

# **Automotive Valves Market ? Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Vehicle Type (Passenger Cars, LCV and HCV), By Electric Vehicle Type (BEV, HEV and PHEV), By Product Type (Engine, A/c, Brake, Thermostat, Fuel System and Others), By Function Type (Electric, Pneumatic, Hydraulic and Others), By Application (Engine System, HVAC System and Brake System), By Region & Competition, 2021-2031F**

<https://marketpublishers.com/r/A7F62039AA5FEN.html>

Date: January 2026

Pages: 180

Price: US\$ 4,500.00 (Single User License)

ID: A7F62039AA5FEN

## **Abstracts**

The Global Automotive Valves Market is projected to expand from USD 29.14 Billion in 2025 to USD 37.67 Billion by 2031, achieving a compound annual growth rate of 4.37%. These precision components play a critical role in regulating fuel and air intake, expelling exhaust gases, and controlling fluids within auxiliary systems. Market growth is primarily driven by a sustained rise in global vehicle manufacturing and strict fuel efficiency regulations that demand advanced engine management. This industrial momentum is illustrated by data from the International Organization of Motor Vehicle Manufacturers, which reported that global motor vehicle production hit 92.5 million units in 2024. However, the market faces a significant challenge due to the transition toward powertrain electrification; battery electric vehicles utilize motors instead of internal combustion engines, fundamentally removing the need for traditional intake and exhaust valves.

## **Market Driver**

The enforcement of rigorous government emission regulations and fuel economy

standards acts as a major catalyst for advanced valve technology development. To reduce carbon footprints, regulatory bodies worldwide are mandating the adoption of components like Exhaust Gas Recirculation (EGR) valves and variable valve timing systems to optimize combustion. For instance, the US Environmental Protection Agency's March 2024 'Final Rule' projects a fleet-wide average target of 85 grams/mile of CO<sub>2</sub> for 2032 models, representing a nearly 50% reduction from 2026 levels, which ensures continued demand for high-precision valves in the remaining internal combustion segment. Simultaneously, the rise of electric vehicles creates new opportunities for advanced thermal management and HVAC valves. Unlike traditional powertrains, EVs require complex thermal loops for batteries and electronics, significantly increasing the valve content per unit. Mahle's 'Annual Report 2023' (April 2024) notes that thermal management sales for electric cars can be three times higher than for comparable combustion vehicles. This shift is supported by the International Energy Agency's 2024 report, citing nearly 14 million global electric car sales in 2023, which drives a burgeoning market for specialized solenoid and electromechanical valves.

## **Market Challenge**

The structural shift toward powertrain electrification stands as the primary restraint on the global automotive valves market. Because battery electric vehicles rely on electric motors rather than internal combustion engines, they eliminate the necessity for the intake and exhaust valves that regulate air-fuel mixtures in traditional systems. As automakers increasingly redirect capital and production capacity toward electric drive units, the total addressable volume for conventional engine valves faces a permanent reduction, threatening a product category that historically provided stable recurring revenue. This disruption is substantiated by data from the China Association of Automobile Manufacturers, which reported that production of new energy vehicles reached 12.89 million units in 2024. The influx of such a large volume of vehicles lacking traditional valve configurations highlights the erosion of the addressable market, restricting long-term growth prospects for the sector.

## **Market Trends**

The global automotive valves market is increasingly defined by the adoption of hollow-stem sodium-filled valves, a technology essential for maximizing the efficiency of hybrid internal combustion engines. In contrast to traditional solid stems, these valves contain a sodium-filled cavity that liquefies at operating temperatures to facilitate heat transfer from the combustion chamber to the cylinder head, enabling higher compression ratios

and lean-burn strategies without causing knock. The value of this design is highlighted by Eaton, which reported in March 2025 that its advanced hollow head valve technology allows OEMs to achieve up to 13% of their 2025 CO2 reduction targets by improving combustion stability and knock mitigation.

