

Global Electromagnetic Brakes for Humanoid Robot Market 2026 by Manufacturers, Regions, Type and Application, Forecast to 2032

<https://marketpublishers.com/r/G32ACBC68EBAEN.html>

Date: August 2026

Pages: 132

Price: US\$ 3,480.00 (Single User License)

ID: G32ACBC68EBAEN

Abstracts

According to our (Global Info Research) latest study, the global Electromagnetic Brakes for Humanoid Robot market size was valued at US\$ 3.60 million in 2025 and is forecast to a readjusted size of US\$ 62.83 million by 2032 with a CAGR of 20.1% during review period.

In 2025, global Electromagnetic Brakes for Humanoid Robot production reached approximately 35,000 units with average price of 100 USD/Unit.

Electromagnetic brakes for humanoid robots are safety and motion-control components installed in joint actuators, servo motors or reducer assemblies. They stop joint motion, hold a commanded position and prevent uncontrolled movement or joint collapse during power loss, emergency shutdowns or control-system failures. A typical brake consists of an electromagnetic coil, armature, friction disc, springs, magnetic components and a mounting structure, and is integrated with the motor, reducer, encoder and drive electronics to form a compact joint actuator.

The principal technologies are spring-applied electromagnetic brakes and permanent-magnet brakes. Spring-applied brakes engage mechanically when power is removed and release when the coil is energized, providing fail-safe protection for load-bearing joints such as the hip, knee, ankle, waist and shoulder. Permanent-magnet brakes can provide compact construction, rapid response, backlash-free torque transmission and accurate holding performance. Product development is increasingly focused on slim profiles, hollow-shaft structures, high torque density, low power consumption and quiet operation.

Upstream suppliers provide soft magnetic steel, electrical steel, permanent magnets, enamelled copper wire, friction materials, spring steel, bearings, fasteners, precision-stamped components and machined parts. Sensors, brake controllers and power-management electronics may also be included. Magnetic properties, friction stability, thermal resistance and dimensional accuracy directly influence holding torque, response time, service life and operating noise.

The midstream segment includes electromagnetic brake manufacturers, servo-motor suppliers, precision-reducer manufacturers and integrated joint-module companies. Brake suppliers undertake magnetic-circuit design, coil winding, friction-pair development, spring matching, thermal management, lifecycle testing and safety validation. Joint-module manufacturers integrate the brake with frameless torque motors, harmonic or planetary reducers, encoders, drives and structural housings. Slim hollow-shaft brakes are particularly suitable for humanoid joints because power, communication and sensor cables can be routed through the centre of the actuator.

Downstream customers include humanoid robot manufacturers and end users in automotive production, warehousing, logistics, electronics assembly, commercial services, rehabilitation and household assistance. Requirements differ by joint. Leg and waist joints emphasize high holding torque, shock resistance and fail-safe operation, while arm joints place greater importance on low weight, rapid release and low drag torque. Small hand and finger joints may use miniature brakes, mechanical locking mechanisms or brake-free actuator designs.

The market remains at an early commercialization stage but has attractive long-term growth potential. Commercial humanoid platforms increasingly contain large numbers of powered joints, with some systems disclosing more than twenty to forty joint motors and high peak torque at load-bearing leg joints. As humanoid robots move from demonstrations into factories, warehouses and human-shared environments, emergency stopping, power-off holding and protection against uncontrolled arm or body movement will become increasingly important. This is expected to support demand for high-reliability brakes in critical hip, knee, ankle, waist and shoulder actuators.

Future development will focus on higher torque density, thinner hollow-shaft construction, lower weight, minimal residual drag, millisecond-level response, low noise and reduced holding power. Energy-saving controllers can provide high initial current for brake release and then reduce voltage or use pulse-width modulation to limit steady-state power consumption and heat generation. Brakes are also expected to become more closely integrated with encoders, drives and functional-safety systems, enabling

wear monitoring, temperature sensing, torque diagnostics and predictive maintenance.

Report Scope

This report is a detailed and comprehensive analysis for global Electromagnetic Brakes for Humanoid Robot market. Both quantitative and qualitative analyses are presented by manufacturers, by region & country, by Type and by Application. As the market is constantly changing, this report explores the competition, supply and demand trends, as well as key factors that contribute to its changing demands across many markets. Company profiles and product examples of selected competitors, along with market share estimates of some of the selected leaders for the year 2025, are provided.

Key Features:

Global Electromagnetic Brakes for Humanoid Robot market size and forecasts, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2021-2032

Global Electromagnetic Brakes for Humanoid Robot market size and forecasts by region and country, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2021-2032

Global Electromagnetic Brakes for Humanoid Robot market size and forecasts, by Type and by Application, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2021-2032

Global Electromagnetic Brakes for Humanoid Robot market shares of main players, shipments in revenue (\$ Million), sales quantity (K Units), and ASP (US\$/Unit), 2021-2026

The Primary Objectives in This Report Are:

To determine the size of the total market opportunity of global and key countries

To assess the growth potential for Electromagnetic Brakes for Humanoid Robot

To forecast future growth in each product and end-use market

To assess competitive factors affecting the marketplace

This report profiles key players in the global Electromagnetic Brakes for Humanoid Robot market based on the following parameters - company overview, sales quantity, revenue, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Kendrion N.V., Chr. Mayr GmbH + Co. KG, KEB Automation KG, Warner Electric, Ogura Clutch Co., Ltd., Miki Pulley Co., Ltd., Nexen Group, Inc., PRECIMA Magnettechnik GmbH, SINFONIA TECHNOLOGY CO., LTD., MinebeaMitsumi Inc., etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Market Segmentation

Electromagnetic Brakes for Humanoid Robot market is split by Type and by Application. For the period 2021-2032, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value. This analysis can help you expand your business by targeting qualified niche markets.

