mazda cx 3 technical specifications

mazda cx 3 technical specifications provide a detailed insight into what makes this subcompact crossover SUV a popular choice among urban drivers and small families. Known for its stylish design, agile handling, and efficient performance, the Mazda CX-3 combines Mazda's renowned driving dynamics with practical features suited for daily commuting and weekend adventures. This article delives into the comprehensive technical details of the Mazda CX-3, covering its engine options, performance metrics, dimensions, safety features, and technology offerings. Understanding these specifications helps potential buyers and automotive enthusiasts appreciate the vehicle's capabilities and how it compares within its segment. The following sections break down the key aspects of the Mazda CX-3 to offer a thorough overview of what this vehicle delivers.

- Engine and Performance
- Dimensions and Exterior Features
- Interior and Comfort Specifications
- Safety and Driver Assistance Technologies
- Infotainment and Connectivity
- Fuel Efficiency and Emissions

Engine and Performance

The Mazda CX-3 technical specifications highlight a powertrain designed to balance spirited driving with fuel economy. It is equipped with a responsive engine lineup and advanced transmission options that enhance driving dynamics in various conditions.

Engine Options

The primary engine powering the Mazda CX-3 is a naturally aspirated 2.0-liter SKYACTIV-G inline-4 gasoline engine. This engine delivers a robust balance of power and efficiency, outputting approximately 148 horsepower and 146 lb-ft of torque. The SKYACTIV technology integrates high compression ratios and optimized combustion to improve fuel efficiency and reduce emissions.

Transmission and Drivetrain

The Mazda CX-3 comes standard with a 6-speed automatic transmission that features manual shift mode for enhanced driver control. Front-wheel drive (FWD) is standard, while an all-wheel-drive (AWD) system is available for improved traction and stability, especially beneficial in adverse weather conditions or light off-road scenarios.

Performance Metrics

Acceleration and handling are key performance highlights of the Mazda CX-3. The vehicle can accelerate from 0 to 60 mph in approximately 8.5 seconds, which is competitive within the subcompact SUV class. The suspension setup includes a front MacPherson strut and rear torsion beam suspension, tuned for a comfortable ride and responsive handling. Additionally, the Mazda CX-3 features precise steering feedback and a lightweight chassis that contribute to an engaging driving experience.

Dimensions and Exterior Features

The Mazda CX-3's compact dimensions make it well-suited for urban environments while still offering a commanding presence on the road. Its design combines sporty aesthetics with functional considerations for maneuverability and cargo capacity.

Exterior Dimensions

The Mazda CX-3 measures approximately 168.3 inches in length, 69.6 inches in width, and 60.7 inches in height. It has a wheelbase of 101.2 inches, which supports stability and cabin space optimization. The ground clearance stands at around 6.1 inches, allowing it to handle rougher roads without compromising on-road comfort.

Design Elements

Distinctive styling cues include Mazda's signature KODO design language, characterized by sleek lines and an aggressive front grille. LED headlights and taillights are standard on most trims, improving visibility and adding a modern touch. Alloy wheels ranging from 16 to 18 inches complement the exterior, enhancing both aesthetics and performance.

• Length: 168.3 inches

• Width: 69.6 inches (excluding mirrors)

Height: 60.7 inchesWheelbase: 101.2 inchesGround Clearance: 6.1 inches

Wheel Options: 16-inch to 18-inch alloy wheels

Interior and Comfort Specifications

The interior of the Mazda CX-3 is designed to maximize comfort and convenience within a compact footprint. The cabin materials and layout reflect Mazda's attention to detail and commitment to quality.

Seating and Space

The Mazda CX-3 offers seating for five passengers, with cloth upholstery standard and leatherette or genuine leather available on higher trims. Front seats are typically heated, enhancing comfort during colder months. Rear seat legroom measures around 29.5 inches, which is adequate for a vehicle of this class, while cargo volume behind the rear seats is approximately 12.4 cubic feet, expandable to nearly 44.5 cubic feet with the rear seats folded down.

Interior Features

Standard interior amenities include a tilt-and-telescoping steering wheel, automatic climate control, and power windows. Higher trims may offer additional luxury features such as dual-zone climate control, premium audio systems, and a leather-wrapped steering wheel. The dashboard layout focuses on driver ergonomics, with intuitive control placement and a clear instrument cluster.

Safety and Driver Assistance Technologies

Safety is a key component of the Mazda CX-3 technical specifications, with a suite of standard and available features aimed at protecting occupants and preventing accidents.

Structural Safety

The CX-3 incorporates Mazda's SKYACTIV-Body design, which uses high-strength steel to improve crash energy absorption and passenger protection. The vehicle has consistently earned favorable safety ratings from independent testing organizations, reflecting its robust build quality.

Active Safety Features

Standard safety technologies include antilock brakes (ABS), electronic stability control (ESC), traction control, and multiple airbags. Available driver assistance features include:

- Blind Spot Monitoring (BSM)
- Rear Cross Traffic Alert (RCTA)
- Lane Departure Warning System (LDWS)
- Smart City Brake Support (SCBS)
- Adaptive Cruise Control (ACC)

Infotainment and Connectivity

The Mazda CX-3 offers a modern infotainment system that integrates connectivity, entertainment, and vehicle information in a user-friendly interface, enhancing the driving experience.