Concurrent with this design evolution is a distinct material transition toward lightweight titanium and superalloys capable of enduring the extreme conditions found in downsized, high-output engines. As manufacturers pursue higher power densities, conventional steel alloys often struggle to maintain integrity under elevated exhaust temperatures and pressures, prompting the development of superalloys that offer superior fatigue resistance and thermal stability while reducing reciprocating mass. This trend is evidenced by a May 2025 technical report from the U.S. Department of Energy Office of Scientific and Technical Information, which notes that Tenneco secured patents for novel high-strength iron-nickel-chromium alloys specifically engineered to meet the durability requirements of next-generation intake and exhaust valves.

### **Key Market Players**

Robert Bosch GmbH

Continental AG

Denso Corporation

BorgWarner Inc

Aisin Seiki Co., Ltd.

Mahle GmbH

Eaton Corporation PLC

Valeo S.A.

Hitachi Ltd

FTE Automotive GmbH

## Report Scope

In this report, the Global Automotive Valves Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

### Automotive Valves Market, By Vehicle Type

Passenger Cars

LCV and HCV

### Automotive Valves Market, By Electric Vehicle Type

BEV

HEV and PHEV

### Automotive Valves Market, By Product Type

Engine

A/c

Brake

Thermostat

Fuel System and Others

### Automotive Valves Market, By Function Type

Electric

Pneumatic

Hydraulic and Others

### Automotive Valves Market, By Application

Engine System

HVAC System and Brake System

Automotive Valves Market, By Region

North America

United States

Canada

Mexico

Europe

France

United Kingdom

Italy

Germany

Spain

Asia Pacific

China

India

Japan

Australia

South Korea

## South America

Brazil

Argentina

Colombia

## Middle East & Africa

South Africa

Saudi Arabia

UAE

### **Competitive Landscape**

Company Profiles: Detailed analysis of the major companies present in the Global Automotive Valves Market.

### **Available Customizations:**

Global Automotive Valves Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

### **Company Information**

Detailed analysis and profiling of additional market players (up to five).

## Contents

### 1. PRODUCT OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
  - 1.2.1. Markets Covered
  - 1.2.2. Years Considered for Study
  - 1.2.3. Key Market Segmentations

### 2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Key Industry Partners
- 2.4. Major Association and Secondary Sources
- 2.5. Forecasting Methodology
- 2.6. Data Triangulation & Validation
- 2.7. Assumptions and Limitations

### 3. EXECUTIVE SUMMARY

- 3.1. Overview of the Market
- 3.2. Overview of Key Market Segmentations
- 3.3. Overview of Key Market Players
- 3.4. Overview of Key Regions/Countries
- 3.5. Overview of Market Drivers, Challenges, Trends

### 4. VOICE OF CUSTOMER

### 5. GLOBAL AUTOMOTIVE VALVES MARKET OUTLOOK

- 5.1. Market Size & Forecast
  - 5.1.1. By Value
- 5.2. Market Share & Forecast
  - 5.2.1. By Vehicle Type (Passenger Cars, LCV and HCV)
  - 5.2.2. By Electric Vehicle Type (BEV, HEV and PHEV)
  - 5.2.3. By Product Type (Engine, A/c, Brake, Thermostat, Fuel System and Others)
  - 5.2.4. By Function Type (Electric, Pneumatic, Hydraulic and Others)

- 5.2.5. By Application (Engine System, HVAC System and Brake System)
- 5.2.6. By Region
- 5.2.7. By Company (2025)
- 5.3. Market Map

## **6. NORTH AMERICA AUTOMOTIVE VALVES MARKET OUTLOOK**

- 6.1. Market Size & Forecast
  - 6.1.1. By Value
- 6.2. Market Share & Forecast
  - 6.2.1. By Vehicle Type
  - 6.2.2. By Electric Vehicle Type
  - 6.2.3. By Product Type
  - 6.2.4. By Function Type
  - 6.2.5. By Application
  - 6.2.6. By Country
- 6.3. North America: Country Analysis
  - 6.3.1. United States Automotive Valves Market Outlook
    - 6.3.1.1. Market Size & Forecast
      - 6.3.1.1.1. By Value
    - 6.3.1.2. Market Share & Forecast
      - 6.3.1.2.1. By Vehicle Type
      - 6.3.1.2.2. By Electric Vehicle Type
      - 6.3.1.2.3. By Product Type
      - 6.3.1.2.4. By Function Type
      - 6.3.1.2.5. By Application
  - 6.3.2. Canada Automotive Valves Market Outlook
    - 6.3.2.1. Market Size & Forecast
      - 6.3.2.1.1. By Value
    - 6.3.2.2. Market Share & Forecast
      - 6.3.2.2.1. By Vehicle Type
      - 6.3.2.2.2. By Electric Vehicle Type
      - 6.3.2.2.3. By Product Type
      - 6.3.2.2.4. By Function Type
      - 6.3.2.2.5. By Application
  - 6.3.3. Mexico Automotive Valves Market Outlook
    - 6.3.3.1. Market Size & Forecast
      - 6.3.3.1.1. By Value
    - 6.3.3.2. Market Share & Forecast

