

Global Electric Coolant Pump Market Size Study, by Type (Full-size, Mid-size, Compact-size, Mini-size, Others), by Vehicle Type (Passenger Cars, Light Commercial Vehicles, Heavy Commercial Vehicles, Electric Vehicles, Others), by Application (Engine Cooling, Battery Cooling, Turbocharger Cooling, Others), by Propulsion Type (BEVs, PHEVs, HEVs, ICE Vehicles, FCEVs), by Technology (Electric, Mechanical, Hydraulic) and Regional Forecasts 2024-2032

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## **Abstracts**

The Global Electric Coolant Pump Market was valued at approximately USD 1.68 billion in 2023 and is projected to grow at a robust CAGR of 12.8% during the forecast period 2024-2032. The electric coolant pump, a critical component in both internal combustion engines and electric vehicles, is pivotal in circulating engine coolant to maintain optimal temperature. Key advantages of electric coolant pumps over traditional mechanical pumps include higher efficiency, reduced emissions, and lower parasitic losses. The market is significantly driven by stringent emission norms, increasing vehicle electrification, and advancements in pump technology. The technical benefits of electric coolant pumps, such as control over coolant flow requirements, contribute to reduced fuel consumption and exhaust emissions. These pumps are compatible with different engine capacities, enhancing their application across various vehicle models. Additional advantages, including faster heater response after a cold start and flexible installation within the engine compartment, are boosting their popularity among automakers. As powertrain electrification advances, the use of electric coolant pumps for electric and



hybrid vehicles is expected to grow substantially.

Turbocharged engines, which require higher cooling performance than conventional engines, significantly drive the market. The increasing demand for Turbocharged Gasoline Direct Injection (TGDI) engines, due to their reduced emissions and higher fuel efficiency, further propels market growth. Despite their higher product cost and maintenance requirements, electric coolant pumps offer substantial operational benefits, making them a preferred choice in the automotive industry.

Strategic partnerships between OEMs and advancements in electric coolant pump technology present lucrative opportunities for market players. Collaborations and innovations are expected to enhance product performance, leading to increased adoption across various vehicle models. However, the complex design and electronic components of electric coolant pumps pose challenges, including higher costs and potential failures.

The Asia Pacific region is anticipated to dominate the market during the forecast period, driven by rising sales of electric vehicles, supportive government policies, and collaborations between key players and OEMs. The region's strong automotive industry and shifting consumer preferences towards electric vehicles contribute to this growth. Whereas, the market in Europe is anticipated to grow at the fastest rate over the forecast period 2024-2032.

Major market players included in this report are:

Robert Bosch GmbH

Continental AG

Mahle GmbH

**Denso Corporation** 

Rheinmetall AG

Aisin Seiki Co., Ltd.

Hanon Systems



Johnson Electric Holdings Limited

Valeo S.A.

BorgWarner Inc.

Gates Corporation

Delphi Technologies

Magna International Inc.

Hitachi Automotive Systems, Ltd.

Schaeffler Group

The detailed segments and sub-segment of the market are explained below:

By Type:

Full-size

Mid-size

Compact-size

Mini-size

Others

By Vehicle Type:

**Passenger Cars** 

Light Commercial Vehicles

Heavy Commercial Vehicles



**Electric Vehicles** 

Others

By Application:

**Engine Cooling** 

**Battery Cooling** 

Turbocharger Cooling

Others

By Propulsion Type:

BEVs

PHEVs

HEVs

ICE Vehicles

FCEVs

By Technology:

Electric

Mechanical

Hydraulic

By Region:

Global Electric Coolant Pump Market Size Study, by Type (Full-size, Mid-size, Compact-size, Mini-size, Others)...



North America
U.S.
Canada
Europe
UK
Germany
France
Spain
Italy
ROE
Asia Pacific
China
India
Japan
Australia
South Korea
RoAPAC
Latin America
Brazil

#### Mexico



Middle East & Africa

Saudi Arabia

South Africa

RoMEA

Years considered for the study are as follows:

Historical year – 2022

Base year - 2023

Forecast period – 2024 to 2032

Key Takeaways:

Market Estimates & Forecast for 10 years from 2022 to 2032.

Annualized revenues and regional level analysis for each market segment.

Detailed analysis of geographical landscape with Country level analysis of major regions.

Competitive landscape with information on major players in the market.

Analysis of key business strategies and recommendations on future market approach.

Analysis of competitive structure of the market.

Demand side and supply side analysis of the market.



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