These are the characteristics of the 912:

- Air-cooled 3-, 4-, 5-, 6-cylinder naturally aspirated in-line-engines.
- Direct injection.
- Advanced injection and combustion system.
- PTOs via gear, V-belt and crankshaft.
- Extremely compact design.
- High torque at low speeds.
- Modular system with single cylinder arrangement and high degree of parts commonality.
- Customized component system with many different peripheral parts.
- Cold-starting ability even under extreme climatic conditions.

These are the benefits for you:

- Fast response to load changes.
- Low noise emission, high cost savings thanks to less noise insulation requirement.
- Low operating costs thanks to lower fuel consumption and long maintenance intervals with reduced maintenance requirement.
- Excellent smooth-running characteristics thanks to low engine vibrations.
- Minimal environmental impact. Meets exhaust regulation EU-RL 97/68.
- Extremely reliable and durable.
- Easy-to-install unit (engine with integrated cooling system).

BDC
From the library of Barrington Diesel Club
BDC for engine manuals and specs
https://barringtondieselclub.co.za/
Engine description

Cooling system: Air-cooled with integrated axial-flow blower
Crankcase: Grey cast iron
Cylinder head: Aluminium single cylinder heads
Valve arrangement/timing: Overhead valves in the cylinder head, one inlet and one exhaust valve per cylinder, actuated from gear-driven camshaft via tappets, push-rods and rocker arms
Piston: Three-ring piston: two compression rings and one oil scraper ring
Piston cooling: Oil spray via nozzle
Crankshaft: Drop-forged steel crankshaft with bolted counterweights
Connecting rod: Drop-forged steel rod, diagonally split
Main and big end bearings: Ready-to-install tri-metal plain bearings
Camshaft: Steel, seated in bi-metal bearing on the blower side
Lubrication system: Forced-feed circulation lubrication with rotary pump which feeds both lubricating and heating systems (if heating is fitted)
Engine oil cooler: Integrated aluminium cooler
Oil cooler thermostat: Oil cooler flow thermostatically controlled on engines with heating system
Lube oil filter: Paper-type micro-filter as replaceable-cartridge full flow filter
Injection pump/governor: In-line injection pump with mechanical centrifugal governor
Injection nozzle: Five-hole-nozzle
Fuel filter: Replaceable cartridge
Starter motor: 12V; 2.7 kW (Standard)
Alternator: Three-phase alternator, 14 V; 55A (Standard)
Heating system: Optional connection for cab heating
Options: Intake manifold connections, exhaust manifold connections, compressors, hydraulic pumps, engine mounts rigid and flexible, oil pans, SAE 1/2/3/4 flywheel housings, three-phase alternators 12 and 24 Volt, integrated hydraulic oil cooler, cooling fans controlled by exhaust thermostat
### Technical data

<table>
<thead>
<tr>
<th>Engine type</th>
<th>F3L912</th>
<th>F4L912</th>
<th>F5L912</th>
<th>F6L912</th>
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<tbody>
<tr>
<td>Number of cylinders</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>Bore/ stroke (mm)</td>
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<td>100/120</td>
<td>100/120</td>
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<tr>
<td>Displacement (l)</td>
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<td>4.71</td>
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<td>Compression ratio</td>
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<td>18</td>
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<td>18</td>
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<tr>
<td>Max. rated speed (min⁻¹)</td>
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<td>Mean piston speed (m/s)</td>
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#### Power ratings for construction equipment engines

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<tr>
<th></th>
<th>kW</th>
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<td>at speed (min⁻¹)</td>
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<tr>
<td>Mean effective pressure (bar)</td>
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<td>6.88</td>
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</table>

### Model designation

**F 6 L 912**

- **F** = High-speed four-stroke engine
- **L** = Air-cooled
- **Number of cylinders**: 3, 4, 5, 6

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1. Power ratings without deduction fan power requirement, incl. cooling system, meeting exhaust emission limits of EU-RL 97/68.
2. Power ratings to DIN ISO 1585, EG-RL80/1269/EWG ECE-R 24
3. Power ratings for non-mentioned speeds upon request.
4. Power to DIN ISO 3046/1 (IFN). The fuel stop IFN power is an ISO net power at flywheel under reference conditions with all essential auxiliaries driven by the engine.
5. At optimal operating point. Specific fuel consumption based on diesel fuel with a specific gravity of 0.835 kg/dm³ at 15°C.
6. Without starter motor/alternator, radiator and liquids, however with flywheel and flywheel housing and complete integrated cooling system.

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

<table>
<thead>
<tr>
<th>Engine</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
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<tr>
<td>F3L912</td>
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</table>

*) with standard flywheel, incl. cooling system
**) with standard oil pan, oil sump central

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**Dimensions**

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Standard engines

![Graphs showing engine performance metrics for F5L912 and F6L912 engines.](https://barringtondieselclub.co.za/)

BDC for engine manuals and specs
https://barringtondieselclub.co.za/