+357 96 030922
info@marketpublishers.com

# Global Bionic Fingertip Tactile Sensor Supply, Demand and Key Producers, 2026-2032

https://marketpublishers.com/r/G393BFE89766EN.html
Date: September 2026
Pages: 112
Price: US$ 4,480.00 (Single User License)
ID: G393BFE89766EN

## Abstracts

The global Bionic Fingertip Tactile Sensor market size is expected to reach $ 243 million by 2032, rising at a market growth of 17.4% CAGR during the forecast period (2026-2032).

Bionic Fingertip Tactile Sensor refers to an advanced tactile sensing device designed to replicate the perception capabilities of human fingertips by integrating biomimetic structures, flexible sensing materials, micro-force detection technologies and intelligent signal processing algorithms. These sensors are engineered to detect multi-dimensional tactile information, including pressure, shear force, vibration, contact location, surface texture and material characteristics, similar to the biological sensing functions of human skin and fingertips. Compared with conventional force or pressure sensors, Bionic Fingertip Tactile Sensors provide higher sensitivity, spatial resolution and real-time perception capability, enabling precise interaction and manipulation in complex environments. They are mainly applied in humanoid robots, robotic hands, prosthetic devices, industrial automation, medical rehabilitation equipment and advanced robotics platforms requiring human-like touch perception and dexterous object handling.

## Key Findings

Bionic Fingertip Tactile Sensors replicate human fingertip perception through biomimetic structures and advanced sensing technologies

Robotic hands and humanoid robots represent the primary application direction for bionic fingertip tactile sensing

+357 96 030922
info@marketpublishers.com

Flexible and multi-dimensional tactile sensing technologies are becoming the major development trend

The market is currently in early commercialization with demand concentrated in advanced robotics and research applications

## Market Trends

The Bionic Fingertip Tactile Sensor market is developing toward higher sensitivity, greater spatial resolution and more human-like tactile perception capabilities. With the rapid advancement of humanoid robots, dexterous robotic hands and intelligent automation systems, demand is increasing for sensors that can replicate human fingertip functions, including pressure recognition, texture detection, slip perception and force feedback. Sensor manufacturers are continuously improving flexible electronic materials, micro-structured sensing surfaces, multi-axis force detection technologies and artificial intelligence-based signal processing algorithms to achieve more accurate tactile perception. Future development is expected to focus on compact sensor integration, improved durability, lower manufacturing costs and wider deployment in commercial robotic systems.

## Market Dynamics

### Drivers

Growth is mainly driven by increasing demand for humanoid robots, advanced robotic manipulation systems and intelligent automation equipment requiring human-like tactile perception. Traditional industrial robots mainly rely on visual and force sensors, while next-generation robots require tactile feedback capabilities to perform delicate operations such as grasping fragile objects, handling irregular components and interacting safely with humans. The expansion of robotics applications in manufacturing, healthcare and service industries is accelerating adoption of bionic fingertip tactile sensing technologies.

### Restraints

The market faces limitations related to complex manufacturing processes, high sensor

+357 96 030922
info@marketpublishers.com

costs and challenges in achieving consistent performance at commercial scale. Producing fingertip-level tactile sensors requires advanced flexible materials, precision fabrication technologies and sophisticated calibration processes. In addition, the lack of unified industry standards and limited large-scale deployment experience restrict faster market adoption.

### Opportunities

Future opportunities are emerging from humanoid robots, medical prosthetics, rehabilitation equipment and collaborative robotics. As robotic systems become more intelligent and require more accurate environmental interaction capabilities, bionic fingertip tactile sensors are expected to become an important perception component. Advances in flexible electronics, artificial skin technologies and AI-based tactile interpretation will further expand application opportunities.

### Challenges

The industry faces challenges including improving sensor reliability, reducing production costs, increasing lifespan and achieving large-scale manufacturing. Maintaining stable tactile performance under different environmental conditions while integrating sensors into compact robotic structures remains a key technical challenge.

## Industry Chain Analysis

The upstream industry mainly includes flexible electronic materials, conductive materials, micro-sensing components, semiconductor devices, signal processing chips and specialized manufacturing equipment. These materials and components determine sensor sensitivity, durability, resolution and response speed. The midstream sector consists of bionic fingertip tactile sensor manufacturers responsible for biomimetic structure design, sensor fabrication, calibration, algorithm development and system integration. The downstream sector includes humanoid robot manufacturers, robotic hand developers, prosthetic device companies, industrial automation providers and medical rehabilitation equipment manufacturers, where tactile sensing technology improves manipulation accuracy and human-machine interaction capability.