- 6.3.3.2.1. By Vehicle Type
- 6.3.3.2.2. By Electric Vehicle Type
- 6.3.3.2.3. By Product Type
- 6.3.3.2.4. By Function Type
- 6.3.3.2.5. By Application

## **7. EUROPE AUTOMOTIVE VALVES MARKET OUTLOOK**

### 7.1. Market Size & Forecast

- 7.1.1. By Value

### 7.2. Market Share & Forecast

- 7.2.1. By Vehicle Type
- 7.2.2. By Electric Vehicle Type
- 7.2.3. By Product Type
- 7.2.4. By Function Type
- 7.2.5. By Application
- 7.2.6. By Country

### 7.3. Europe: Country Analysis

#### 7.3.1. Germany Automotive Valves Market Outlook

- 7.3.1.1. Market Size & Forecast
  - 7.3.1.1.1. By Value
- 7.3.1.2. Market Share & Forecast
  - 7.3.1.2.1. By Vehicle Type
  - 7.3.1.2.2. By Electric Vehicle Type
  - 7.3.1.2.3. By Product Type
  - 7.3.1.2.4. By Function Type
  - 7.3.1.2.5. By Application

#### 7.3.2. France Automotive Valves Market Outlook

- 7.3.2.1. Market Size & Forecast
  - 7.3.2.1.1. By Value
- 7.3.2.2. Market Share & Forecast
  - 7.3.2.2.1. By Vehicle Type
  - 7.3.2.2.2. By Electric Vehicle Type
  - 7.3.2.2.3. By Product Type
  - 7.3.2.2.4. By Function Type
  - 7.3.2.2.5. By Application

#### 7.3.3. United Kingdom Automotive Valves Market Outlook

- 7.3.3.1. Market Size & Forecast
  - 7.3.3.1.1. By Value

- 7.3.3.2. Market Share & Forecast
  - 7.3.3.2.1. By Vehicle Type
  - 7.3.3.2.2. By Electric Vehicle Type
  - 7.3.3.2.3. By Product Type
  - 7.3.3.2.4. By Function Type
  - 7.3.3.2.5. By Application
- 7.3.4. Italy Automotive Valves Market Outlook
  - 7.3.4.1. Market Size & Forecast
    - 7.3.4.1.1. By Value
  - 7.3.4.2. Market Share & Forecast
    - 7.3.4.2.1. By Vehicle Type
    - 7.3.4.2.2. By Electric Vehicle Type
    - 7.3.4.2.3. By Product Type
    - 7.3.4.2.4. By Function Type
    - 7.3.4.2.5. By Application
- 7.3.5. Spain Automotive Valves Market Outlook
  - 7.3.5.1. Market Size & Forecast
    - 7.3.5.1.1. By Value
  - 7.3.5.2. Market Share & Forecast
    - 7.3.5.2.1. By Vehicle Type
    - 7.3.5.2.2. By Electric Vehicle Type
    - 7.3.5.2.3. By Product Type
    - 7.3.5.2.4. By Function Type
    - 7.3.5.2.5. By Application

## **8. ASIA PACIFIC AUTOMOTIVE VALVES MARKET OUTLOOK**

- 8.1. Market Size & Forecast
  - 8.1.1. By Value
- 8.2. Market Share & Forecast
  - 8.2.1. By Vehicle Type
  - 8.2.2. By Electric Vehicle Type
  - 8.2.3. By Product Type
  - 8.2.4. By Function Type
  - 8.2.5. By Application
  - 8.2.6. By Country
- 8.3. Asia Pacific: Country Analysis
  - 8.3.1. China Automotive Valves Market Outlook
    - 8.3.1.1. Market Size & Forecast