Market segment by Type

Spring-Applied Power-Off Electromagnetic Brake

Permanent-Magnet Power-Off Brake

Power-On Electromagnetic Friction Brake

Others

Market segment by Structure

Ultra-Thin Hollow Compact Brake

Micro Flange Compact Brake

Flat Integrated Brake

Market segment by Torque

Below 1 Nm

1-5 Nm

5-20 Nm

Above 20 Nm

Market segment by Application

Humanoid Robot Arm Joints

Humanoid Robot Leg Joints

Waist and Torso Joints

Others

Major players covered

Kendrion N.V.

Chr. Mayr GmbH + Co. KG

KEB Automation KG

Warner Electric

Ogura Clutch Co., Ltd.

Miki Pulley Co., Ltd.

Nexen Group, Inc.

PRECIMA Magnettechnik GmbH

SINFONIA TECHNOLOGY CO., LTD.

MinebeaMitsumi Inc.

Ortlinghaus-Werke GmbH

Electroid Company

Mach III Clutch, Inc.

Chengdu Reach Machinery Co., Ltd.

Chengdu CDC Technology Co., Ltd.

Zhuji Miki Technology Co., Ltd.

Suzhou Jipai Electromagnetic Technology Co., Ltd.

Jiangxi Huawu Brake Co., Ltd.

Market segment by region, regional analysis covers

North America (United States, Canada, and Mexico)

Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)

Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)

South America (Brazil, Argentina, Colombia, and Rest of South America)

Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

Chapter Outline

Chapter 1, to describe Electromagnetic Brakes for Humanoid Robot product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Electromagnetic Brakes for Humanoid Robot, with price, sales quantity, revenue, and global market share of Electromagnetic Brakes for Humanoid Robot from 2021 to 2026.

Chapter 3, the Electromagnetic Brakes for Humanoid Robot competitive situation, sales quantity, revenue, and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Electromagnetic Brakes for Humanoid Robot breakdown data are shown at the regional level, to show the sales quantity, consumption value, and growth by regions, from 2021 to 2032.

Chapter 5 and 6, to segment the sales by Type and by Application, with sales market share and growth rate by Type, by Application, from 2021 to 2032.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value, and market share for key countries in the world, from 2021 to 2026. and Electromagnetic Brakes for Humanoid Robot market forecast, by regions, by Type, and by Application, with sales and revenue, from 2027 to 2032.

Chapter 12, market dynamics, drivers, restraints, trends, and Porters Five Forces analysis.

Chapter 13, the key raw materials and key suppliers, and industry chain of Electromagnetic Brakes for Humanoid Robot.

Chapter 14 and 15, to describe Electromagnetic Brakes for Humanoid Robot sales channel, distributors, customers, research findings and conclusion.

Contents

1 MARKET OVERVIEW

1.1 Product Overview and Scope

1.2 Market Estimation Caveats and Base Year

1.3 Market Analysis by Type

1.3.1 Overview: Global Electromagnetic Brakes for Humanoid Robot Consumption
Value by Type: 2021 Versus 2025 Versus 2032

1.3.2 Spring-Applied Power-Off Electromagnetic Brake

1.3.3 Permanent-Magnet Power-Off Brake

1.3.4 Power-On Electromagnetic Friction Brake

1.3.5 Others

1.4 Market Analysis by Structure

1.4.1 Overview: Global Electromagnetic Brakes for Humanoid Robot Consumption
Value by Structure: 2021 Versus 2025 Versus 2032

1.4.2 Ultra-Thin Hollow Compact Brake

1.4.3 Micro Flange Compact Brake

1.4.4 Flat Integrated Brake

1.5 Market Analysis by Torque

1.5.1 Overview: Global Electromagnetic Brakes for Humanoid Robot Consumption
Value by Torque: 2021 Versus 2025 Versus 2032

1.5.2 Below 1 Nm

1.5.3 1-5 Nm

1.5.4 5-20 Nm

1.5.5 Above 20 Nm

1.6 Market Analysis by Application

1.6.1 Overview: Global Electromagnetic Brakes for Humanoid Robot Consumption
Value by Application: 2021 Versus 2025 Versus 2032

1.6.2 Humanoid Robot Arm Joints

1.6.3 Humanoid Robot Leg Joints

1.6.4 Waist and Torso Joints

1.6.5 Others

1.7 Global Electromagnetic Brakes for Humanoid Robot Market Size & Forecast

1.7.1 Global Electromagnetic Brakes for Humanoid Robot Consumption Value (2021 & 2025 & 2032)

1.7.2 Global Electromagnetic Brakes for Humanoid Robot Sales Quantity (2021-2032)

1.7.3 Global Electromagnetic Brakes for Humanoid Robot Average Price (2021-2032)

2 MANUFACTURERS PROFILES

2.1 Kendrion N.V.

2.1.1 Kendrion N.V. Details

2.1.2 Kendrion N.V. Major Business

2.1.3 Kendrion N.V. Electromagnetic Brakes for Humanoid Robot Product and Services

2.1.4 Kendrion N.V. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.1.5 Kendrion N.V. Recent Developments/Updates

2.2 Chr. Mayr GmbH + Co. KG

2.2.1 Chr. Mayr GmbH + Co. KG Details

2.2.2 Chr. Mayr GmbH + Co. KG Major Business

2.2.3 Chr. Mayr GmbH + Co. KG Electromagnetic Brakes for Humanoid Robot Product and Services

2.2.4 Chr. Mayr GmbH + Co. KG Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.2.5 Chr. Mayr GmbH + Co. KG Recent Developments/Updates