### Segment Insights

+357 96 030922
info@marketpublishers.com

By sensing technology, capacitive, piezoresistive and optical sensing technologies represent the major technical approaches, with flexible and multi-modal sensing solutions gaining increasing attention due to their ability to detect multiple tactile signals simultaneously. By sensor form factor, fingertip sensors remain the core product category because they directly replicate human fingertip perception and are widely integrated into robotic hands and manipulation systems. Flexible skin sensors and tactile arrays represent future expansion directions for larger robotic surfaces and human-like artificial skin applications.

### Downstream Market Opportunities

Bionic Fingertip Tactile Sensors are mainly adopted in applications requiring precise contact perception and dexterous manipulation. Humanoid robots and robotic hands represent the most important emerging market, where tactile feedback enables accurate gripping, object recognition and safe interaction. Prosthetic devices and rehabilitation equipment provide additional opportunities by improving sensory feedback for users. Industrial automation and collaborative robots are also expected to increase adoption as manufacturers seek higher flexibility and intelligent interaction capabilities.

## Regional Insights

Asia-Pacific is expected to become a major growth region due to strong robotics manufacturing capabilities, expanding humanoid robot development and increasing investment in intelligent automation. Japan maintains technological advantages in robotics and precision sensing, while China is rapidly expanding applications through domestic robot manufacturers and advanced manufacturing industries. North America and Europe remain important innovation centers with strong research capabilities, established robotics companies and demand from medical, industrial and research applications.

## Competitive Landscape Analysis

The competitive landscape is characterized by specialized sensor developers focusing on biomimetic tactile perception technologies. SynTouch is recognized for its BioTac® biomimetic fingertip sensing technology, while XELA Robotics focuses on flexible tactile sensing solutions for robotic applications. GelSight provides artificial skin-based high-

+357 96 030922
info@marketpublishers.com

resolution tactile sensing technologies, and companies such as Contactile and Pressure Profile Systems contribute to advanced robotic tactile perception solutions. Competition is mainly based on sensing accuracy, multi-dimensional perception capability, flexible material technology, integration capability and commercialization experience.

## Report Scope

This report studies the global Bionic Fingertip Tactile Sensor production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Bionic Fingertip Tactile Sensor and provides market size (US$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Bionic Fingertip Tactile Sensor that contribute to its increasing demand across many markets.

## Highlights and key features of the study

Global Bionic Fingertip Tactile Sensor total production and demand, 2021-2032, (K Units)

Global Bionic Fingertip Tactile Sensor total production value, 2021-2032, (USD Million)

Global Bionic Fingertip Tactile Sensor production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (K Units), (based on production site)

Global Bionic Fingertip Tactile Sensor consumption by region & country, CAGR, 2021-2032 & (K Units)

U.S. VS China: Bionic Fingertip Tactile Sensor domestic production, consumption, key domestic manufacturers and share

Global Bionic Fingertip Tactile Sensor production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (K Units)

+357 96 030922
info@marketpublishers.com

Global Bionic Fingertip Tactile Sensor production by Sensing Technology, production, value, CAGR, 2021-2032, (USD Million) & (K Units)

Global Bionic Fingertip Tactile Sensor production by Application, production, value, CAGR, 2021-2032, (USD Million) & (K Units)

This report profiles key players in the global Bionic Fingertip Tactile Sensor market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include SynTouch, LLC, XELA Robotics Inc., GelSight, Inc., Contactile Pty Ltd, Pressure Profile Systems, Inc., Bota Systems, etc.

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

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Bionic Fingertip Tactile Sensor market

## Detailed Segmentation:

Each section contains quantitative market data including market by value (US$ Millions), volume (production, consumption) & (K Units) and average price (US$/Unit) by manufacturer, by Sensing Technology, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

### Global Bionic Fingertip Tactile Sensor Market, By Region:

United States

China

Europe

Japan

+357 96 030922
info@marketpublishers.com

South Korea

ASEAN

India

Rest of World

## Market Segmentation

### Global Bionic Fingertip Tactile Sensor Market, Segmentation by Sensing Technology:

Capacitive Type

Piezoresistive Type

Optical Type

Piezoelectric Type

Others

### Global Bionic Fingertip Tactile Sensor Market, Segmentation by Sensor Form Factor:

Fingertip Sensor (<20 mm Sensing Area)

Flexible Skin Sensor (20–200 mm Sensing Area)

Tactile Array Sensor (>200 mm Sensing Area)

### Global Bionic Fingertip Tactile Sensor Market, Segmentation by Application:

+357 96 030922
info@marketpublishers.com

Robotic Hand and Manipulation

Prosthetic Hand and Rehabilitation Devices

Industrial Automation and Collaborative Robots

Others

## Companies Profiled:

SynTouch, LLC

XELA Robotics Inc.

GelSight, Inc.

Contactile Pty Ltd

Pressure Profile Systems, Inc.

