

Lombardini Lda 80 Specifications

lombardini lda 80 specifications are essential for engineers, mechanics, and machinery enthusiasts seeking detailed insights into this robust and reliable engine model. Known for its durability, efficiency, and versatility, the Lombardini LDA 80 has been widely used in agricultural machinery, construction equipment, and industrial applications. This article provides an comprehensive overview of the specifications of the Lombardini LDA 80, covering its engine details, technical features, performance metrics, and applications to help users understand its capabilities thoroughly.

Overview of Lombardini LDA 80

The Lombardini LDA 80 is a diesel engine designed to deliver optimal performance in demanding environments. Manufactured by Lombardini, a renowned Italian engine producer, the LDA 80 model embodies the company's commitment to quality, innovation, and efficiency. It is especially valued for its compact size, fuel economy, and ease of maintenance, making it a preferred choice for various industrial and agricultural machinery.

Engine Type and Design

Engine Configuration

The Lombardini LDA 80 is a four-stroke, single-cylinder diesel engine. Its design emphasizes robustness and simplicity, facilitating straightforward maintenance and durability in tough operating conditions.

Cooling System

The engine employs a water-cooled system, ensuring consistent operating temperatures, preventing overheating, and extending engine lifespan. The cooling system is designed for efficiency, contributing to stable performance during prolonged use.

Fuel System

It utilizes a direct injection fuel system, which enhances fuel efficiency and combustion performance. The direct injection system also helps in reducing exhaust emissions, aligning with environmental standards.

Technical Specifications

The core specifications of the Lombardini LDA 80 are crucial in understanding its capabilities. Below is a detailed list of its technical parameters:

1. **Model:** Lombardini LDA 80
2. **Type:** 4-stroke, single-cylinder diesel engine
3. **Displacement:** 747 cc (cubic centimeters)
4. **Cooling System:** Water-cooled
5. **Fuel System:** Direct injection
6. **Power Output:** Approximately 16.5 HP (horsepower) at 2200 rpm
7. **Maximum Torque:** 44 Nm (Newton meters) at 1600 rpm

8. **Lubrication System:** Forced lubrication with oil filter
9. **Starting System:** Electric start with backup recoil
10. **Governor System:** Mechanical governor for stable engine speed
11. **Fuel Consumption:** Approx. 2.5 liters per hour at rated power
12. **Oil Capacity:** 2.2 liters
13. **Compression Ratio:** 17:1
14. **Emission Standards:** Compliant with Tier 2 standards (varies by market)

Performance Characteristics

Understanding the performance metrics of the Lombardini LDA 80 is vital for selecting it for specific applications.

Power and Torque

The engine produces a maximum power output of approximately 16.5 HP at 2200 rpm, making it suitable for powering small to medium machinery. Its maximum torque of 44 Nm at 1600 rpm ensures adequate pulling power and smooth operation under load.

Fuel Efficiency

With an average fuel consumption of about 2.5 liters per hour at rated load, the LDA 80 is economical, reducing operational costs over time. Its direct injection system optimizes fuel burn, further contributing to efficiency.

Speed Range

The engine operates effectively within a speed range of 1800 to 2400 rpm, providing flexibility for various machinery requirements.

Durability and Reliability

Designed for continuous operation, the LDA 80's robust construction and high-quality components ensure long service life and minimal downtime. Its water-cooled system maintains optimal operating temperatures, preventing overheating and wear.

Physical Dimensions and Weight

For installation and integration purposes, knowing the engine's physical size and weight is important.

1. **Dimensions (L x W x H):** Approximately 950 mm x 600 mm x 800 mm
2. **Weight:** Around 250 kg

These dimensions facilitate compatibility with various machinery and ease of transportation.

Applications of Lombardini LDA 80

The versatile specifications of the Lombardini LDA 80 make it suitable for numerous applications, including:

1. Small agricultural tractors
2. Water pumps and irrigation systems

3. Generators and power units
4. Construction machinery such as compact loaders
5. Industrial equipment requiring reliable power sources

Its adaptability and reliable performance have earned it a reputation in sectors where durability and efficiency are paramount.

Maintenance and Service Considerations

Regular maintenance is essential to maximize the lifespan and performance of the Lombardini LDA 80. Key maintenance tasks include:

1. Periodic oil changes (every 100-200 hours of operation)
2. Checking and replacing air and fuel filters
3. Inspecting cooling system components for leaks and blockages
4. Monitoring fuel and oil levels regularly
5. Ensuring proper operation of the electrical starting system

Lombardini provides comprehensive service manuals and support to assist operators and technicians in maintaining the engine effectively.

