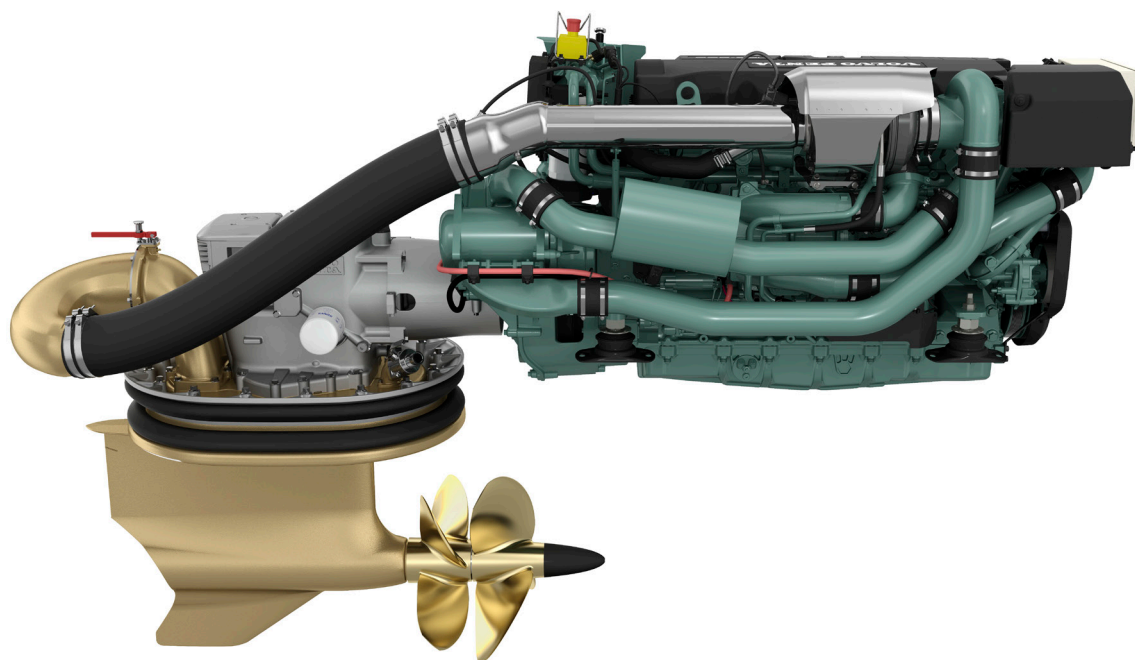


## VOLVO PENTA INBOARD PERFORMANCE SYSTEM

# D11-IPS 650/800

10.84 liter, in-line 6 cylinder



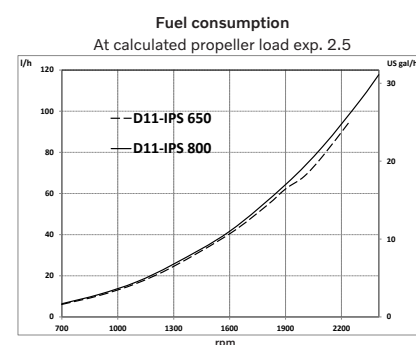
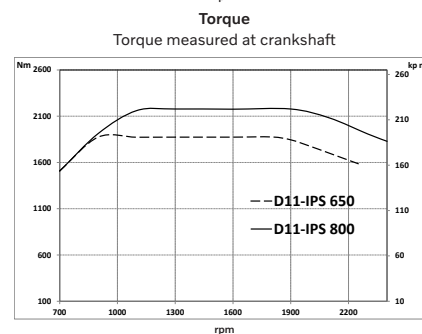
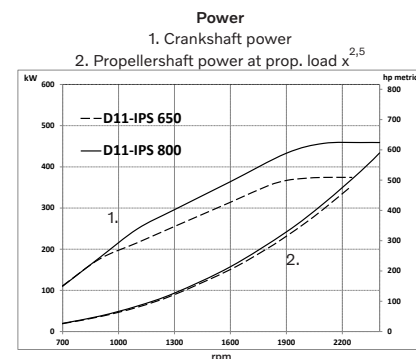
### General Data

| System designation                        | IPS650                                             | IPS800               |
|-------------------------------------------|----------------------------------------------------|----------------------|
| Engine displacement, l (in <sup>3</sup> ) | 10.84 (661.3)                                      | 10.84 (661.3)        |
| Configuration                             | in-line 6                                          | in-line 6            |
| Crankshaft power, kW (hp)                 | 374 (510) @ 2250 rpm                               | 459 (625) @ 2400 rpm |
| Propshaft power, kW (hp)                  | 354 (482) @ 2250 rpm                               | 435 (591) @ 2400 rpm |
| Aspiration                                | Twin entry turbo and compressor                    |                      |
| Rating                                    | R3*                                                | R4**                 |
| Package dry weight, approx. kg (lb)       | 1955 (4310)                                        | 1955 (4310)          |
| Propeller series                          | P2-P8, PS4-PS5                                     | P2-P8, PS4-PS5       |
| Voltage                                   | 24V                                                | 24V                  |
| Emission compliance                       | IMO NOx, EU RCD Stage II, US EPA Tier 3            |                      |
| Application                               | Twin/multiple engine installation in planing hulls |                      |
| Speed range                               | 22 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.

\*RATING 3. For commercial vessels or craft with high demands on speed and acceleration, planing or semi-planing hulls in cyclical operation.

\*\*RATING 4. For light planing craft in commercial operation



# D11-IPS 650/800

10.84 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
- Gallery oil-cooled cast aluminum alloy pistons with three piston rings
- Rear-end transmission

### Engine mounting

- Flexible engine mounting (option)

### Lubrication system

- Integrated oil cooler in cylinder block
- Symmetrically 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, with water separator and water alarm

### 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

- Seawater-cooled tubular heat exchanger
- Coolant system prepared for hot water outlet
- Easily accessible seawater impeller pump in rear end

### Electrical system

- 24V with extra 12V/115A or 24V/80A 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, covering boat speeds from 22 to 40 knots
- Several optional jackshaft lengths



Learn more about Volvo Penta IPS and the unique functions the IPS system can be extended with, visit [www.volvopenta.com](http://www.volvopenta.com).

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)



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