Bota Systems

## Key Questions Answered

1. How big is the global Bionic Fingertip Tactile Sensor market?
2. What is the demand of the global Bionic Fingertip Tactile Sensor market?
3. What is the year over year growth of the global Bionic Fingertip Tactile Sensor market?
4. What is the total value of the global Bionic Fingertip Tactile Sensor market?
5. Who are the Major Players in the global Bionic Fingertip Tactile Sensor market?
6. What are the growth factors driving the market demand?

+357 96 030922
info@marketpublishers.com

# Contents


## 1 SUPPLY SUMMARY

1.1 Bionic Fingertip Tactile Sensor Introduction
1.2 World Bionic Fingertip Tactile Sensor Supply & Forecast
  1.2.1 World Bionic Fingertip Tactile Sensor Production Value (2021 & 2025 & 2032)
  1.2.2 World Bionic Fingertip Tactile Sensor Production (2021-2032)
  1.2.3 World Bionic Fingertip Tactile Sensor Pricing Trends (2021-2032)
1.3 World Bionic Fingertip Tactile Sensor Production by Region (Based on Production Site)
  1.3.1 World Bionic Fingertip Tactile Sensor Production Value by Region (2021-2032)
  1.3.2 World Bionic Fingertip Tactile Sensor Production by Region (2021-2032)
  1.3.3 World Bionic Fingertip Tactile Sensor Average Price by Region (2021-2032)
  1.3.4 North America Bionic Fingertip Tactile Sensor Production (2021-2032)
  1.3.5 Europe Bionic Fingertip Tactile Sensor Production (2021-2032)
  1.3.6 China Bionic Fingertip Tactile Sensor Production (2021-2032)
  1.3.7 Japan Bionic Fingertip Tactile Sensor Production (2021-2032)
  1.3.8 South Korea Bionic Fingertip Tactile Sensor Production (2021-2032)
  1.3.9 Southeast Asia Bionic Fingertip Tactile Sensor Production (2021-2032)
  1.3.10 China Taiwan Bionic Fingertip Tactile Sensor Production (2021-2032)
1.4 Market Drivers, Restraints and Trends
  1.4.1 Bionic Fingertip Tactile Sensor Market Drivers
  1.4.2 Factors Affecting Demand
  1.4.3 Bionic Fingertip Tactile Sensor Major Market Trends

## 2 DEMAND SUMMARY

2.1 World Bionic Fingertip Tactile Sensor Demand (2021-2032)
2.2 World Bionic Fingertip Tactile Sensor Consumption by Region
  2.2.1 World Bionic Fingertip Tactile Sensor Consumption by Region (2021-2026)
  2.2.2 World Bionic Fingertip Tactile Sensor Consumption Forecast by Region (2027-2032)
2.3 United States Bionic Fingertip Tactile Sensor Consumption (2021-2032)
2.4 China Bionic Fingertip Tactile Sensor Consumption (2021-2032)
2.5 Europe Bionic Fingertip Tactile Sensor Consumption (2021-2032)
2.6 Japan Bionic Fingertip Tactile Sensor Consumption (2021-2032)
2.7 South Korea Bionic Fingertip Tactile Sensor Consumption (2021-2032)
2.8 ASEAN Bionic Fingertip Tactile Sensor Consumption (2021-2032)

+357 96 030922
info@marketpublishers.com

2.9 India Bionic Fingertip Tactile Sensor Consumption (2021-2032)

## 3 WORLD MANUFACTURERS COMPETITIVE ANALYSIS

3.1 World Bionic Fingertip Tactile Sensor Production Value by Manufacturer (2021-2026)
3.2 World Bionic Fingertip Tactile Sensor Production by Manufacturer (2021-2026)
3.3 World Bionic Fingertip Tactile Sensor Average Price by Manufacturer (2021-2026)
3.4 Bionic Fingertip Tactile Sensor Company Evaluation Quadrant
3.5 Industry Rank and Concentration Rate (CR)
  3.5.1 Global Bionic Fingertip Tactile Sensor Industry Rank of Major Manufacturers
  3.5.2 Global Concentration Ratios (CR4) for Bionic Fingertip Tactile Sensor in 2025
  3.5.3 Global Concentration Ratios (CR8) for Bionic Fingertip Tactile Sensor in 2025
3.6 Bionic Fingertip Tactile Sensor Market: Overall Company Footprint Analysis
  3.6.1 Bionic Fingertip Tactile Sensor Market: Region Footprint
  3.6.2 Bionic Fingertip Tactile Sensor Market: Company Product Type Footprint
  3.6.3 Bionic Fingertip Tactile Sensor Market: Company Product Application Footprint
3.7 Competitive Environment
  3.7.1 Historical Structure of the Industry
  3.7.2 Barriers of Market Entry
  3.7.3 Factors of Competition
3.8 New Entrant and Capacity Expansion Plans
3.9 Mergers, Acquisition, Agreements, and Collaborations

