+357 96 030922
info@marketpublishers.com

Safety Motion Control Market Forecasts to 2032 – Global Analysis By Type (Open-Loop Systems and Closed-Loop Systems), Component, System Function, Application, End User and By Geography

https://marketpublishers.com/r/SCB5C2F37623EN.html
Date: January 2026
Pages: 200
Price: US$ 4,150.00 (Single User License)
ID: SCB5C2F37623EN

Abstracts

According to Stratistics MRC, the Global Safety Motion Control Market is accounted for $6.70 billion in 2025 and is expected to reach $10.42 billion by 2032 growing at a CAGR of 6.5% during the forecast period. Safety Motion Control refers to the integration of safety functions directly into motion control systems to ensure machines operate without posing risks to people, equipment, or processes. It combines functional safety with precise motion management to monitor, control, and safely stop mechanical movements during abnormal conditions. By using safety-rated drives, controllers, sensors, and software, safety motion control enables functions such as safe torque off, safe speed monitoring, and safe positioning. This approach improves productivity, reduces downtime, and ensures compliance with international machine safety standards while maintaining high operational performance.

According to the Motion Control and Motor Association, the global motion control and the motor market experienced record growth in 2018, with USD 3.827 billion in shipments, increasing by 8% from 2017.

Market Dynamics:

Driver:

Rise of collaborative robotics (Cobots)

Cobots are designed to work alongside humans, making precise motion monitoring and

+357 96 030922
info@marketpublishers.com

safe speed, position, and torque control essential. Manufacturers are integrating advanced safety motion functions to comply with stringent workplace safety standards while maintaining productivity. As factories move toward flexible and human-centric automation, safety-rated motion control becomes a critical enabler. Industries such as automotive, electronics, and packaging are rapidly adopting cobots for repetitive and high-precision tasks. This trend is pushing OEMs to embed safety directly into drives, motors, and controllers. Consequently, the growth of collaborative robotics is acting as a strong catalyst for the safety motion control market.

Restraint:

Shortage of skilled personnel

Engineers must possess knowledge of functional safety standards such as IEC 61508 and IEC 61800-5-2, along with advanced automation skills. Many end users face challenges in configuring, validating, and certifying safety motion applications. This skills gap increases deployment time and raises overall project costs for manufacturers. Small and mid-sized enterprises are particularly affected due to limited access to trained professionals. Inadequate training can also lead to underutilization of advanced safety features. As a result, the shortage of skilled personnel is constraining broader adoption of safety motion control technologies.

Opportunity:

AI-Driven predictive safety

AI-enabled analytics can predict potential motion-related hazards by analyzing real-time operational data. This allows systems to initiate preventive safety actions before faults or accidents occur. Predictive safety enhances uptime by reducing unplanned shutdowns while maintaining compliance with safety standards. Manufacturers are increasingly combining AI with digital twins and machine learning models to optimize motion behavior. Such capabilities are particularly valuable in high-speed and complex automation environments. The shift toward intelligent, self-adaptive safety systems is opening new avenues for innovation in the market.

Threat:

Cybersecurity vulnerabilities

+357 96 030922
info@marketpublishers.com

Networked drives, controllers, and safety PLCs are potential entry points for cyberattacks. A security breach could compromise safety functions, leading to operational disruptions or hazardous situations. Industrial facilities are increasingly exposed due to the convergence of IT and OT systems. Ensuring both functional safety and cybersecurity compliance adds complexity to system design. While standards for industrial cybersecurity are evolving, implementation remains uneven across regions. These vulnerabilities pose a significant threat to market confidence and adoption.

Covid-19 Impact:

The COVID-19 pandemic had a mixed impact on the safety motion control market. Initial lockdowns disrupted manufacturing operations and delayed automation projects across multiple industries. Supply chain interruptions affected the availability of drives, sensors, and control components. However, the crisis accelerated the adoption of automation to reduce dependency on human labor. Companies increasingly invested in safer, more autonomous production lines to ensure business continuity. This shift highlighted the importance of integrated safety motion solutions in resilient manufacturing setups. In the post-pandemic phase, demand has rebounded with a stronger focus on smart and safe automation.