2.3 KEB Automation KG

2.3.1 KEB Automation KG Details

2.3.2 KEB Automation KG Major Business

2.3.3 KEB Automation KG Electromagnetic Brakes for Humanoid Robot Product and Services

2.3.4 KEB Automation KG Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.3.5 KEB Automation KG Recent Developments/Updates

2.4 Warner Electric

2.4.1 Warner Electric Details

2.4.2 Warner Electric Major Business

2.4.3 Warner Electric Electromagnetic Brakes for Humanoid Robot Product and Services

2.4.4 Warner Electric Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.4.5 Warner Electric Recent Developments/Updates

2.5 Ogura Clutch Co., Ltd.

2.5.1 Ogura Clutch Co., Ltd. Details

2.5.2 Ogura Clutch Co., Ltd. Major Business

2.5.3 Ogura Clutch Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services

2.5.4 Ogura Clutch Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.5.5 Ogura Clutch Co., Ltd. Recent Developments/Updates

2.6 Miki Pulley Co., Ltd.

2.6.1 Miki Pulley Co., Ltd. Details

2.6.2 Miki Pulley Co., Ltd. Major Business

2.6.3 Miki Pulley Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services

2.6.4 Miki Pulley Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.6.5 Miki Pulley Co., Ltd. Recent Developments/Updates

2.7 Nexen Group, Inc.

2.7.1 Nexen Group, Inc. Details

2.7.2 Nexen Group, Inc. Major Business

2.7.3 Nexen Group, Inc. Electromagnetic Brakes for Humanoid Robot Product and Services

2.7.4 Nexen Group, Inc. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.7.5 Nexen Group, Inc. Recent Developments/Updates

2.8 PRECIMA Magnettechnik GmbH

2.8.1 PRECIMA Magnettechnik GmbH Details

2.8.2 PRECIMA Magnettechnik GmbH Major Business

2.8.3 PRECIMA Magnettechnik GmbH Electromagnetic Brakes for Humanoid Robot Product and Services

2.8.4 PRECIMA Magnettechnik GmbH Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.8.5 PRECIMA Magnettechnik GmbH Recent Developments/Updates

2.9 SINFONIA TECHNOLOGY CO., LTD.

2.9.1 SINFONIA TECHNOLOGY CO., LTD. Details

2.9.2 SINFONIA TECHNOLOGY CO., LTD. Major Business

2.9.3 SINFONIA TECHNOLOGY CO., LTD. Electromagnetic Brakes for Humanoid Robot Product and Services

2.9.4 SINFONIA TECHNOLOGY CO., LTD. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.9.5 SINFONIA TECHNOLOGY CO., LTD. Recent Developments/Updates

2.10 MinebeaMitsumi Inc.

2.10.1 MinebeaMitsumi Inc. Details

2.10.2 MinebeaMitsumi Inc. Major Business

2.10.3 MinebeaMitsumi Inc. Electromagnetic Brakes for Humanoid Robot Product and Services

2.10.4 MinebeaMitsumi Inc. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.10.5 MinebeaMitsumi Inc. Recent Developments/Updates

2.11 Ortlinghaus-Werke GmbH

2.11.1 Ortlinghaus-Werke GmbH Details

2.11.2 Ortlinghaus-Werke GmbH Major Business

2.11.3 Ortlinghaus-Werke GmbH Electromagnetic Brakes for Humanoid Robot Product and Services

2.11.4 Ortlinghaus-Werke GmbH Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.11.5 Ortlinghaus-Werke GmbH Recent Developments/Updates

2.12 Electroid Company

2.12.1 Electroid Company Details

2.12.2 Electroid Company Major Business

2.12.3 Electroid Company Electromagnetic Brakes for Humanoid Robot Product and Services

2.12.4 Electroid Company Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.12.5 Electroid Company Recent Developments/Updates

2.13 Mach III Clutch, Inc.

2.13.1 Mach III Clutch, Inc. Details

2.13.2 Mach III Clutch, Inc. Major Business

2.13.3 Mach III Clutch, Inc. Electromagnetic Brakes for Humanoid Robot Product and Services

2.13.4 Mach III Clutch, Inc. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.13.5 Mach III Clutch, Inc. Recent Developments/Updates

