

Food & Beverage Position Sensors Market Forecasts to 2030 – Global Analysis By Product Type (Contact Sensors and Contact-Less Sensors), Measuring Type (Point Level Measuring and Continuous Level Measuring), Position Sensor Type and By Geography

<https://marketpublishers.com/r/F441C08423CAEN.html>

Date: February 2025

Pages: 150

Price: US\$ 4,150.00 (Single User License)

ID: F441C08423CAEN

Abstracts

According to Statistics MRC, the Global Food & Beverage Position Sensors Market is accounted for \$300.60 million in 2024 and is expected to reach \$565.30 million by 2030 growing at a CAGR of 11.1% during the forecast period. Food & beverage position sensors play a critical role in enhancing automation and ensuring the precision of processes within the industry. The main purpose of these sensors is to track and manage the location of moving components in packaging systems, food handling apparatus, and production lines. Position sensors help maximize production efficiency, minimize downtime, and maintain consistent product quality by providing real-time feedback on the location of machinery components.

According to Food Processing's 2025 Manufacturing Outlook Survey, 44% of food and beverage manufacturers plan to increase automation investments to enhance efficiency and control costs.

Market Dynamics:

Driver:

Growing food processing automation

The food and beverage sector is rapidly moving toward automation in an effort to increase productivity, consistency, and efficiency. Because they provide precise real-

time data on the movement of machinery and component positioning, position sensors are essential for automating processes like filling, sorting, packaging, and quality control. In addition to lowering reliance on manual labor, automation also reduces human error, improving product consistency and safety standard compliance. Additionally, high-precision position sensors are anticipated to become much more in demand as robotics and automated material handling systems become more prevalent.

Restraint:

Expensive initial outlay and integration fees

While automation and sensor technology offer long-term benefits, the high initial cost can discourage many food manufacturers from adopting these technologies, slowing market growth. The adoption of position sensors in food and beverage manufacturing requires a significant investment in automation infrastructure. The cost of buying, installing, and integrating advanced position sensors into existing systems can be high, especially for small and medium-sized enterprises (SMEs) with limited budgets. Furthermore, the changeover to automated systems often involves upgrading older machinery, software integration, and employee training, further increasing overall costs.

Opportunity:

Developments in miniaturization and sensor technology

Position sensors in the food and beverage sector are opening up new possibilities due to ongoing developments in sensor technology, such as miniaturization, increased sensitivity, and improved durability. High-precision, small sensors that can communicate wirelessly allow for easy integration into contemporary production settings. For food processing applications, the development of non-contact position sensors—such as laser-based and capacitive sensors—is especially advantageous because they preserve high accuracy while minimizing wear and tear. Moreover, adoption across various food manufacturing processes is anticipated to be fueled by these innovations.

Threat:

Rapid advancements and the obsolescence of technologies

The sensor industry is evolving rapidly, with continuous advancements in artificial intelligence (AI), machine learning, and IoT-enabled sensors. These innovations present

a threat to businesses that are unable to keep up with technological advancements, even though they also open up new opportunities. Position sensors that lack smart features, real-time data analytics, or wireless connectivity risk becoming obsolete. If manufacturers don't invest in R&D to enhance their sensor offerings, they risk losing market share to competitors who have more advanced and efficient solutions. Furthermore, some businesses put off upgrades because it can be difficult and costly to integrate new technologies into their current food processing systems.

Covid-19 Impact:

The COVID-19 pandemic had a mixed effect on the market for food and beverage position sensors. At first, it caused supply chain disruptions, delayed sensor production, and slowed down installation because of labor shortages and lockdowns. In order to improve operational efficiency, reduce human contact, and guarantee hygiene compliance, food manufacturers, however, adopted automation and Industry 4.0 technologies more quickly as a result of the crisis. Investments in automated production lines were further fueled by the pandemic's increased demand for packaged and processed foods, which increased the demand for high-precision position sensors. Additionally, companies emphasis on resilience, remote monitoring, and predictive maintenance to lessen future disruptions also accelerated the move towards smart manufacturing and IoT-enabled monitoring solutions.