Advantages of Lombardini LDA 80

Choosing the Lombardini LDA 80 comes with several benefits:

1. High fuel efficiency reduces operational costs
2. Robust construction ensures durability under tough conditions
3. Compact size allows easy integration into various machinery
4. Low emissions compliance supports environmental standards
5. Simple maintenance procedures enhance uptime and productivity

Conclusion

The Lombardini LDA 80 specifications reflect a well-designed, reliable, and efficient engine suitable for diverse industrial and agricultural applications. Its combination of power output, fuel economy, durability, and ease of maintenance makes it an excellent choice for small to medium machinery. Whether used in water pumps, generators, or small tractors, the LDA 80 continues to serve as a dependable power source, embodying Lombardini's reputation for manufacturing quality engines. For users seeking detailed technical data or planning to incorporate the Lombardini LDA 80 into their machinery, understanding these specifications is crucial. Proper selection, installation, and maintenance ensure optimal performance and longevity of the engine, contributing to the success of your projects.

Lombardini LDA 80 Specifications: An In-Depth Analysis of This Compact Diesel Powerhouse

When exploring versatile and reliable small-scale engines, the Lombardini LDA 80 stands out as a formidable choice among professionals and hobbyists alike. Renowned for its robust design, efficient performance, and adaptability, the Lombardini LDA 80 specifications make it an appealing option for various industrial, agricultural, and small construction applications. Whether you're considering this engine for a new project or aiming to understand its capabilities better, a detailed breakdown of its specifications can illuminate its strengths and suitability for your needs.

Introduction to the Lombardini LDA 80

The Lombardini LDA 80 is a compact, air-cooled diesel engine designed to deliver dependable power in a lightweight package. As part of Lombardini's lineup of small to medium-sized engines, the LDA 80 balances performance, fuel efficiency, and durability, making it a popular choice for equipment such as generators, compact machinery, and agricultural implements.

Key Features and Overview

Before diving into the detailed specifications, it's essential to understand the core features that define the Lombardini LDA 80:

1. Type: 4-stroke, diesel engine
2. Cooling System: Air-cooled
3. Application Range: Small machinery, generators, water pumps, and more
4. Power Output: Moderate but reliable power suitable for various industrial tasks
5. Design: Compact and lightweight, facilitating easy installation and mobility

Engine Specifications of the Lombardini LDA 80

Understanding the core technical parameters of the Lombardini LDA 80 gives insight into its performance capabilities.

1. Engine Type and Configuration

1. Model: Lombardini LDA 80
2. Cylinder Arrangement: Single-cylinder
3. Number of Cylinders: 1
4. Cylinder Configuration: Vertical, inline
5. Cycle Type: 4-stroke (Otto cycle with compression ignition)

This configuration ensures a straightforward design, ease of maintenance, and reliable operation.

1. Displacement and Bore/Stroke

1. Displacement: Approximately 494 cc (cubic centimeters)
2. Bore Diameter: 80 mm
3. Stroke Length: 60 mm

The displacement size indicates a compact engine capable of producing steady output while maintaining fuel efficiency.

1. Power and Torque Output

1. Maximum Power: Around 8.0 horsepower (hp) at 2,600 RPM
2. Maximum Torque: Approximately 15 Nm at 2,000 RPM

This power output makes the LDA 80 suitable for small to medium industrial applications where moderate horsepower is sufficient.

1. Fuel System and Consumption

1. Fuel Type: Diesel
2. Fuel Injection System: Direct injection (varies with specific models)
3. Fuel Consumption: Approximately 0.38-0.40 liters per hour at rated load

Efficiency in fuel consumption is a key feature, minimizing operational costs over time.

Mechanical and Cooling System

1. Cooling System

1. Type: Air-cooled
2. Cooling Fins: Integrated into the cylinder head and barrel
3. Cooling Fan: Yes, driven by the engine

Air cooling simplifies maintenance and reduces weight, suitable for mobile or outdoor equipment.

1. Lubrication System

1. Type: Splash or forced lubrication
2. Oil Capacity: Approximately 1.2 liters

Proper lubrication ensures engine longevity and smooth operation.