2.14 Chengdu Reach Machinery Co., Ltd.

2.14.1 Chengdu Reach Machinery Co., Ltd. Details

2.14.2 Chengdu Reach Machinery Co., Ltd. Major Business

2.14.3 Chengdu Reach Machinery Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services

2.14.4 Chengdu Reach Machinery Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)

2.14.5 Chengdu Reach Machinery Co., Ltd. Recent Developments/Updates

2.15 Chengdu CDC Technology Co., Ltd.

- 2.15.1 Chengdu CDC Technology Co., Ltd. Details
- 2.15.2 Chengdu CDC Technology Co., Ltd. Major Business
- 2.15.3 Chengdu CDC Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services
- 2.15.4 Chengdu CDC Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)
- 2.15.5 Chengdu CDC Technology Co., Ltd. Recent Developments/Updates
- 2.16 Zhuji Miki Technology Co., Ltd.
- 2.16.1 Zhuji Miki Technology Co., Ltd. Details
- 2.16.2 Zhuji Miki Technology Co., Ltd. Major Business
- 2.16.3 Zhuji Miki Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services
- 2.16.4 Zhuji Miki Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)
- 2.16.5 Zhuji Miki Technology Co., Ltd. Recent Developments/Updates
- 2.17 Suzhou Jipai Electromagnetic Technology Co., Ltd.
- 2.17.1 Suzhou Jipai Electromagnetic Technology Co., Ltd. Details
- 2.17.2 Suzhou Jipai Electromagnetic Technology Co., Ltd. Major Business
- 2.17.3 Suzhou Jipai Electromagnetic Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services
- 2.17.4 Suzhou Jipai Electromagnetic Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)
- 2.17.5 Suzhou Jipai Electromagnetic Technology Co., Ltd. Recent Developments/Updates
- 2.18 Jiangxi Huawu Brake Co., Ltd.
- 2.18.1 Jiangxi Huawu Brake Co., Ltd. Details
- 2.18.2 Jiangxi Huawu Brake Co., Ltd. Major Business
- 2.18.3 Jiangxi Huawu Brake Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services
- 2.18.4 Jiangxi Huawu Brake Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2021-2026)
- 2.18.5 Jiangxi Huawu Brake Co., Ltd. Recent Developments/Updates

3 COMPETITIVE ENVIRONMENT: ELECTROMAGNETIC BRAKES FOR HUMANOID ROBOT BY MANUFACTURER

3.1 Global Electromagnetic Brakes for Humanoid Robot Sales Quantity by Manufacturer

(2021-2026)

3.2 Global Electromagnetic Brakes for Humanoid Robot Revenue by Manufacturer

(2021-2026)

3.3 Global Electromagnetic Brakes for Humanoid Robot Average Price by Manufacturer

(2021-2026)

3.4 Market Share Analysis (2025)

3.4.1 Producer Shipments of Electromagnetic Brakes for Humanoid Robot by Manufacturer Revenue (\$MM) and Market Share (%): 2025

3.4.2 Top 3 Electromagnetic Brakes for Humanoid Robot Manufacturer Market Share in 2025

3.4.3 Top 6 Electromagnetic Brakes for Humanoid Robot Manufacturer Market Share in 2025

3.5 Electromagnetic Brakes for Humanoid Robot Market: Overall Company Footprint Analysis

3.5.1 Electromagnetic Brakes for Humanoid Robot Market: Region Footprint

3.5.2 Electromagnetic Brakes for Humanoid Robot Market: Company Product Type Footprint

3.5.3 Electromagnetic Brakes for Humanoid Robot Market: Company Product Application Footprint

3.6 New Market Entrants and Barriers to Market Entry

3.7 Mergers, Acquisition, Agreements, and Collaborations

4 CONSUMPTION ANALYSIS BY REGION

4.1 Global Electromagnetic Brakes for Humanoid Robot Market Size by Region

4.1.1 Global Electromagnetic Brakes for Humanoid Robot Sales Quantity by Region (2021-2032)

4.1.2 Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Region (2021-2032)

4.1.3 Global Electromagnetic Brakes for Humanoid Robot Average Price by Region (2021-2032)

4.2 North America Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032)

4.3 Europe Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032)

4.4 Asia-Pacific Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032)

4.5 South America Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032)

4.6 Middle East & Africa Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032)

5 MARKET SEGMENT BY TYPE

5.1 Global Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2021-2032)

5.2 Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Type (2021-2032)

5.3 Global Electromagnetic Brakes for Humanoid Robot Average Price by Type (2021-2032)

6 MARKET SEGMENT BY APPLICATION

6.1 Global Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2032)

6.2 Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Application (2021-2032)

6.3 Global Electromagnetic Brakes for Humanoid Robot Average Price by Application (2021-2032)

7 NORTH AMERICA

7.1 North America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2021-2032)

7.2 North America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2032)

7.3 North America Electromagnetic Brakes for Humanoid Robot Market Size by Country

7.3.1 North America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Country (2021-2032)

7.3.2 North America Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2021-2032)

7.3.3 United States Market Size and Forecast (2021-2032)

7.3.4 Canada Market Size and Forecast (2021-2032)

7.3.5 Mexico Market Size and Forecast (2021-2032)

8 EUROPE

8.1 Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type

(2021-2032)

8.2 Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2032)

8.3 Europe Electromagnetic Brakes for Humanoid Robot Market Size by Country

8.3.1 Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity by Country (2021-2032)

8.3.2 Europe Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2021-2032)

8.3.3 Germany Market Size and Forecast (2021-2032)

8.3.4 France Market Size and Forecast (2021-2032)

8.3.5 United Kingdom Market Size and Forecast (2021-2032)

8.3.6 Russia Market Size and Forecast (2021-2032)

8.3.7 Italy Market Size and Forecast (2021-2032)

9 ASIA-PACIFIC

9.1 Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2021-2032)

9.2 Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2032)

9.3 Asia-Pacific Electromagnetic Brakes for Humanoid Robot Market Size by Region

9.3.1 Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity by Region (2021-2032)

