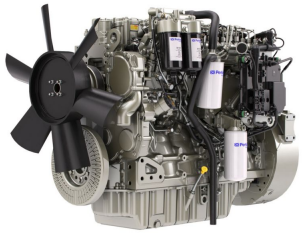
1106D-E70TA Industrial Diesel Engine

116.5-205 kW (156.2-274.9 hp)
EU Stage IIIA/U.S. EPA Tier 3 equivalent

The 6 cylinder option in the Perkins 1100 Series, the 1106 range delivers the power you need for earth moving and construction all the way through to agricultural use and warehousing. Choice of mechanically or electronically controlled engines depending on the power output required and application. With models meeting EU Stage II/Stage III and U.S. EPA Tier 2/Tier 3 equivalent emissions standards, the engines form a common platform with our 1200 Series Stage IV/Tier 4 Final engines. This allows for an easy transition when you need to upgrade to the next emissions level.
Electronic turbocharged aspirated, designed to meet EU Stage IIIA/U.S. EPA Tier 3 equivalent emissions standards.



Specifications

Power Rating		
Minimum Power	116.5 kW	156.2 HP
Maximum Power	205 kW	274.9 HP
Maximum Torque	1050 Nm @ 1400 rpm	774.4 lb-ft @ 1400 rpm
Rated Speed	2200-2500 rpm	

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

General		
Bore	105 mm	4.13 in
Stroke	135 mm	5.3 in
Displacement	7.01 l	427.7 in³
Aspiration	Turbocharged aftercooled	
Rotation from Flywheel End	Anti-clockwise	
Combustion System	Direct injection	
Compression Ratio	16.8:1	
Cooling System	Liquid	
Cycle	4 stroke	
Number of Cylinders	6 inline	

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Total Coolant Capacity	15.2 l	4 gal (US)
Total Lubricating Capacity	16 l	4.2 gal (US)

Engine Dimensions*		
Dry Weight	506 kg	1115 lb
Height	817 mm	32.2 in
Length	1050 mm	36.5 in
Width	668 mm	26.2 in

Features and Benefits

Choice of electronic engine

A robust electronically controlled common rail engine provides the opportunity to increase power and low speed torque, whilst maintaining displacement volume, and still achieving the 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 1106 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. It uses a turbocharged aftercooled engine to offer the best combination of power delivery and response, whilst still meeting the emissions standards.

Ease of maintenance

The engines have mechanical or electronic fuel injection with standard 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

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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

Flywheels and flywheel housing

- Adaptor plate
- Flywheel and starter ring
- SAE B PTO Drive

Fuel system

- Fuel filter

General

- Cold start aid
- Engine mountings

Oil system

- Lubricating oil filter and breather
- Oil filter
- Sound isolated lubricating oil sump