The closed-loop systems segment is expected to be the largest during the forecast period

The closed-loop systems segment is expected to account for the largest market share during the forecast period. These systems continuously monitor feedback from encoders and sensors to ensure precise and safe motion execution. Their ability to detect deviations in speed, position, or torque makes them highly reliable for safety-critical applications. Closed-loop control enhances both operational accuracy and worker protection. Industries with high-speed machinery prefer these systems due to their superior performance and fault detection capabilities. Integration with advanced drives and controllers further strengthens their adoption.

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

Over the forecast period, the pharmaceuticals segment is predicted to witness the highest growth rate. Pharmaceutical manufacturing requires extremely precise and contamination-free motion control under strict regulatory oversight. Automated filling, packaging, and inspection systems rely heavily on safety-rated motion functions. The

+357 96 030922
info@marketpublishers.com

push toward continuous manufacturing and high-speed production lines is increasing safety requirements. Regulatory compliance and worker protection are critical drivers in this sector. Additionally, rising pharmaceutical demand globally is accelerating investments in advanced automation.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share. The region has a high concentration of advanced manufacturing facilities and early adopters of automation technologies. Strong enforcement of occupational safety regulations drives consistent demand for safety solutions. Industries such as automotive, aerospace, and food processing heavily invest in safety-rated motion systems. The presence of leading automation vendors further strengthens market maturity. Continuous upgrades to smart factories are also supporting adoption.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR. Rapid industrialization and expansion of manufacturing capacity are key growth drivers. Countries such as China, India, Japan, and South Korea are aggressively investing in factory automation. Rising awareness of worker safety and international compliance standards is boosting demand for safety motion technologies. The growing adoption of robotics across electronics and automotive sectors further accelerates growth. Government initiatives supporting smart manufacturing are also playing a crucial role.

Key players in the market

Some of the key players in Safety Motion Control Market include Siemens AG, Honeywell International Inc., Rockwell Automation, Inc., Lenze SE, Schneider Electric SE, Omron Corporation, ABB Ltd., Yaskawa Electric Corporation, Mitsubishi Electric Corporation, Keyence Corporation, General Electric Company, Eaton Corporation plc, SICK AG, Bosch Rexroth AG, and Pilz GmbH & Co. KG

Key Developments:

In January 2026, Siemens and NVIDIA announced a significant expansion of their strategic partnership to bring artificial intelligence into the real world. Together, the companies aim to develop industrial and physical AI solutions that will bring AI-driven

+357 96 030922
info@marketpublishers.com

innovation to every industry and industrial workflow, as well as accelerate each others' operations.

In November 2025, Schneider Electric, and Bloomberg New Economy announced the launch of the Energy Technology Coalition ('Coalition'). This new private sector initiative brings together global decision makers and experts across industries to accelerate the adoption of technologies that make energy consumption more efficient, resilient, and responsive amid soaring global electricity demand.

Types Covered:

- Open-Loop Systems
- Closed-Loop Systems

Components Covered:

- Sensors
- Feedback Devices
- Motion Controllers
- AC Motors
- DC Motors
- Other Components

System Functions Covered:

- Safe Torque Off (STO)
- Safe Limited Speed
- Safe Stop

+357 96 030922
info@marketpublishers.com

- Safe Direction
- Emergency Stop

Applications Covered:

- Assembling
- Material Handling
- Packaging
- Retrofitting of Drive Systems
- Machine Building
- Motion Control Operations
- Servo Presses, Compressors, Pumps

End Users Covered:

- Manufacturing
- Oil & Gas
- Automotive
- Logistics & Warehousing
- Aerospace & Defense
- Pharmaceuticals
- Energy & Power
- Food & Beverage

+357 96 030922
info@marketpublishers.com

- Electrical & Electronics
- Other End Users

Regions Covered:

- North America
  - US
  - Canada
  - Mexico
- Europe
  - Germany
  - UK
  - Italy
  - France
  - Spain
  - Rest of Europe
- Asia Pacific
  - Japan
  - China
  - India
  - Australia

