1104D-E44T Industrial Diesel Engine

74.5 kW (100 hp) @ 2200 rpm

EU Stage IIIA/U.S. EPA Tier 3 equivalent

Whatever your application, there's an 1104 engine for you. Part of the Perkins 1100 Series, the range's 4 cylinder, 4.4 litre engines are smooth and quiet in operation. Designed to meet EU Stage II/IIIA and U.S. EPA Tier 2/Tier 3 equivalent emissions standards, the 1104 range offer a choice of mechanical or electronically controlled common rail engines. Electronically controlled engines deliver the right fuel injection for the load applied to the engine. Common front and rear ends, connection points and components across the range, making it easy to install a different 1100 Series engine in your application.
Electronic common rail, turbocharged engine designed to meet EU Stage IIIA/U.S. EPA Tier 3 equivalent emissions standards for off-road machines.

Specifications

Power Rating		
Minimum power	68 kW	91.2 hp
Maximum power	74.5 kW	100 hp
Rated speed	2200 rpm	
Maximum torque	420 Nm @ 1400 rpm	310 lb-ft @ 1400 rpm

Emission Standards	
Emissions	EU Stage IIIA/U.S. EPA Tier 3 equivalent

General		
Number of cylinders	4 inline	
Bore	105 mm	4.13 in
Stroke	127 mm	5 in
Displacement	4.4 litres	269 cubic in
Aspiration	Turbocharged	
Cycle	4 stroke	
Compression ratio	16.2:1	
Combustion system	Direct injection	
Rotation (from flywheel end)	Anti-clockwise	
Cooling system	Liquid	

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Total coolant capacity	7 litres	1.8 US gal
Total lubricating capacity**	8 litres	2.1 US gal

Engine Dimensions*		
Length	631 mm	24.8 in
Width	647 mm	25.4 in
Height	823 mm	32.4 in
Dry weight	360 kg	794 lb

Disclaimer		
*Final dimensions dependent on selected options	0	0
**Dependent on sump option and gradeability requirements	0	0

Features and Benefits

Choice of electronic engine

A robust electronically controlled common rail engine provides the opportunity to increase power and performance, whilst maintaining displacement volume, and still achieving emissions standards. It uses advanced common rail, fuel pump and injectors, combined with the latest high capacity fuel filtration to provide an engine which is reliable when used with varying standards of fuel around the world. With an electronic control and high pressure common rail system, the engine can be integrated fully into the machine, delivering smoother operation for the user, faster response and providing operator feedback on engine performance.

Designed for lesser regulated territories

The 1100 Series range of engines have been specifically designed for use in territories with Stage II/IIIA and Tier 2/3 equivalent emissions standards, using the best technologies to ensure a reliable and easy to maintain machine. With a choice of naturally aspirated, turbocharged and turbocharged aftercooled it offers the best combination of power delivery and response.

Ease of maintenance

All of the engines have 500 hour service intervals. And single side service components, for ease of end user servicing.

Easy to upgrade

Common front and rear ends, connection points and components across the range mean that you can easily install a different 1100 Series engine in your application.

Expertise whenever you need it

With our network of distributors, you will find all the advice you need to ensure you get the right engine. By building strong relationships with you, we make sure you have access to the full power of the Perkins brand and expertise. Our fully trained experts deliver total service support 24/7, 365 days of the year. Whether you need technical information, parts identification or ordering, our distribution network is there to make sure your Perkins engine keeps on running at peak performance.

Oil and fuel filtration

The high quality oil and fuel filtration on our 1100 Series range produces an engine that is reliable and durable. Ecoplus fuel filtration is available to boost its clean running qualities and the engine is capable of running on a wide range of global fuels including biodiesel.