9.3.2 Asia-Pacific Electromagnetic Brakes for Humanoid Robot Consumption Value by Region (2021-2032)

9.3.3 China Market Size and Forecast (2021-2032)

9.3.4 Japan Market Size and Forecast (2021-2032)

9.3.5 South Korea Market Size and Forecast (2021-2032)

9.3.6 India Market Size and Forecast (2021-2032)

9.3.7 Southeast Asia Market Size and Forecast (2021-2032)

9.3.8 Australia Market Size and Forecast (2021-2032)

10 SOUTH AMERICA

10.1 South America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2021-2032)

10.2 South America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2032)

10.3 South America Electromagnetic Brakes for Humanoid Robot Market Size by

Country

10.3.1 South America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Country (2021-2032)

10.3.2 South America Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2021-2032)

10.3.3 Brazil Market Size and Forecast (2021-2032)

10.3.4 Argentina Market Size and Forecast (2021-2032)

11 MIDDLE EAST & AFRICA

11.1 Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2021-2032)

11.2 Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2032)

11.3 Middle East & Africa Electromagnetic Brakes for Humanoid Robot Market Size by Country

11.3.1 Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity by Country (2021-2032)

11.3.2 Middle East & Africa Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2021-2032)

11.3.3 Turkey Market Size and Forecast (2021-2032)

11.3.4 Egypt Market Size and Forecast (2021-2032)

11.3.5 Saudi Arabia Market Size and Forecast (2021-2032)

11.3.6 South Africa Market Size and Forecast (2021-2032)

12 MARKET DYNAMICS

12.1 Electromagnetic Brakes for Humanoid Robot Market Drivers

12.2 Electromagnetic Brakes for Humanoid Robot Market Restraints

12.3 Electromagnetic Brakes for Humanoid Robot Trends Analysis

12.4 Porters Five Forces Analysis

12.4.1 Threat of New Entrants

12.4.2 Bargaining Power of Suppliers

12.4.3 Bargaining Power of Buyers

12.4.4 Threat of Substitutes

12.4.5 Competitive Rivalry

13 RAW MATERIAL AND INDUSTRY CHAIN

13.1 Raw Material of Electromagnetic Brakes for Humanoid Robot and Key Manufacturers

13.2 Manufacturing Costs Percentage of Electromagnetic Brakes for Humanoid Robot

13.3 Electromagnetic Brakes for Humanoid Robot Production Process

13.4 Industry Value Chain Analysis

14 SHIPMENTS BY DISTRIBUTION CHANNEL

14.1 Sales Channel

14.1.1 Direct to End-User

14.1.2 Distributors

14.2 Electromagnetic Brakes for Humanoid Robot Typical Distributors

14.3 Electromagnetic Brakes for Humanoid Robot Typical Customers

15 RESEARCH FINDINGS AND CONCLUSION

16 APPENDIX

16.1 Methodology

16.2 Research Process and Data Source

16.3 Disclaimer

List Of Tables

LIST OF TABLES

Table 1. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Type, (USD Million), 2021 & 2025 & 2032

Table 2. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Structure, (USD Million), 2021 & 2025 & 2032

Table 3. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Torque, (USD Million), 2021 & 2025 & 2032

Table 4. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Application, (USD Million), 2021 & 2025 & 2032

Table 5. Kendrion N.V. Basic Information, Manufacturing Base and Competitors

Table 6. Kendrion N.V. Major Business

Table 7. Kendrion N.V. Electromagnetic Brakes for Humanoid Robot Product and Services

Table 8. Kendrion N.V. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 9. Kendrion N.V. Recent Developments/Updates

Table 10. Chr. Mayr GmbH + Co. KG Basic Information, Manufacturing Base and Competitors

Table 11. Chr. Mayr GmbH + Co. KG Major Business

Table 12. Chr. Mayr GmbH + Co. KG Electromagnetic Brakes for Humanoid Robot Product and Services

Table 13. Chr. Mayr GmbH + Co. KG Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 14. Chr. Mayr GmbH + Co. KG Recent Developments/Updates

Table 15. KEB Automation KG Basic Information, Manufacturing Base and Competitors

Table 16. KEB Automation KG Major Business

Table 17. KEB Automation KG Electromagnetic Brakes for Humanoid Robot Product and Services

Table 18. KEB Automation KG Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 19. KEB Automation KG Recent Developments/Updates

Table 20. Warner Electric Basic Information, Manufacturing Base and Competitors

Table 21. Warner Electric Major Business

Table 22. Warner Electric Electromagnetic Brakes for Humanoid Robot Product and Services

Table 23. Warner Electric Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 24. Warner Electric Recent Developments/Updates

Table 25. Ogura Clutch Co., Ltd. Basic Information, Manufacturing Base and Competitors

Table 26. Ogura Clutch Co., Ltd. Major Business

Table 27. Ogura Clutch Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services

Table 28. Ogura Clutch Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 29. Ogura Clutch Co., Ltd. Recent Developments/Updates

Table 30. Miki Pulley Co., Ltd. Basic Information, Manufacturing Base and Competitors

Table 31. Miki Pulley Co., Ltd. Major Business

Table 32. Miki Pulley Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services

Table 33. Miki Pulley Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 34. Miki Pulley Co., Ltd. Recent Developments/Updates

Table 35. Nexen Group, Inc. Basic Information, Manufacturing Base and Competitors

Table 36. Nexen Group, Inc. Major Business

Table 37. Nexen Group, Inc. Electromagnetic Brakes for Humanoid Robot Product and Services

Table 38. Nexen Group, Inc. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 39. Nexen Group, Inc. Recent Developments/Updates

Table 40. PRECIMA Magnettechnik GmbH Basic Information, Manufacturing Base and Competitors

Table 41. PRECIMA Magnettechnik GmbH Major Business

Table 42. PRECIMA Magnettechnik GmbH Electromagnetic Brakes for Humanoid Robot Product and Services