The Contact-Less Sensors segment is expected to be the largest during the forecast period

The Contact-Less Sensors segment is expected to account for the largest market share during the forecast period. This sizeable portion is explained by their advantages over contact-based sensors, which include greater durability, accuracy, and dependability—all of which are critical for preserving efficiency and hygiene in settings involving food processing. Moreover, these sensors non-contact design minimizes wear and tear, lowers maintenance needs, and guarantees adherence to strict sanitary regulations, making them the go-to option for contemporary food and beverage manufacturing applications.

The Capacitance segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the Capacitance segment is predicted to witness the highest growth rate. This growth is driven by their ability to detect a wide range of materials,

including liquids and granular substances, without direct contact, ensuring hygiene and reducing contamination risks in food processing environments. Capacitance sensors are perfect for applications like ingredient dispensing system control, packaging process monitoring, and level detection in storage tanks because of their high sensitivity and dependability. Additionally, their quick industry adoption can be largely attributed to their adaptability and non-invasive nature.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market share, driven by the need for automated production lines, the presence of major food and beverage manufacturers, and the fast pace of industrialization. The food processing and packaging industries in nations like China, Japan, and India are growing quickly to satisfy the demands of a sizable consumer base, and they are significant contributors to this growth. Furthermore, the adoption of sophisticated position sensors is also aided by the region's growing emphasis on raising production efficiency and food safety standards.

Region with highest CAGR:

Over the forecast period, the Middle East and Africa region is anticipated to exhibit the highest CAGR. The region's growing food and beverage manufacturing industry, which is fueled by population growth, urbanization, and the rising demand for packaged and processed foods, is the main driver of this expansion. Automation technologies, such as position sensors, are increasingly being used as the region updates its food processing and packaging operations in an effort to increase productivity and adhere to international safety regulations. Moreover, the need for sophisticated position sensor technologies is also growing in the MEA region as a result of continuous infrastructure investments and the drive toward more environmentally friendly and energy-efficient production methods.

Key players in the market

Some of the key players in Food & Beverage Position Sensors market include ABB Ltd, Honeywell International Inc., Sick AG, Omron Corporation, Emerson Electric Co., Hauser Management AG, GEMS Sensors Inc., Siemens AG, Baumer, Endress+Hauser, Ag Leader Technology, IFM Electronic GmbH, Balluff Inc., Novotechnik U.S., Inc. and Raven Industries, Inc.

Key Developments:

In December 2024, Honeywell announced the signing of a strategic agreement with Bombardier, a global leader in aviation and manufacturer of world-class business jets, to provide advanced technology for current and future Bombardier aircraft in avionics, propulsion and satellite communications technologies.

In August 2024, SICK AG and Endress+Hauser AG have entered into a strategic partnership for sustainability in process automation. Per the agreement, the companies will form a joint venture tasked with the development and production of process-related solutions for decarbonization, with each company holding a 50% stake.

In March 2024, ABB is collaborating with Green Hydrogen International (GHI) on a project to develop a major green hydrogen facility in south Texas, United States. As part of the Memorandum of Understanding (MoU) ABB's automation, electrification and digital technology will be assessed for deployment at GHI's Hydrogen City project.