+357 96 030922
info@marketpublishers.com

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 2024, 2025, 2026, 2028, and 2032
- 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

+357 96 030922
info@marketpublishers.com

- 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

+357 96 030922
info@marketpublishers.com

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 Application Analysis
3.7 End User Analysis
3.8 Emerging Markets
3.9 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

+357 96 030922
info@marketpublishers.com

5 GLOBAL SAFETY MOTION CONTROL MARKET, BY TYPE

5.1 Introduction
5.2 Open-Loop Systems
5.3 Closed-Loop Systems

6 GLOBAL SAFETY MOTION CONTROL MARKET, BY COMPONENT

6.1 Introduction
6.2 Sensors
6.3 Feedback Devices
6.4 Motion Controllers
6.5 AC Motors
6.6 DC Motors
6.7 Other Components

7 GLOBAL SAFETY MOTION CONTROL MARKET, BY SYSTEM FUNCTION

7.1 Introduction
7.2 Safe Torque Off (STO)
7.3 Safe Limited Speed
7.4 Safe Stop
7.5 Safe Direction
7.6 Emergency Stop

8 GLOBAL SAFETY MOTION CONTROL MARKET, BY APPLICATION

8.1 Introduction
8.2 Assembling
8.3 Material Handling
8.4 Packaging
8.5 Retrofitting of Drive Systems
8.6 Machine Building
8.7 Motion Control Operations
8.8 Servo Presses, Compressors, Pumps

9 GLOBAL SAFETY MOTION CONTROL MARKET, BY END USER

9.1 Introduction

+357 96 030922
info@marketpublishers.com

9.2 Manufacturing
9.3 Oil & Gas
9.4 Automotive
9.5 Logistics & Warehousing
9.6 Aerospace & Defense
9.7 Pharmaceuticals
9.8 Energy & Power
9.9 Food & Beverage
9.10 Electrical & Electronics
9.11 Other End Users

10 GLOBAL SAFETY MOTION CONTROL MARKET, BY GEOGRAPHY

10.1 Introduction
10.2 North America
  10.2.1 US
  10.2.2 Canada
  10.2.3 Mexico
10.3 Europe
  10.3.1 Germany
  10.3.2 UK
  10.3.3 Italy
  10.3.4 France
  10.3.5 Spain
  10.3.6 Rest of Europe
10.4 Asia Pacific
  10.4.1 Japan
  10.4.2 China
  10.4.3 India
  10.4.4 Australia
  10.4.5 New Zealand
  10.4.6 South Korea
  10.4.7 Rest of Asia Pacific
10.5 South America
  10.5.1 Argentina
  10.5.2 Brazil
  10.5.3 Chile
  10.5.4 Rest of South America
10.6 Middle East & Africa

+357 96 030922
info@marketpublishers.com

10.6.1 Saudi Arabia
10.6.2 UAE
10.6.3 Qatar
10.6.4 South Africa
10.6.5 Rest of Middle East & Africa

11 KEY DEVELOPMENTS

11.1 Agreements, Partnerships, Collaborations and Joint Ventures
11.2 Acquisitions & Mergers
11.3 New Product Launch
11.4 Expansions
11.5 Other Key Strategies

12 COMPANY PROFILING

12.1 Siemens AG
12.2 Honeywell International Inc.
12.3 Rockwell Automation, Inc.
12.4 Lenze SE
12.5 Schneider Electric SE
12.6 Omron Corporation
12.7 ABB Ltd.
12.8 Yaskawa Electric Corporation
12.9 Mitsubishi Electric Corporation
12.10 Keyence Corporation
12.11 General Electric Company
12.12 Eaton Corporation plc
12.13 SICK AG
12.14 Bosch Rexroth AG
12.15 Pilz GmbH & Co. KG

