1104D-44T Industrial Diesel Engine

55.5-74.5 kW (75-99.9 hp) @ 2200-2400 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. 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	55.5 kW	75 hp			
Maximum power	74.5 kW	99.9 hp			
Rated speed	2200-2400 rpm				
Maximum torque	392 Nm @ 1400 rpm	289 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	1.9 US gal
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Engine Dimensions*					
Length	663 mm	26.1 in			
Width	597 mm	23.5 in			
Height	810 mm	31.9 in			
Dry weight	306 kg	674.6 lb			

Disclaimer		
*Final dimensions dependent on selected options	0	0

Features and Benefits

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.



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Technical Information

Air inlet system

- Air compressor
- Exhaust manifold
- · Induction manifold

Control system

- Alternator
- Starter motor

Cooling system

- · Cooling pack
- Fan drive

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

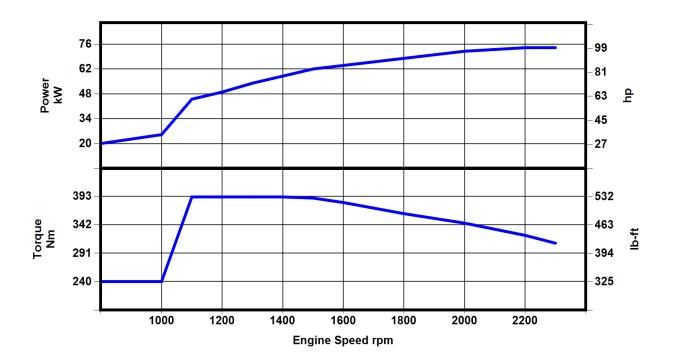
Power take-off

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



1100 Series 1104D-44T INDUSTRIAL ENGINE

EU Stage IIIA/U.S. EPA Tier 3 equivalent 55.5-74.5 kW / 74.4-99.9 hp



Power kW	Power hp	Rated Speed (rpm)	Torque Nm	Torque lb-ft	Speed (rpm)	Rating Type
55.5	74.4	2200	307	416	1400	Industrial C intermittent rating
55.5	74.4	2300	307	416	1400	Industrial C intermittent rating
55.5	74.4	2400	307	416	1400	Industrial C intermittent rating
57.5	77.1	2200	309	419	1400	Industrial C intermittent rating
57.5	77.1	2300	309	419	1400	Industrial C intermittent rating
57.5	77.1	2400	309	419	1400	Industrial C intermittent rating
60.5	81.1	2200	352	477	1400	Industrial C intermittent rating
60.5	81.1	2300	352	477	1400	Industrial C intermittent rating
60.5	81.1	2400	352	477	1400	Industrial C intermittent rating
62.5	83.8	2200	354	480	1400	Industrial C intermittent rating
62.5	83.8	2300	354	480	1400	Industrial C intermittent rating
62.5	83.8	2400	354	480	1400	Industrial C intermittent rating
64.0	85.8	2200	368	499	1400	Industrial C intermittent rating



1100 Series 1104D-44T INDUSTRIAL ENGINE

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

55.5-74.5 kW / 74.4-99.9 hp

64.0	85.8	2300	368	499	1400	Industrial C intermittent rating
66.0	88.5	2200	370	501	1400	Industrial C intermittent rating
66.0	88.5	2300	370	501	1400	Industrial C intermittent rating
68.0	91.2	2200	390	528	1400	Industrial C intermittent rating
68.0	91.2	2300	390	528	1400	Industrial C intermittent rating
70.0	93.9	2200	392	531	1400	Industrial C intermittent rating
70.0	93.9	2300	392	531	1400	Industrial C intermittent rating
72.5	97.2	2200	390	528	1400	Industrial C intermittent rating
72.5	97.2	2300	390	528	1400	Industrial C intermittent rating
74.5	99.9	2200	392	531	1400	Industrial C intermittent rating
74.5	99.9	2300	392	531	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).