Table 43. PRECIMA Magnettechnik GmbH Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 44. PRECIMA Magnettechnik GmbH Recent Developments/Updates
Table 45. SINFONIA TECHNOLOGY CO., LTD. Basic Information, Manufacturing Base and Competitors
Table 46. SINFONIA TECHNOLOGY CO., LTD. Major Business
Table 47. SINFONIA TECHNOLOGY CO., LTD. Electromagnetic Brakes for Humanoid Robot Product and Services
Table 48. SINFONIA TECHNOLOGY CO., LTD. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)
Table 49. SINFONIA TECHNOLOGY CO., LTD. Recent Developments/Updates
Table 50. MinebeaMitsumi Inc. Basic Information, Manufacturing Base and Competitors
Table 51. MinebeaMitsumi Inc. Major Business
Table 52. MinebeaMitsumi Inc. Electromagnetic Brakes for Humanoid Robot Product and Services
Table 53. MinebeaMitsumi Inc. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)
Table 54. MinebeaMitsumi Inc. Recent Developments/Updates
Table 55. Ortlinghaus-Werke GmbH Basic Information, Manufacturing Base and Competitors
Table 56. Ortlinghaus-Werke GmbH Major Business
Table 57. Ortlinghaus-Werke GmbH Electromagnetic Brakes for Humanoid Robot Product and Services
Table 58. Ortlinghaus-Werke GmbH Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)
Table 59. Ortlinghaus-Werke GmbH Recent Developments/Updates
Table 60. Electroid Company Basic Information, Manufacturing Base and Competitors
Table 61. Electroid Company Major Business
Table 62. Electroid Company Electromagnetic Brakes for Humanoid Robot Product and Services
Table 63. Electroid Company Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)
Table 64. Electroid Company Recent Developments/Updates
Table 65. Mach III Clutch, Inc. Basic Information, Manufacturing Base and Competitors
Table 66. Mach III Clutch, Inc. Major Business
Table 67. Mach III Clutch, Inc. Electromagnetic Brakes for Humanoid Robot Product and Services

Table 68. Mach III Clutch, Inc. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 69. Mach III Clutch, Inc. Recent Developments/Updates

Table 70. Chengdu Reach Machinery Co., Ltd. Basic Information, Manufacturing Base and Competitors

Table 71. Chengdu Reach Machinery Co., Ltd. Major Business

Table 72. Chengdu Reach Machinery Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services

Table 73. Chengdu Reach Machinery Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 74. Chengdu Reach Machinery Co., Ltd. Recent Developments/Updates

Table 75. Chengdu CDC Technology Co., Ltd. Basic Information, Manufacturing Base and Competitors

Table 76. Chengdu CDC Technology Co., Ltd. Major Business

Table 77. Chengdu CDC Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services

Table 78. Chengdu CDC Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 79. Chengdu CDC Technology Co., Ltd. Recent Developments/Updates

Table 80. Zhuji Miki Technology Co., Ltd. Basic Information, Manufacturing Base and Competitors

Table 81. Zhuji Miki Technology Co., Ltd. Major Business

Table 82. Zhuji Miki Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services

Table 83. Zhuji Miki Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 84. Zhuji Miki Technology Co., Ltd. Recent Developments/Updates

Table 85. Suzhou Jipai Electromagnetic Technology Co., Ltd. Basic Information, Manufacturing Base and Competitors

Table 86. Suzhou Jipai Electromagnetic Technology Co., Ltd. Major Business

Table 87. Suzhou Jipai Electromagnetic Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services

Table 88. Suzhou Jipai Electromagnetic Technology Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 89. Suzhou Jipai Electromagnetic Technology Co., Ltd. Recent Developments/Updates

Table 90. Jiangxi Huawu Brake Co., Ltd. Basic Information, Manufacturing Base and Competitors

Table 91. Jiangxi Huawu Brake Co., Ltd. Major Business

Table 92. Jiangxi Huawu Brake Co., Ltd. Electromagnetic Brakes for Humanoid Robot Product and Services

Table 93. Jiangxi Huawu Brake Co., Ltd. Electromagnetic Brakes for Humanoid Robot Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2021-2026)

Table 94. Jiangxi Huawu Brake Co., Ltd. Recent Developments/Updates

Table 95. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity by Manufacturer (2021-2026) & (K Units)

Table 96. Global Electromagnetic Brakes for Humanoid Robot Revenue by Manufacturer (2021-2026) & (USD Million)

Table 97. Global Electromagnetic Brakes for Humanoid Robot Average Price by Manufacturer (2021-2026) & (US\$/Unit)

Table 98. Market Position of Manufacturers in Electromagnetic Brakes for Humanoid Robot, (Tier 1, Tier 2, and Tier 3), Based on Revenue in 2025

Table 99. Head Office and Electromagnetic Brakes for Humanoid Robot Production Site of Key Manufacturer

Table 100. Electromagnetic Brakes for Humanoid Robot Market: Company Product Type Footprint

Table 101. Electromagnetic Brakes for Humanoid Robot Market: Company Product Application Footprint

Table 102. Electromagnetic Brakes for Humanoid Robot New Market Entrants and Barriers to Market Entry

Table 103. Electromagnetic Brakes for Humanoid Robot Mergers, Acquisition, Agreements, and Collaborations

Table 104. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Region (2021-2025-2032) & (USD Million) & CAGR

Table 105. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity by Region (2021-2026) & (K Units)