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

Table 1 Global Safety Motion Control Market Outlook, By Region (2024-2032) ($MN)
Table 2 Global Safety Motion Control Market Outlook, By Type (2024-2032) ($MN)
Table 3 Global Safety Motion Control Market Outlook, By Open-Loop Systems (2024-2032) ($MN)
Table 4 Global Safety Motion Control Market Outlook, By Closed-Loop Systems (2024-2032) ($MN)
Table 5 Global Safety Motion Control Market Outlook, By Component (2024-2032) ($MN)
Table 6 Global Safety Motion Control Market Outlook, By Sensors (2024-2032) ($MN)
Table 7 Global Safety Motion Control Market Outlook, By Feedback Devices (2024-2032) ($MN)
Table 8 Global Safety Motion Control Market Outlook, By Motion Controllers (2024-2032) ($MN)
Table 9 Global Safety Motion Control Market Outlook, By AC Motors (2024-2032) ($MN)
Table 10 Global Safety Motion Control Market Outlook, By DC Motors (2024-2032) ($MN)
Table 11 Global Safety Motion Control Market Outlook, By Other Components (2024-2032) ($MN)
Table 12 Global Safety Motion Control Market Outlook, By System Function (2024-2032) ($MN)
Table 13 Global Safety Motion Control Market Outlook, By Safe Torque Off (STO) (2024-2032) ($MN)
Table 14 Global Safety Motion Control Market Outlook, By Safe Limited Speed (2024-2032) ($MN)
Table 15 Global Safety Motion Control Market Outlook, By Safe Stop (2024-2032) ($MN)
Table 16 Global Safety Motion Control Market Outlook, By Safe Direction (2024-2032) ($MN)
Table 17 Global Safety Motion Control Market Outlook, By Emergency Stop (2024-2032) ($MN)
Table 18 Global Safety Motion Control Market Outlook, By Application (2024-2032) ($MN)
Table 19 Global Safety Motion Control Market Outlook, By Assembling (2024-2032) ($MN)
Table 20 Global Safety Motion Control Market Outlook, By Material Handling

+357 96 030922
info@marketpublishers.com

(2024-2032) ($MN)
Table 21 Global Safety Motion Control Market Outlook, By Packaging (2024-2032) ($MN)
Table 22 Global Safety Motion Control Market Outlook, By Retrofitting of Drive Systems (2024-2032) ($MN)
Table 23 Global Safety Motion Control Market Outlook, By Machine Building (2024-2032) ($MN)
Table 24 Global Safety Motion Control Market Outlook, By Motion Control Operations (2024-2032) ($MN)
Table 25 Global Safety Motion Control Market Outlook, By Servo Presses, Compressors, Pumps (2024-2032) ($MN)
Table 26 Global Safety Motion Control Market Outlook, By End User (2024-2032) ($MN)
Table 27 Global Safety Motion Control Market Outlook, By Manufacturing (2024-2032) ($MN)
Table 28 Global Safety Motion Control Market Outlook, By Oil & Gas (2024-2032) ($MN)
Table 29 Global Safety Motion Control Market Outlook, By Automotive (2024-2032) ($MN)
Table 30 Global Safety Motion Control Market Outlook, By Logistics & Warehousing (2024-2032) ($MN)
Table 31 Global Safety Motion Control Market Outlook, By Aerospace & Defense (2024-2032) ($MN)
Table 32 Global Safety Motion Control Market Outlook, By Pharmaceuticals (2024-2032) ($MN)
Table 33 Global Safety Motion Control Market Outlook, By Energy & Power (2024-2032) ($MN)
Table 34 Global Safety Motion Control Market Outlook, By Food & Beverage (2024-2032) ($MN)
Table 35 Global Safety Motion Control Market Outlook, By Electrical & Electronics (2024-2032) ($MN)
Table 36 Global Safety Motion Control Market Outlook, By Other End Users (2024-2032) ($MN)
Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Safety Motion Control Market Forecasts to 2032 – Global Analysis By Type (Open-Loop Systems and Closed-Loop Systems), Component, System Function, Application, End User and By Geography

Product link: https://marketpublishers.com/r/SCB5C2F37623EN.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/SCB5C2F37623EN.html