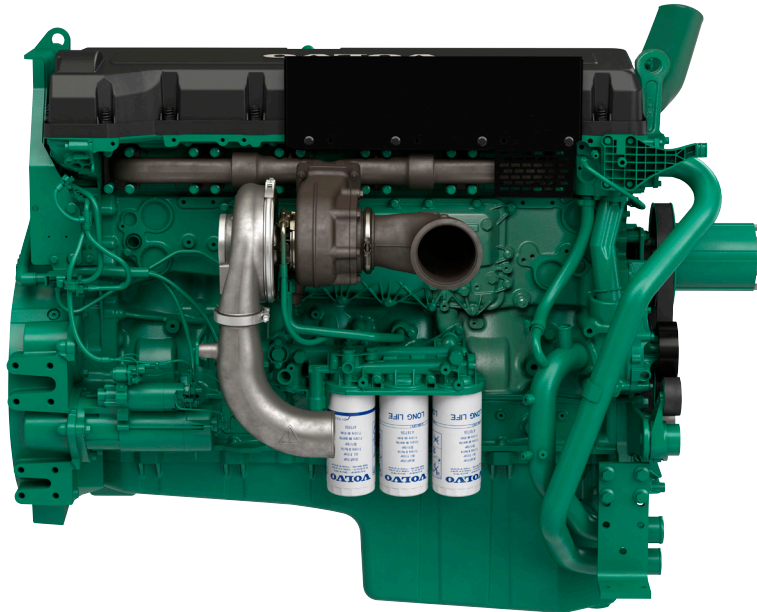


# TAD1640-1642VE-C

16.12 liter, in-line 6 cylinder - 405, 450 and 515 kW

Emission compliance: EU Stage II / EPA Tier 2



**TAD1640-1642VE- C is a powerful, reliable and economical Versatile Diesel Engine range built on the Volvo in-line six concept.**

#### Low cost of ownership

World class fuel efficiency combined with a reliable engine gives high uptime as well as low cost of ownership.

#### Compact and simple installation

As optional equipment all material needed in order to install the engine can be ordered from Volvo Penta. Installation guidelines as well as drawings and CAD models are easy to access. The result is an engine that is easy to install with minor impact on existing machine layout.

#### Durability & low noise

Designed for the easiest, fastest and most economical installation. Well balanced to produce smooth operation with low noise level, featured with high torque.

#### Power and torque

Maximum power and torque available at low rpm. As a result, noise as well as fuel consumption is very low. Useful engine speed for the TAD1640-1642VE-C is due to power and torque layout very flexible.

#### Low exhaust emission

Efficient injection as well as robust engine design contributes to excellent combustion and low fuel

consumption. TAD1640-1642VE-C complies with former EU Stage II / EPA Tier 2 emissions legislations, and is now intended for unregulated markets.

#### Easy service & maintenance

Easily accessible service and maintenance points contribute to the ease of service of the engine. As optional equipment possible to remote mount filters and service points.

- Low cost of ownership
- Proven and straight-forward design
- Compact and simple installation
- High power and torque available at low engine speed
- Wide range of optional equipment, please see order specification

	TAD1640VE-C	TAD1641VE-C	TAD1642VE-C
Power output, kW/hp	405/551	450/612	515/700
at speed, rpm	1900	1800	1700
Max. torque, Nm/lb/ft	2771/2044	2911/2147	3230/2382
at speed, rpm	1260	1260	1260

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## Technical data

Configuration and no. of cylinders .....	in-line 6
Displacement, l (in <sup>3</sup> ) .....	16.12 (984)
Method of operation .....	4-stroke
Bore, mm (in.) .....	144 (5.67)
Stroke, mm (in.) .....	165 (6.50)
Wet weight, engine only, kg (lb).....	1560 (3439)
Compression ratio.....	17.0:1

## Technical description

### Engine and block

- Cast iron cylinder block
- Wet, replaceable cylinder liners
- Overhead camshaft and four valves per cylinder

### Lubrication system

- Full flow disposable spin-on oil filter
- Gear type lubricating oil pump, gear driven by the transmission
- Oil level sensor at startup

