

VOLVO PENTA

VOLVO PENTA INBOARD PERFORMANCE SYSTEM

D13-IPS 900/1050/1200/1200SD/1350/1350SD

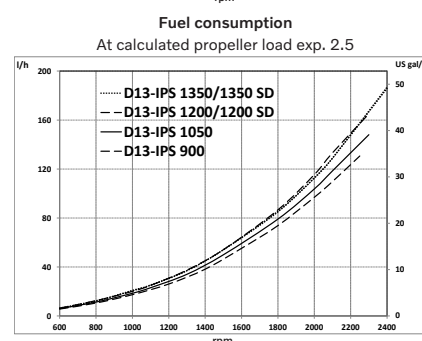
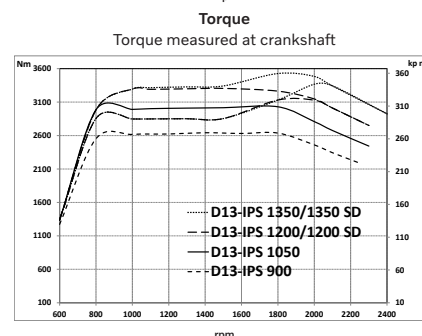
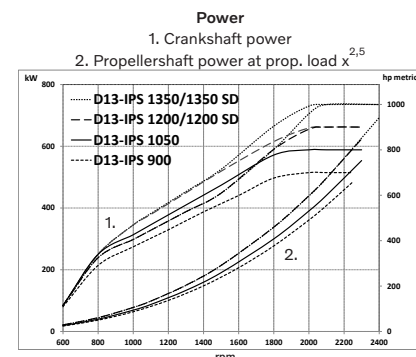
12.8 liter, in-line 6 cylinder



General Data

System designation	D13-IPS 900	D13-IPS1050	D13-IPS1200	D13-IPS1350
Engine displacement, l (in ³)	12.8 (780)	12.8 (780)	12.8 (780)	12.8 (780)
Configuration	in-line 6	in-line 6	in-line 6	in-line 6
Crankshaft power, kW (hp)	515 (700) @2250 rpm	588 (800) @2300 rpm	662 (900) @2300 rpm	735 (1000) @ 2400 rpm
Propshaft power, kW (hp)	485 (659) @2250 rpm	554 (753) @2300 rpm	624 (848) @2300 rpm	693 (942) @ 2400 rpm
Aspiration	Dual stage turbo with twin charge air coolers			
Rating	R3	R4	R5	R5
Dry weight with IPS30, approx. kg (lb)	2470 (5445)	2470 (5445)	2475 (5456)	2480 (5467)
Propeller series	Q1-Q7, QS5, QE1-4	Q1-Q8	Q2-Q8 QS4-Q1 (SD)	Q2-Q8 QS4-Q1 (SD)
Voltage	24V	24V	24V	24V
Emission compliance	IMO NOx, EU RCD Stage II, US EPA Tier 3, China 2			
Application	Twin/multiple engine installation in planing hulls			
Speed range	21 to 39 knots	26 to 42 knots	26 to 42 knots	19 to 44 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.



D13-IPS 1050/1200/1200SD/1350/1350SD

12.8 liter, in-line 6 cylinder

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



Learn more about Volvo Penta IPS and the unique functions the IPS system can be extended with.

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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