Product Types Covered:

Contact Sensors

Contact-Less Sensors

Measuring Types Covered:

Point Level Measuring

Continuous Level Measuring

Position Sensor Types Covered:

Ultrasonic

Radar Microwave

Tuning Fork

Electromagnetic

Capacitance

Other Position Sensor Types

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2022, 2023, 2024, 2026, and 2030
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations

- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Product Analysis
- 3.7 Emerging Markets
- 3.8 Impact of Covid-19

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL FOOD & BEVERAGE POSITION SENSORS MARKET, BY PRODUCT

TYPE

- 5.1 Introduction
- 5.2 Contact Sensors
- 5.3 Contact-Less Sensors

6 GLOBAL FOOD & BEVERAGE POSITION SENSORS MARKET, BY MEASURING TYPE

- 6.1 Introduction
- 6.2 Point Level Measuring
- 6.3 Continuous Level Measuring

7 GLOBAL FOOD & BEVERAGE POSITION SENSORS MARKET, BY POSITION SENSOR TYPE

- 7.1 Introduction
- 7.2 Ultrasonic
- 7.3 Radar Microwave
- 7.4 Tuning Fork
- 7.5 Electromagnetic
- 7.6 Capacitance
- 7.7 Other Position Sensor Types

8 GLOBAL FOOD & BEVERAGE POSITION SENSORS MARKET, BY GEOGRAPHY

- 8.1 Introduction
- 8.2 North America
 - 8.2.1 US
 - 8.2.2 Canada
 - 8.2.3 Mexico
- 8.3 Europe
 - 8.3.1 Germany
 - 8.3.2 UK
 - 8.3.3 Italy
 - 8.3.4 France
 - 8.3.5 Spain
 - 8.3.6 Rest of Europe
- 8.4 Asia Pacific

- 8.4.1 Japan
- 8.4.2 China
- 8.4.3 India
- 8.4.4 Australia
- 8.4.5 New Zealand
- 8.4.6 South Korea
- 8.4.7 Rest of Asia Pacific
- 8.5 South America
 - 8.5.1 Argentina
 - 8.5.2 Brazil
 - 8.5.3 Chile
 - 8.5.4 Rest of South America
- 8.6 Middle East & Africa
 - 8.6.1 Saudi Arabia
 - 8.6.2 UAE
 - 8.6.3 Qatar
 - 8.6.4 South Africa
 - 8.6.5 Rest of Middle East & Africa

9 KEY DEVELOPMENTS

- 9.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 9.2 Acquisitions & Mergers
- 9.3 New Product Launch
- 9.4 Expansions
- 9.5 Other Key Strategies

10 COMPANY PROFILING

- 10.1 ABB Ltd
- 10.2 Honeywell International Inc.
- 10.3 Sick AG
- 10.4 Omron Corporation
- 10.5 Emerson Electric Co.
- 10.6 Hauser Management AG
- 10.7 GEMS Sensors Inc.
- 10.8 Siemens AG
- 10.9 Baumer
- 10.10 Endress+Hauser

- 10.11 Ag Leader Technology
- 10.12 IFM Electronic GmbH
- 10.13 Balluff Inc.
- 10.14 Novotechnik U.S., Inc.
- 10.15 Raven Industries, Inc.

List Of Tables

LIST OF TABLES

- 1 Global Food & Beverage Position Sensors Market Outlook, By Region (2022-2030) (\$MN)
- 2 Global Food & Beverage Position Sensors Market Outlook, By Product Type (2022-2030) (\$MN)
- 3 Global Food & Beverage Position Sensors Market Outlook, By Contact Sensors (2022-2030) (\$MN)
- 4 Global Food & Beverage Position Sensors Market Outlook, By Contact-Less Sensors (2022-2030) (\$MN)
- 5 Global Food & Beverage Position Sensors Market Outlook, By Measuring Type (2022-2030) (\$MN)
- 6 Global Food & Beverage Position Sensors Market Outlook, By Point Level Measuring (2022-2030) (\$MN)
- 7 Global Food & Beverage Position Sensors Market Outlook, By Continuous Level Measuring (2022-2030) (\$MN)
- 8 Global Food & Beverage Position Sensors Market Outlook, By Position Sensor Type (2022-2030) (\$MN)
- 9 Global Food & Beverage Position Sensors Market Outlook, By Ultrasonic (2022-2030) (\$MN)
- 10 Global Food & Beverage Position Sensors Market Outlook, By Radar Microwave (2022-2030) (\$MN)
- 11 Global Food & Beverage Position Sensors Market Outlook, By Tuning Fork (2022-2030) (\$MN)
- 12 Global Food & Beverage Position Sensors Market Outlook, By Electromagnetic (2022-2030) (\$MN)
- 13 Global Food & Beverage Position Sensors Market Outlook, By Capacitance (2022-2030) (\$MN)
- 14 Global Food & Beverage Position Sensors Market Outlook, By Other Position Sensor Types (2022-2030) (\$MN)
- 15 North America Food & Beverage Position Sensors Market Outlook, By Country (2022-2030) (\$MN)
- 16 North America Food & Beverage Position Sensors Market Outlook, By Product Type (2022-2030) (\$MN)
- 17 North America Food & Beverage Position Sensors Market Outlook, By Contact Sensors (2022-2030) (\$MN)
- 18 North America Food & Beverage Position Sensors Market Outlook, By Contact-Less