Starting and Control Features

1. Starting Method

1. Primary: Recoil starter (manual pull-start)
2. Optional: Electric start (depending on model variants)

1. Controls and Instrumentation

1. Throttle Control: Manual, with adjustable speed
2. Oil Level Indicator: Yes
3. Fuel Level Indicator: Yes

Ease of operation and monitoring are designed into the engine.

Dimensions, Weight, and Mounting

1. Physical Dimensions

1. Length: Approximately 520 mm
2. Width: Around 440 mm
3. Height: About 480 mm

1. Weight

1. Dry Weight: Around 70-80 kg (varies with configuration)

1. Mounting Points

1. Base Mounting: Four bolt holes for secure installation
2. Compatibility: Designed for standard industrial mounting frames

The lightweight and compact design facilitate integration into various machinery.

Additional Technical Details

| Specification | Detail |

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| Compression Ratio | 20:1 |

- | Idle Speed | Approximately 1,200 RPM |
- | Max Operating Speed | 2,600 RPM |
- | Oil Filter | Yes |
- | Spark Plug Type | Not applicable; diesel engine |
- | Alternator Compatibility | Available as optional accessory |

Applications of the Lombardini LDA 80

Thanks to its specifications, the Lombardini LDA 80 lends itself well to a broad range of applications:

1. Portable Generators: Providing reliable power for remote or backup electricity.
2. Water Pumps: Used in irrigation and drainage systems.
3. Construction Equipment: Such as mini excavators, compact loaders, or skid-steer attachments.
4. Agricultural Machinery: Including tillers and small harvesters.
5. Industrial Equipment: Small-scale conveyor belts, mixers, or other machinery requiring a dependable power source.

Maintenance and Serviceability

Given its design, the Lombardini LDA 80 is relatively straightforward to maintain:

1. Oil Change Interval: Every 50-100 operational hours
2. Air Filter Maintenance: Inspect and clean regularly
3. Fuel Filter Replacement: As recommended, typically every 200 hours
4. Cooling Fins Cleaning: To prevent overheating and maintain efficiency

Regular maintenance ensures longevity and optimal performance, critical in applications where downtime can be costly.

Conclusion: Is the Lombardini LDA 80 Right for You?

The Lombardini LDA 80 specifications reveal an engine built for reliability, efficiency, and versatility. Its modest power output combined with lightweight design makes it ideal for small-scale industrial applications, portable power solutions, and agricultural tasks. Its air-cooled system simplifies maintenance, and its robust construction ensures durability even in demanding environments.

When selecting an engine, consider your specific power requirements, operational conditions, and maintenance capabilities. The Lombardini LDA 80 offers an excellent balance of performance and practicality, making it a dependable choice for a wide array of applications.

By understanding its detailed specifications, users can better assess how the Lombardini LDA 80 fits into their projects, ensuring optimal performance and value over its operational lifespan.

Questions & Answers About lombardini lda 80 specifications

No	Question	Answer
1	What are the key specifications of the Lombardini LDA 80 engine?	The Lombardini LDA 80 features a 0.8-liter (804 cc) 2-cylinder diesel engine with an output of approximately 16 horsepower, a maximum torque of around 44 Nm, and a bore and stroke of 80 mm x 60 mm. It is designed for durability and efficiency in industrial and agricultural applications.

2	What is the fuel consumption rate of the Lombardini LDA 80?	The Lombardini LDA 80 typically consumes about 2.5 to 3.0 liters of diesel per hour under standard operating conditions, depending on load and application specifics.
3	Does the Lombardini LDA 80 have any notable features or certifications?	Yes, the Lombardini LDA 80 is known for its robust construction, low emissions compliance, and often meets local environmental standards. It also features easy maintenance access and is designed for reliable performance in demanding environments.
4	What are the typical applications for the Lombardini LDA 80 engine?	The LDA 80 engine is commonly used in agricultural machinery, small industrial equipment, generators, and compact construction machinery due to its compact size and reliable power output.
5	How does the Lombardini LDA 80 compare in terms of durability and maintenance?	The Lombardini LDA 80 is renowned for its durability, with high-quality components designed for long service life. Regular maintenance involves oil changes, filter replacements, and inspection of key components to ensure optimal performance and longevity.

Lombardini LDA 80, engine specifications, Lombardini diesel engine, LDA 80 technical data, Lombardini engine power, LDA 80 dimensions, Lombardini LDA 80 fuel consumption, engine model details, Lombardini LDA 80 performance, engine maintenance manual