Power take-off

- Belt driven auxiliaries
- Front end drive

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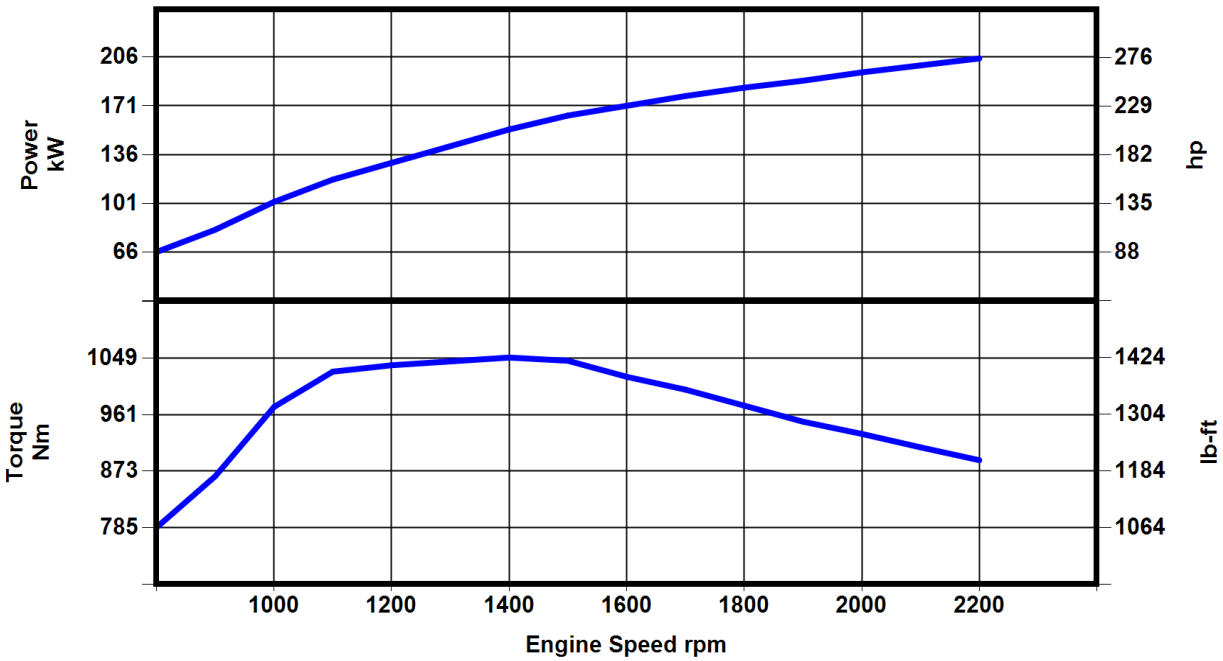
- Timing case and gear driven auxiliaries

1100 Series 1106D-E70TA INDUSTRIAL ENGINE

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

93.0-205 kW / 125-275 hp



Power kW	Power hp	Rated Speed (rpm)	Torque Nm	Torque lb-ft	Speed (rpm)	Rating Type
93.0	125	1800	598	810	1400	Industrial C intermittent rating
105	141	1800	725	982	1350	Industrial C intermittent rating
111	149	1800	696	943	1400	Industrial C intermittent rating
116	155	2200	706	957	1400	Industrial C intermittent rating
116	156	2200	706	957	1400	Industrial C intermittent rating
118	158	1800	696	943	1400	Industrial C intermittent rating
118	158	2000	706	957	1400	Industrial C intermittent rating
119	160	1800	775	1050	1350	Industrial C intermittent rating
125	168	2000	823	1115	1000	Industrial C intermittent rating
129	173	2000	800	1084	1400	Industrial C intermittent rating
129	173	2200	800	1084	1400	Industrial C intermittent rating
129	173	2000	868	1176	1400	Industrial C intermittent rating
129	173	2200	868	1176	1400	Industrial C intermittent rating

1100 Series 1106D-E70TA INDUSTRIAL ENGINE

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

93.0-205 kW / 125-275 hp

130	174	2500	695	942	1400	Industrial C intermittent rating
139	186	2000	920	1247	1400	Industrial C intermittent rating
140	188	2000	818	1108	1400	Industrial C intermittent rating
140	188	1800	900	1220	1400	Industrial C intermittent rating
147	197	1900	922	1249	1400	Industrial C intermittent rating
151	202	2200	922	1249	1400	Industrial C intermittent rating
159	213	1900	922	1249	1400	Industrial C intermittent rating
159	213	2200	932	1263	1400	Industrial C intermittent rating
167	224	2000	975	1321	1400	Industrial C intermittent rating
167	224	2200	975	1321	1400	Industrial C intermittent rating
168	225	2200	1020	1382	1400	Industrial C intermittent rating
168	225	2000	1028	1393	1400	Industrial C intermittent rating
168	225	2200	1028	1393	1400	Industrial C intermittent rating
186	249	2000	1050	1423	1400	Industrial C intermittent rating
186	249	2200	1050	1423	1400	Industrial C intermittent rating
195	261	2000	1050	1423	1400	Industrial C intermittent rating
204	274	2200	1050	1423	1400	Industrial C intermittent rating
205	275	2200	1050	1423	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).