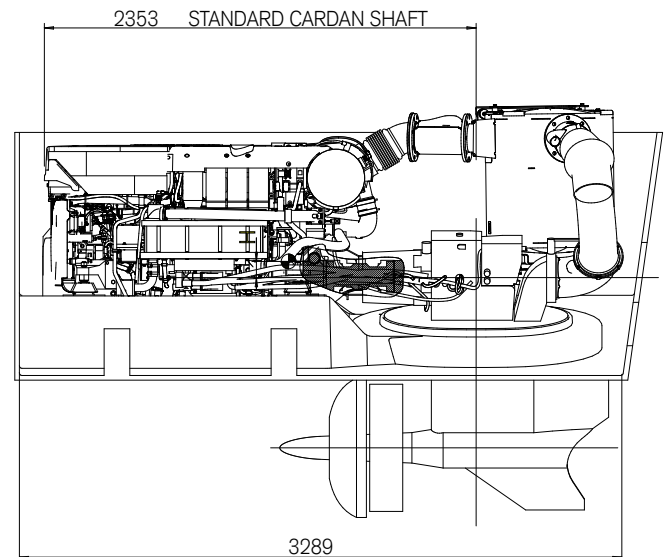
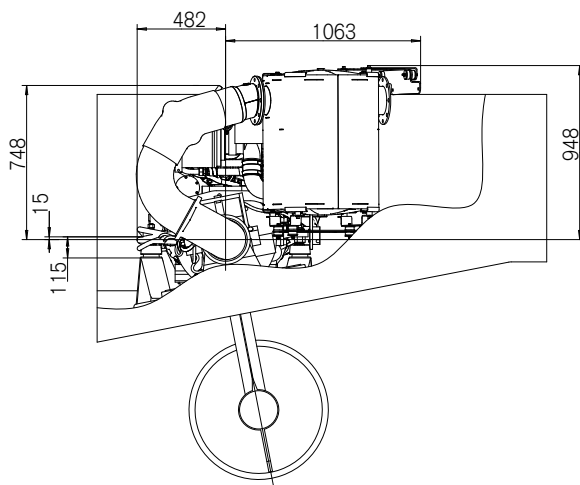
- Forward-facing, twin counter-rotating propellers
- Electronic steering, enabling features such as joystick maneuvering
- Integrated exhaust system
- Hydraulic gear shift system with low speed mode as standard
- Water in oil sensor
- Oil change from inside the boat
- Nickel Aluminum Bronze and stainless steel in all main under water components
- Complete range of propellers available
- Several optional jackshaft lengths

Exhaust aftertreatment system

- SCR (Selective Catalytic Reduction)
- Aqueous UREA solution 32% or 40%
- Complete system – developed, certified, and serviced by one company
- Fully integrated capabilities
- Prop-to-helm system (IPS)
- SCR unit reduces noise by up to 35 dBA
- Wide range of installation options available

Dimensions

Not for installation, mm



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



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