- 8.3.1.1.1. By Value
- 8.3.1.2. Market Share & Forecast
  - 8.3.1.2.1. By Vehicle Type
  - 8.3.1.2.2. By Electric Vehicle Type
  - 8.3.1.2.3. By Product Type
  - 8.3.1.2.4. By Function Type
  - 8.3.1.2.5. By Application
- 8.3.2. India Automotive Valves Market Outlook
  - 8.3.2.1. Market Size & Forecast
    - 8.3.2.1.1. By Value
  - 8.3.2.2. Market Share & Forecast
    - 8.3.2.2.1. By Vehicle Type
    - 8.3.2.2.2. By Electric Vehicle Type
    - 8.3.2.2.3. By Product Type
    - 8.3.2.2.4. By Function Type
    - 8.3.2.2.5. By Application
- 8.3.3. Japan Automotive Valves Market Outlook
  - 8.3.3.1. Market Size & Forecast
    - 8.3.3.1.1. By Value
  - 8.3.3.2. Market Share & Forecast
    - 8.3.3.2.1. By Vehicle Type
    - 8.3.3.2.2. By Electric Vehicle Type
    - 8.3.3.2.3. By Product Type
    - 8.3.3.2.4. By Function Type
    - 8.3.3.2.5. By Application
- 8.3.4. South Korea Automotive Valves Market Outlook
  - 8.3.4.1. Market Size & Forecast
    - 8.3.4.1.1. By Value
  - 8.3.4.2. Market Share & Forecast
    - 8.3.4.2.1. By Vehicle Type
    - 8.3.4.2.2. By Electric Vehicle Type
    - 8.3.4.2.3. By Product Type
    - 8.3.4.2.4. By Function Type
    - 8.3.4.2.5. By Application
- 8.3.5. Australia Automotive Valves Market Outlook
  - 8.3.5.1. Market Size & Forecast
    - 8.3.5.1.1. By Value
  - 8.3.5.2. Market Share & Forecast
    - 8.3.5.2.1. By Vehicle Type

- 8.3.5.2.2. By Electric Vehicle Type
- 8.3.5.2.3. By Product Type
- 8.3.5.2.4. By Function Type
- 8.3.5.2.5. By Application

## **9. MIDDLE EAST & AFRICA AUTOMOTIVE VALVES MARKET OUTLOOK**

### 9.1. Market Size & Forecast

- 9.1.1. By Value

### 9.2. Market Share & Forecast

- 9.2.1. By Vehicle Type
- 9.2.2. By Electric Vehicle Type
- 9.2.3. By Product Type
- 9.2.4. By Function Type
- 9.2.5. By Application
- 9.2.6. By Country

### 9.3. Middle East & Africa: Country Analysis

#### 9.3.1. Saudi Arabia Automotive Valves Market Outlook

- 9.3.1.1. Market Size & Forecast
  - 9.3.1.1.1. By Value
- 9.3.1.2. Market Share & Forecast
  - 9.3.1.2.1. By Vehicle Type
  - 9.3.1.2.2. By Electric Vehicle Type
  - 9.3.1.2.3. By Product Type
  - 9.3.1.2.4. By Function Type
  - 9.3.1.2.5. By Application

#### 9.3.2. UAE Automotive Valves Market Outlook

- 9.3.2.1. Market Size & Forecast
  - 9.3.2.1.1. By Value
- 9.3.2.2. Market Share & Forecast
  - 9.3.2.2.1. By Vehicle Type
  - 9.3.2.2.2. By Electric Vehicle Type
  - 9.3.2.2.3. By Product Type
  - 9.3.2.2.4. By Function Type
  - 9.3.2.2.5. By Application

#### 9.3.3. South Africa Automotive Valves Market Outlook

- 9.3.3.1. Market Size & Forecast
  - 9.3.3.1.1. By Value
- 9.3.3.2. Market Share & Forecast