Sensors (2022-2030) (\$MN)

19 North America Food & Beverage Position Sensors Market Outlook, By Measuring Type (2022-2030) (\$MN)

20 North America Food & Beverage Position Sensors Market Outlook, By Point Level Measuring (2022-2030) (\$MN)

21 North America Food & Beverage Position Sensors Market Outlook, By Continuous Level Measuring (2022-2030) (\$MN)

22 North America Food & Beverage Position Sensors Market Outlook, By Position Sensor Type (2022-2030) (\$MN)

23 North America Food & Beverage Position Sensors Market Outlook, By Ultrasonic (2022-2030) (\$MN)

24 North America Food & Beverage Position Sensors Market Outlook, By Radar Microwave (2022-2030) (\$MN)

25 North America Food & Beverage Position Sensors Market Outlook, By Tuning Fork (2022-2030) (\$MN)

26 North America Food & Beverage Position Sensors Market Outlook, By Electromagnetic (2022-2030) (\$MN)

27 North America Food & Beverage Position Sensors Market Outlook, By Capacitance (2022-2030) (\$MN)

28 North America Food & Beverage Position Sensors Market Outlook, By Other Position Sensor Types (2022-2030) (\$MN)

29 Europe Food & Beverage Position Sensors Market Outlook, By Country (2022-2030) (\$MN)

30 Europe Food & Beverage Position Sensors Market Outlook, By Product Type (2022-2030) (\$MN)

31 Europe Food & Beverage Position Sensors Market Outlook, By Contact Sensors (2022-2030) (\$MN)

32 Europe Food & Beverage Position Sensors Market Outlook, By Contact-Less Sensors (2022-2030) (\$MN)

33 Europe Food & Beverage Position Sensors Market Outlook, By Measuring Type (2022-2030) (\$MN)

34 Europe Food & Beverage Position Sensors Market Outlook, By Point Level Measuring (2022-2030) (\$MN)

35 Europe Food & Beverage Position Sensors Market Outlook, By Continuous Level Measuring (2022-2030) (\$MN)

36 Europe Food & Beverage Position Sensors Market Outlook, By Position Sensor Type (2022-2030) (\$MN)

37 Europe Food & Beverage Position Sensors Market Outlook, By Ultrasonic (2022-2030) (\$MN)

- 38 Europe Food & Beverage Position Sensors Market Outlook, By Radar Microwave (2022-2030) (\$MN)
- 39 Europe Food & Beverage Position Sensors Market Outlook, By Tuning Fork (2022-2030) (\$MN)
- 40 Europe Food & Beverage Position Sensors Market Outlook, By Electromagnetic (2022-2030) (\$MN)
- 41 Europe Food & Beverage Position Sensors Market Outlook, By Capacitance (2022-2030) (\$MN)
- 42 Europe Food & Beverage Position Sensors Market Outlook, By Other Position Sensor Types (2022-2030) (\$MN)
- 43 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Country (2022-2030) (\$MN)
- 44 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Product Type (2022-2030) (\$MN)
- 45 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Contact Sensors (2022-2030) (\$MN)
- 46 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Contact-Less Sensors (2022-2030) (\$MN)
- 47 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Measuring Type (2022-2030) (\$MN)
- 48 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Point Level Measuring (2022-2030) (\$MN)
- 49 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Continuous Level Measuring (2022-2030) (\$MN)
- 50 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Position Sensor Type (2022-2030) (\$MN)
- 51 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Ultrasonic (2022-2030) (\$MN)
- 52 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Radar Microwave (2022-2030) (\$MN)
- 53 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Tuning Fork (2022-2030) (\$MN)
- 54 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Electromagnetic (2022-2030) (\$MN)