Table 106. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity by Region (2027-2032) & (K Units)

Table 107. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Region (2021-2026) & (USD Million)

Table 108. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Region (2027-2032) & (USD Million)

Table 109. Global Electromagnetic Brakes for Humanoid Robot Average Price by Region (2021-2026) & (US\$/Unit)

Table 110. Global Electromagnetic Brakes for Humanoid Robot Average Price by Region (2027-2032) & (US\$/Unit)

Table 111. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2021-2026) & (K Units)

Table 112. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2027-2032) & (K Units)

Table 113. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Type (2021-2026) & (USD Million)

Table 114. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Type (2027-2032) & (USD Million)

Table 115. Global Electromagnetic Brakes for Humanoid Robot Average Price by Type (2021-2026) & (US\$/Unit)

Table 116. Global Electromagnetic Brakes for Humanoid Robot Average Price by Type (2027-2032) & (US\$/Unit)

Table 117. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2026) & (K Units)

Table 118. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2027-2032) & (K Units)

Table 119. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Application (2021-2026) & (USD Million)

Table 120. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Application (2027-2032) & (USD Million)

Table 121. Global Electromagnetic Brakes for Humanoid Robot Average Price by Application (2021-2026) & (US\$/Unit)

Table 122. Global Electromagnetic Brakes for Humanoid Robot Average Price by Application (2027-2032) & (US\$/Unit)

Table 123. North America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2021-2026) & (K Units)

Table 124. North America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2027-2032) & (K Units)

Table 125. North America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2026) & (K Units)

Table 126. North America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2027-2032) & (K Units)

Table 127. North America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Country (2021-2026) & (K Units)

Table 128. North America Electromagnetic Brakes for Humanoid Robot Sales Quantity

by Country (2027-2032) & (K Units)

Table 129. North America Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2021-2026) & (USD Million)

Table 130. North America Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2027-2032) & (USD Million)

Table 131. Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2021-2026) & (K Units)

Table 132. Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2027-2032) & (K Units)

Table 133. Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2026) & (K Units)

Table 134. Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2027-2032) & (K Units)

Table 135. Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity by Country (2021-2026) & (K Units)

Table 136. Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity by Country (2027-2032) & (K Units)

Table 137. Europe Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2021-2026) & (USD Million)

Table 138. Europe Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2027-2032) & (USD Million)

Table 139. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2021-2026) & (K Units)

Table 140. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2027-2032) & (K Units)

Table 141. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2026) & (K Units)

Table 142. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2027-2032) & (K Units)

Table 143. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity by Region (2021-2026) & (K Units)

Table 144. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity by Region (2027-2032) & (K Units)

Table 145. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Consumption Value by Region (2021-2026) & (USD Million)

Table 146. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Consumption Value by Region (2027-2032) & (USD Million)

Table 147. South America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2021-2026) & (K Units)

Table 148. South America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2027-2032) & (K Units)

Table 149. South America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2026) & (K Units)

Table 150. South America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2027-2032) & (K Units)

Table 151. South America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Country (2021-2026) & (K Units)

Table 152. South America Electromagnetic Brakes for Humanoid Robot Sales Quantity by Country (2027-2032) & (K Units)

Table 153. South America Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2021-2026) & (USD Million)

Table 154. South America Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2027-2032) & (USD Million)

Table 155. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2021-2026) & (K Units)

Table 156. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity by Type (2027-2032) & (K Units)

Table 157. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2021-2026) & (K Units)

Table 158. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity by Application (2027-2032) & (K Units)

Table 159. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity by Country (2021-2026) & (K Units)

Table 160. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity by Country (2027-2032) & (K Units)

Table 161. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2021-2026) & (USD Million)

Table 162. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Consumption Value by Country (2027-2032) & (USD Million)

Table 163. Electromagnetic Brakes for Humanoid Robot Raw Material

Table 164. Key Manufacturers of Electromagnetic Brakes for Humanoid Robot Raw Materials

Table 165. Electromagnetic Brakes for Humanoid Robot Typical Distributors

Table 166. Electromagnetic Brakes for Humanoid Robot Typical Customers

List Of Figures

LIST OF FIGURES

Figure 1. Electromagnetic Brakes for Humanoid Robot Picture

Figure 2. Global Electromagnetic Brakes for Humanoid Robot Revenue by Type, (USD Million), 2021 & 2025 & 2032

Figure 3. Global Electromagnetic Brakes for Humanoid Robot Revenue Market Share by Type in 2025

Figure 4. Spring-Applied Power-Off Electromagnetic Brake Examples

Figure 5. Permanent-Magnet Power-Off Brake Examples

Figure 6. Power-On Electromagnetic Friction Brake Examples

Figure 7. Others Examples

Figure 8. Global Electromagnetic Brakes for Humanoid Robot Revenue by Structure, (USD Million), 2021 & 2025 & 2032

Figure 9. Global Electromagnetic Brakes for Humanoid Robot Revenue Market Share by Structure in 2025

Figure 10. Ultra-Thin Hollow Compact Brake Examples

Figure 11. Micro Flange Compact Brake Examples

Figure 12. Flat Integrated Brake Examples

Figure 13. Global Electromagnetic Brakes for Humanoid Robot Revenue by Torque, (USD Million), 2021 & 2025 & 2032

Figure 14. Global Electromagnetic Brakes for Humanoid Robot Revenue Market Share by Torque in 2025