- 9.3.3.2.1. By Vehicle Type
- 9.3.3.2.2. By Electric Vehicle Type
- 9.3.3.2.3. By Product Type
- 9.3.3.2.4. By Function Type
- 9.3.3.2.5. By Application

## **10. SOUTH AMERICA AUTOMOTIVE VALVES MARKET OUTLOOK**

### 10.1. Market Size & Forecast

- 10.1.1. By Value

### 10.2. Market Share & Forecast

- 10.2.1. By Vehicle Type
- 10.2.2. By Electric Vehicle Type
- 10.2.3. By Product Type
- 10.2.4. By Function Type
- 10.2.5. By Application
- 10.2.6. By Country

### 10.3. South America: Country Analysis

#### 10.3.1. Brazil Automotive Valves Market Outlook

- 10.3.1.1. Market Size & Forecast
  - 10.3.1.1.1. By Value
- 10.3.1.2. Market Share & Forecast
  - 10.3.1.2.1. By Vehicle Type
  - 10.3.1.2.2. By Electric Vehicle Type
  - 10.3.1.2.3. By Product Type
  - 10.3.1.2.4. By Function Type
  - 10.3.1.2.5. By Application

#### 10.3.2. Colombia Automotive Valves Market Outlook

- 10.3.2.1. Market Size & Forecast
  - 10.3.2.1.1. By Value
- 10.3.2.2. Market Share & Forecast
  - 10.3.2.2.1. By Vehicle Type
  - 10.3.2.2.2. By Electric Vehicle Type
  - 10.3.2.2.3. By Product Type
  - 10.3.2.2.4. By Function Type
  - 10.3.2.2.5. By Application

#### 10.3.3. Argentina Automotive Valves Market Outlook

- 10.3.3.1. Market Size & Forecast
  - 10.3.3.1.1. By Value

### 10.3.3.2. Market Share & Forecast

#### 10.3.3.2.1. By Vehicle Type

#### 10.3.3.2.2. By Electric Vehicle Type

#### 10.3.3.2.3. By Product Type

#### 10.3.3.2.4. By Function Type

#### 10.3.3.2.5. By Application

## 11. MARKET DYNAMICS

### 11.1. Drivers

### 11.2. Challenges

## 12. MARKET TRENDS & DEVELOPMENTS

### 12.1. Merger & Acquisition (If Any)

### 12.2. Product Launches (If Any)

### 12.3. Recent Developments

## 13. GLOBAL AUTOMOTIVE VALVES MARKET: SWOT ANALYSIS

## 14. PORTER'S FIVE FORCES ANALYSIS

### 14.1. Competition in the Industry

### 14.2. Potential of New Entrants

### 14.3. Power of Suppliers

### 14.4. Power of Customers

### 14.5. Threat of Substitute Products

## 15. COMPETITIVE LANDSCAPE

### 15.1. Robert Bosch GmbH

#### 15.1.1. Business Overview

#### 15.1.2. Products & Services

#### 15.1.3. Recent Developments

#### 15.1.4. Key Personnel

#### 15.1.5. SWOT Analysis

### 15.2. Continental AG

### 15.3. Denso Corporation

### 15.4. BorgWarner Inc

15.5. Aisin Seiki Co., Ltd.

15.6. Mahle GmbH

15.7. Eaton Corporation PLC

15.8. Valeo S.A.

15.9. Hitachi Ltd

15.10. FTE Automotive GmbH

## **16. STRATEGIC RECOMMENDATIONS**

## **17. ABOUT US & DISCLAIMER**

## I would like to order

Product name: Automotive Valves Market ? Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Vehicle Type (Passenger Cars, LCV and HCV), By Electric Vehicle Type (BEV, HEV and PHEV), By Product Type (Engine, A/c, Brake, Thermostat, Fuel System and Others), By Function Type (Electric, Pneumatic, Hydraulic and Others), By Application (Engine System, HVAC System and Brake System), By Region & Competition, 2021-2031F

Product link: <https://marketpublishers.com/r/A7F62039AA5FEN.html>

Price: US\$ 4,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/A7F62039AA5FEN.html>