### Fuel system

- Electronic high pressure unit injectors
- Fuel pre filter with water separator and water-in-fuel indicator/ alarm
- Gear driven low-pressure fuel pump
- Fine fuel filter with manual feed pump and fuel pressure switch

### Cooling system

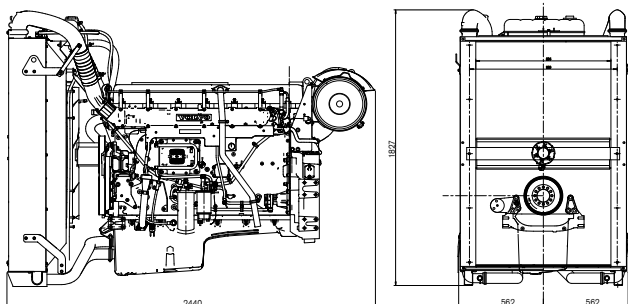
- Available with matching and tested cooling system
- Belt driven coolant pump with high degree of efficiency

### Electrical system

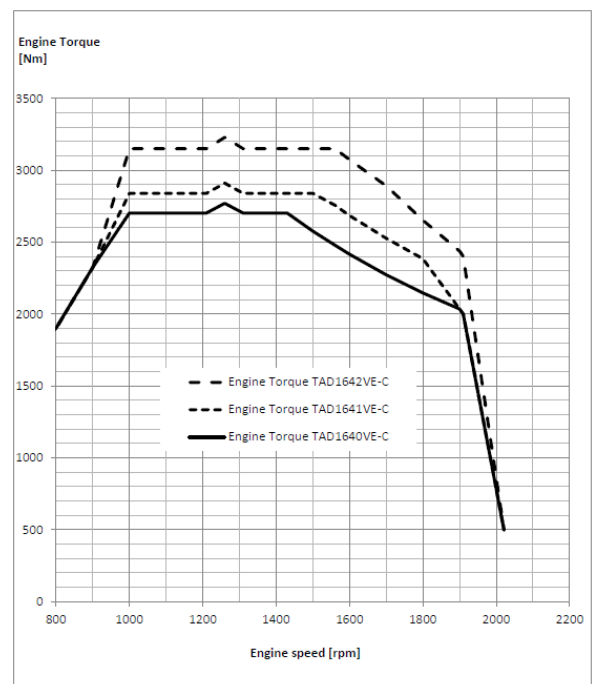
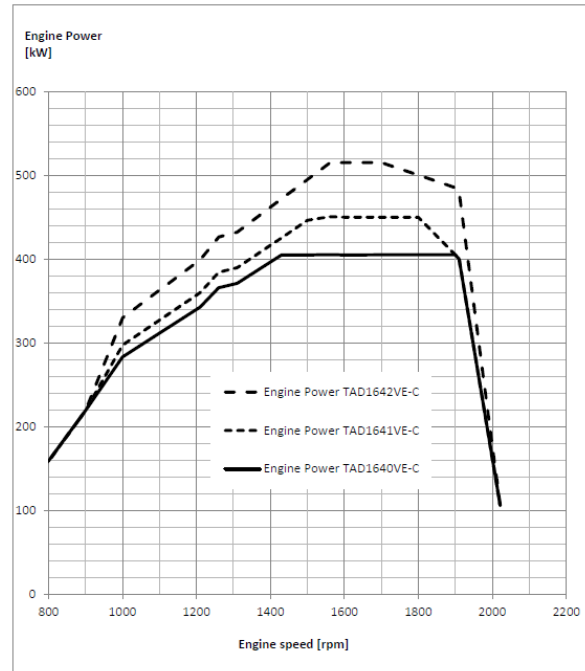
- Engine Management System (EMS), includes advanced features for diagnostics and fault tracing.
- The instruments and controls connect to the engine via the CAN SAE J1939 interface. Options available for engine control equipment.

## Dimensions

Not for installation. Dimensions in mm.



## Characteristics



Please note that products illustrated may differ from production models.

Not all models and accessories are available in all markets, and standard equipment may vary between different markets. Every effort has been made to ensure that facts and figures are correct at the time of publication. However, Volvo Penta reserves the right to make changes without prior notice at any time.

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