Infotainment System

The standard setup features a 7-inch touchscreen display controlled via a rotary dial on the center console. This system supports Bluetooth hands-free calling and audio streaming, USB ports, and an AM/FM radio. Higher trims may include integrated navigation, HD Radio, and premium audio upgrades.

Smartphone Integration

Compatibility with Apple CarPlay and Android Auto is standard on most model years, allowing seamless integration of smartphones for access to apps, navigation, and voice commands. The system also supports voice recognition and steering wheel-mounted controls for safer operation while driving.

Fuel Efficiency and Emissions

Fuel economy is a significant aspect of the Mazda CX-3 technical specifications, reflecting the vehicle's design focus on

efficiency without sacrificing performance.

Fuel Economy Ratings

The Mazda CX-3 achieves competitive fuel efficiency in its class. The EPA-estimated miles per gallon (MPG) ratings are approximately:

- Front-Wheel Drive: 29 MPG city / 34 MPG highway / 31 MPG combined
- All-Wheel Drive: 27 MPG city / 32 MPG highway / 29 MPG combined

These figures demonstrate the vehicle's capability to minimize fuel consumption both in urban and highway driving scenarios.

Emissions and Environmental Impact

The SKYACTIV-G engine technology contributes to lower CO2 emissions relative to comparable engines in the subcompact SUV segment. Mazda's commitment to efficient combustion processes reduces the vehicle's environmental footprint while maintaining driving enjoyment.

Questions

What engine options are available for the Mazda CX-3?

The Mazda CX-3 typically comes with a 2.0-liter SKYACTIV-G inline-4 engine that produces around 148 horsepower and 146 lb-ft of torque.

What type of transmission does the Mazda CX-3 use?

The Mazda CX-3 is equipped with a 6-speed automatic transmission, with some markets offering a 6-speed manual transmission as well.

What is the fuel efficiency of the Mazda CX-3?

The Mazda CX-3 offers an estimated fuel efficiency of about 29 miles per gallon in the city and 34 miles per gallon on the highway, depending on the trim and driving conditions.

What are the dimensions of the Mazda CX-3?

The Mazda CX-3 has an approximate length of 168.3 inches, a width of 69.6 inches, a height of 60.7 inches, and a wheelbase of 101.2 inches.

What kind of drivetrain does the Mazda CX-3 have?

The Mazda CX-3 comes with front-wheel drive as standard, with an option for all-wheel drive (AWD) available on higher trims.

What safety features are included in the Mazda CX-3?

The Mazda CX-3 includes safety features such as advanced airbags, anti-lock brakes (ABS), stability control, traction control, rearview camera, blind-spot monitoring, and available lane departure warning and forward collision warning systems.

- 1. *Mazda CX-3: Comprehensive Technical Guide* This book offers an in-depth look at the technical specifications of the Mazda CX-3. It covers engine details, transmission options, chassis design, and electronic systems. Ideal for enthusiasts and mechanics, it provides detailed diagrams and performance data.
- 2. The Complete Mazda CX-3 Maintenance Manual Focused on the upkeep and servicing of the Mazda CX-3, this manual details all technical aspects necessary for routine maintenance. It includes schedules, part specifications, and troubleshooting tips to keep the vehicle running at peak performance.
- 3. *Understanding the Mazda CX-3 Powertrain* Delving into the heart of the CX-3, this book explains the engine and transmission technologies used in the vehicle. It highlights Mazda's SkyActiv technology and how it enhances fuel efficiency and driving dynamics.
- 4. *Mazda CX-3 Electrical Systems and Diagnostics* This book examines the complex electrical systems within the Mazda CX-3. It covers wiring diagrams, sensor functions, and diagnostic procedures, making it a valuable resource for automotive electricians and repair professionals.
- 5. *Performance Tuning and Upgrades for Mazda CX-3* For those interested in enhancing their Mazda CX-3, this guide explores aftermarket modifications and factory tuning options. It provides technical specifications on compatible parts and advice on boosting engine performance safely.
- 6. Chassis and Suspension Technologies in the Mazda CX-3 A detailed analysis of the suspension system, frame design, and handling characteristics of the Mazda CX-3. Readers will gain insight into Mazda's engineering approach to ride comfort and vehicle stability.
- 7. Mazda CX-3 Fuel Systems and Emissions Control This book explains the fuel delivery methods and emissions

- control technologies employed by Mazda in the CX-3. It covers fuel injection systems, catalytic converters, and regulatory compliance related to environmental standards.
- 8. *Interior and Safety Features of the Mazda CX-3* Focusing on the technical specifications of the CX-3's interior design and safety systems, this book details airbag configurations, seatbelt technologies, and infotainment hardware. It also discusses crash test data and safety ratings.
- 9. Advanced Driver Assistance Systems in the Mazda CX-3 This publication provides a thorough overview of the Mazda CX-3's driver assistance technologies, including adaptive cruise control, lane departure warnings, and blind-spot monitoring. It explains the technical underpinnings and integration of these systems within the vehicle.

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