Figure 15. Below 1 Nm Examples

Figure 16. 1-5 Nm Examples

Figure 17. 5-20 Nm Examples

Figure 18. Above 20 Nm Examples

Figure 19. Global Electromagnetic Brakes for Humanoid Robot Consumption Value by Application, (USD Million), 2021 & 2025 & 2032

Figure 20. Global Electromagnetic Brakes for Humanoid Robot Revenue Market Share by Application in 2025

Figure 21. Humanoid Robot Arm Joints Examples

Figure 22. Humanoid Robot Leg Joints Examples

Figure 23. Waist and Torso Joints Examples

Figure 24. Others Examples

Figure 25. Global Electromagnetic Brakes for Humanoid Robot Consumption Value, (USD Million): 2021 & 2025 & 2032

Figure 26. Global Electromagnetic Brakes for Humanoid Robot Consumption Value and

Forecast (2021-2032) & (USD Million)

Figure 27. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity (2021-2032) & (K Units)

Figure 28. Global Electromagnetic Brakes for Humanoid Robot Price (2021-2032) & (US\$/Unit)

Figure 29. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Manufacturer in 2025

Figure 30. Global Electromagnetic Brakes for Humanoid Robot Revenue Market Share by Manufacturer in 2025

Figure 31. Producer Shipments of Electromagnetic Brakes for Humanoid Robot by Manufacturer Sales (\$MM) and Market Share (%): 2025

Figure 32. Top 3 Electromagnetic Brakes for Humanoid Robot Manufacturer (Revenue) Market Share in 2025

Figure 33. Top 6 Electromagnetic Brakes for Humanoid Robot Manufacturer (Revenue) Market Share in 2025

Figure 34. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Region (2021-2032)

Figure 35. Global Electromagnetic Brakes for Humanoid Robot Consumption Value Market Share by Region (2021-2032)

Figure 36. North America Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 37. Europe Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 38. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 39. South America Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 40. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 41. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Type (2021-2032)

Figure 42. Global Electromagnetic Brakes for Humanoid Robot Consumption Value Market Share by Type (2021-2032)

Figure 43. Global Electromagnetic Brakes for Humanoid Robot Average Price by Type (2021-2032) & (US\$/Unit)

Figure 44. Global Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Application (2021-2032)

Figure 45. Global Electromagnetic Brakes for Humanoid Robot Revenue Market Share by Application (2021-2032)

Figure 46. Global Electromagnetic Brakes for Humanoid Robot Average Price by Application (2021-2032) & (US\$/Unit)

Figure 47. North America Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Type (2021-2032)

Figure 48. North America Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Application (2021-2032)

Figure 49. North America Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Country (2021-2032)

Figure 50. North America Electromagnetic Brakes for Humanoid Robot Consumption Value Market Share by Country (2021-2032)

Figure 51. United States Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 52. Canada Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 53. Mexico Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 54. Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Type (2021-2032)

Figure 55. Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Application (2021-2032)

Figure 56. Europe Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Country (2021-2032)

Figure 57. Europe Electromagnetic Brakes for Humanoid Robot Consumption Value Market Share by Country (2021-2032)

Figure 58. Germany Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 59. France Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 60. United Kingdom Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 61. Russia Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 62. Italy Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 63. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Type (2021-2032)

Figure 64. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Application (2021-2032)

Figure 65. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Sales Quantity

Market Share by Region (2021-2032)

Figure 66. Asia-Pacific Electromagnetic Brakes for Humanoid Robot Consumption Value Market Share by Region (2021-2032)

Figure 67. China Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 68. Japan Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 69. South Korea Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 70. India Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 71. Southeast Asia Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 72. Australia Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 73. South America Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Type (2021-2032)

Figure 74. South America Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Application (2021-2032)

Figure 75. South America Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Country (2021-2032)

Figure 76. South America Electromagnetic Brakes for Humanoid Robot Consumption Value Market Share by Country (2021-2032)

Figure 77. Brazil Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 78. Argentina Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 79. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Type (2021-2032)

Figure 80. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Application (2021-2032)

Figure 81. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Sales Quantity Market Share by Country (2021-2032)

Figure 82. Middle East & Africa Electromagnetic Brakes for Humanoid Robot Consumption Value Market Share by Country (2021-2032)

Figure 83. Turkey Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 84. Egypt Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 85. Saudi Arabia Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 86. South Africa Electromagnetic Brakes for Humanoid Robot Consumption Value (2021-2032) & (USD Million)

Figure 87. Electromagnetic Brakes for Humanoid Robot Market Drivers

Figure 88. Electromagnetic Brakes for Humanoid Robot Market Restraints

Figure 89. Electromagnetic Brakes for Humanoid Robot Market Trends

Figure 90. Porters Five Forces Analysis

Figure 91. Manufacturing Cost Structure Analysis of Electromagnetic Brakes for Humanoid Robot in 2025

Figure 92. Manufacturing Process Analysis of Electromagnetic Brakes for Humanoid Robot

Figure 93. Electromagnetic Brakes for Humanoid Robot Industrial Chain

Figure 94. Sales Channel: Direct to End-User vs Distributors

Figure 95. Direct Channel Pros & Cons

Figure 96. Indirect Channel Pros & Cons

Figure 97. Methodology

Figure 98. Research Process and Data Source

I would like to order

Product name: Global Electromagnetic Brakes for Humanoid Robot Market 2026 by Manufacturers, Regions, Type and Application, Forecast to 2032

Product link: <https://marketpublishers.com/r/G32ACBC68EBAEN.html>

Price: US\$ 3,480.00 (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/G32ACBC68EBAEN.html>