- 55 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Capacitance (2022-2030) (\$MN)
- 56 Asia Pacific Food & Beverage Position Sensors Market Outlook, By Other Position Sensor Types (2022-2030) (\$MN)
- 57 South America Food & Beverage Position Sensors Market Outlook, By Country

(2022-2030) (\$MN)

58 South America Food & Beverage Position Sensors Market Outlook, By Product Type (2022-2030) (\$MN)

59 South America Food & Beverage Position Sensors Market Outlook, By Contact Sensors (2022-2030) (\$MN)

60 South America Food & Beverage Position Sensors Market Outlook, By Contact-Less Sensors (2022-2030) (\$MN)

61 South America Food & Beverage Position Sensors Market Outlook, By Measuring Type (2022-2030) (\$MN)

62 South America Food & Beverage Position Sensors Market Outlook, By Point Level Measuring (2022-2030) (\$MN)

63 South America Food & Beverage Position Sensors Market Outlook, By Continuous Level Measuring (2022-2030) (\$MN)

64 South America Food & Beverage Position Sensors Market Outlook, By Position Sensor Type (2022-2030) (\$MN)

65 South America Food & Beverage Position Sensors Market Outlook, By Ultrasonic (2022-2030) (\$MN)

66 South America Food & Beverage Position Sensors Market Outlook, By Radar Microwave (2022-2030) (\$MN)

67 South America Food & Beverage Position Sensors Market Outlook, By Tuning Fork (2022-2030) (\$MN)

68 South America Food & Beverage Position Sensors Market Outlook, By Electromagnetic (2022-2030) (\$MN)

69 South America Food & Beverage Position Sensors Market Outlook, By Capacitance (2022-2030) (\$MN)

70 South America Food & Beverage Position Sensors Market Outlook, By Other Position Sensor Types (2022-2030) (\$MN)

71 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Country (2022-2030) (\$MN)

72 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Product Type (2022-2030) (\$MN)

73 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Contact Sensors (2022-2030) (\$MN)

74 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Contact-Less Sensors (2022-2030) (\$MN)

75 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Measuring Type (2022-2030) (\$MN)

76 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Point Level Measuring (2022-2030) (\$MN)

- 77 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Continuous Level Measuring (2022-2030) (\$MN)
- 78 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Position Sensor Type (2022-2030) (\$MN)
- 79 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Ultrasonic (2022-2030) (\$MN)
- 80 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Radar Microwave (2022-2030) (\$MN)
- 81 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Tuning Fork (2022-2030) (\$MN)
- 82 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Electromagnetic (2022-2030) (\$MN)
- 83 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Capacitance (2022-2030) (\$MN)
- 84 Middle East & Africa Food & Beverage Position Sensors Market Outlook, By Other Position Sensor Types (2022-2030) (\$MN)

I would like to order

Product name: Food & Beverage Position Sensors Market Forecasts to 2030 – Global Analysis By Product Type (Contact Sensors and Contact-Less Sensors), Measuring Type (Point Level Measuring and Continuous Level Measuring), Position Sensor Type and By Geography

Product link: <https://marketpublishers.com/r/F441C08423CAEN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

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

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/F441C08423CAEN.html>