Technical Information

Air inlet system

- Air compressor
- Exhaust manifold
- Induction manifold

Control system

- Alternator
- Control panel
- Starter motor

Cooling system

- Cooling pack
- Fan drive and location

Flywheel and flywheel housing

- Adaptor plate
- Flywheel and starter ring

Fuel system

- Fuel filter

General

- Cold start aid
- Engine mountings

Oil system

- Lubricating oil filter and breather
- Oil filter positions

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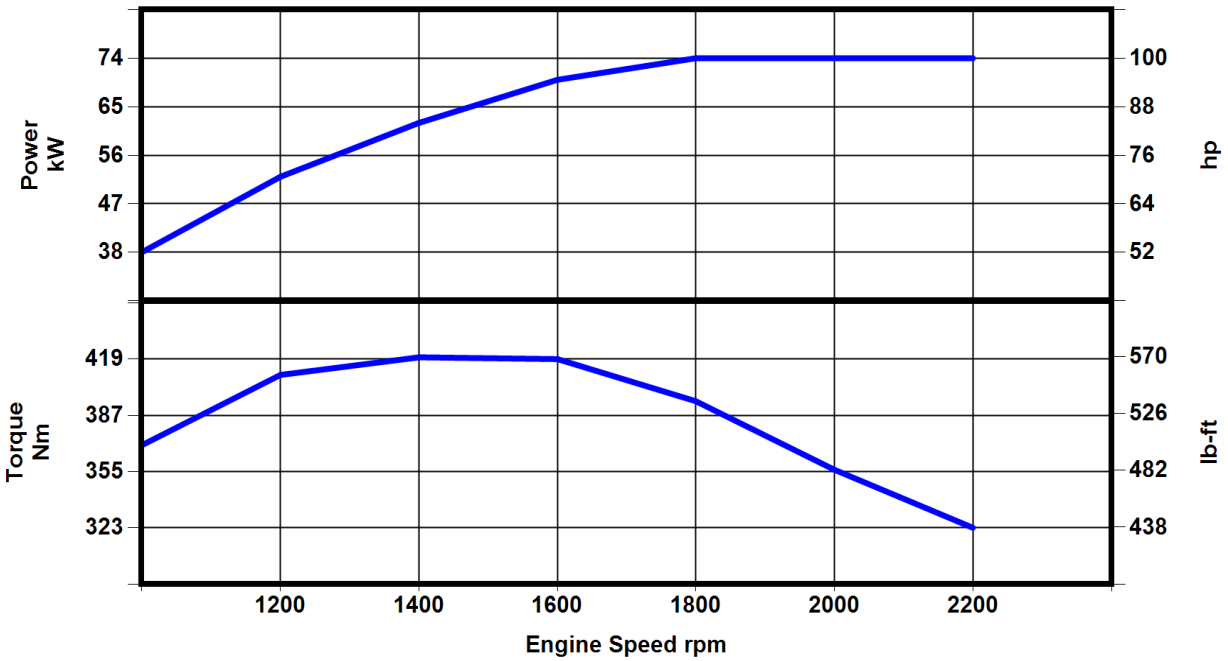
Power take-off

- SAE B PTO drive
- Timing case and gear driven auxiliaries
- Belt driven auxiliaries
- Front end drive

1100 Series 1104D-E44T INDUSTRIAL ENGINE

EU Stage IIIA/U.S. EPA Tier 3 equivalent

68.0-74.5 kW / 91.2-99.9 hp



Power kW	Power hp	Rated Speed (rpm)	Torque Nm	Torque lb-ft	Speed (rpm)	Rating Type
68.0	91.2	2200	395	535	1400	Industrial C intermittent rating
74.5	99.9	2200	420	569	1400	Industrial C intermittent rating

Rating Standard ISO 14396:2002
Additional ratings are available for specific customer requirements. Consult your Perkins distributor.
Unless otherwise specified, all stated data is for maximum rated speed and 100% load.
B rating performance data will be added upon availability

Rating Definitions and Conditions

IND-C (Intermittent) Rating
Is the horsepower and speed capability of the engine where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

Rating Conditions for Diesel Engines – up to 7.1 liters are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in. Hg), with a vapor pressure of 1 kPa (0.295 in Hg) and 25°C (77°F). Performance is measured using fuel to specification EPA 2D 89.330-96 with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).