## 4 UNITED STATES VS CHINA VS REST OF THE WORLD

4.1 United States VS China: Bionic Fingertip Tactile Sensor Production Value Comparison
  4.1.1 United States VS China: Bionic Fingertip Tactile Sensor Production Value Comparison (2021 & 2025 & 2032)
  4.1.2 United States VS China: Bionic Fingertip Tactile Sensor Production Value Market Share Comparison (2021 & 2025 & 2032)
4.2 United States VS China: Bionic Fingertip Tactile Sensor Production Comparison
  4.2.1 United States VS China: Bionic Fingertip Tactile Sensor Production Comparison (2021 & 2025 & 2032)
  4.2.2 United States VS China: Bionic Fingertip Tactile Sensor Production Market Share Comparison (2021 & 2025 & 2032)
4.3 United States VS China: Bionic Fingertip Tactile Sensor Consumption Comparison
  4.3.1 United States VS China: Bionic Fingertip Tactile Sensor Consumption

+357 96 030922
info@marketpublishers.com

Comparison (2021 & 2025 & 2032)
4.3.2 United States VS China: Bionic Fingertip Tactile Sensor Consumption Market Share Comparison (2021 & 2025 & 2032)
4.4 United States Based Bionic Fingertip Tactile Sensor Manufacturers and Market Share, 2021-2026
4.4.1 United States Based Bionic Fingertip Tactile Sensor Manufacturers, Headquarters and Production Site (States, Country)
4.4.2 United States Based Manufacturers Bionic Fingertip Tactile Sensor Production Value (2021-2026)
4.4.3 United States Based Manufacturers Bionic Fingertip Tactile Sensor Production (2021-2026)
4.5 China Based Bionic Fingertip Tactile Sensor Manufacturers and Market Share
4.5.1 China Based Bionic Fingertip Tactile Sensor Manufacturers, Headquarters and Production Site (Province, Country)
4.5.2 China Based Manufacturers Bionic Fingertip Tactile Sensor Production Value (2021-2026)
4.5.3 China Based Manufacturers Bionic Fingertip Tactile Sensor Production (2021-2026)
4.6 Rest of World Based Bionic Fingertip Tactile Sensor Manufacturers and Market Share, 2021-2026
4.6.1 Rest of World Based Bionic Fingertip Tactile Sensor Manufacturers, Headquarters and Production Site (State, Country)
4.6.2 Rest of World Based Manufacturers Bionic Fingertip Tactile Sensor Production Value (2021-2026)
4.6.3 Rest of World Based Manufacturers Bionic Fingertip Tactile Sensor Production (2021-2026)

## 5 MARKET ANALYSIS BY SENSING TECHNOLOGY

5.1 World Bionic Fingertip Tactile Sensor Market Size Overview by Sensing Technology: 2021 VS 2025 VS 2032
5.2 Segment Introduction by Sensing Technology
5.2.1 Capacitive Type
5.2.2 Piezoresistive Type
5.2.3 Optical Type
5.2.4 Piezoelectric Type
5.2.5 Others
5.3 Market Segment by Sensing Technology
5.3.1 World Bionic Fingertip Tactile Sensor Production by Sensing Technology

+357 96 030922
info@marketpublishers.com

(2021-2032)
5.3.2 World Bionic Fingertip Tactile Sensor Production Value by Sensing Technology (2021-2032)
5.3.3 World Bionic Fingertip Tactile Sensor Average Price by Sensing Technology (2021-2032)

**6 MARKET ANALYSIS BY SENSOR FORM FACTOR**

6.1 World Bionic Fingertip Tactile Sensor Market Size Overview by Sensor Form Factor: 2021 VS 2025 VS 2032
6.2 Segment Introduction by Sensor Form Factor
6.2.1 Fingertip Sensor (<20 mm Sensing Area)
6.2.2 Flexible Skin Sensor (20–200 mm Sensing Area)
6.2.3 Tactile Array Sensor (>200 mm Sensing Area)
6.3 Market Segment by Sensor Form Factor
6.3.1 World Bionic Fingertip Tactile Sensor Production by Sensor Form Factor (2021-2032)
6.3.2 World Bionic Fingertip Tactile Sensor Production Value by Sensor Form Factor (2021-2032)
6.3.3 World Bionic Fingertip Tactile Sensor Average Price by Sensor Form Factor (2021-2032)

**7 MARKET ANALYSIS BY APPLICATION**

7.1 World Bionic Fingertip Tactile Sensor Market Size Overview by Application: 2021 VS 2025 VS 2032
7.2 Segment Introduction by Application
7.2.1 Robotic Hand and Manipulation
7.2.2 Prosthetic Hand and Rehabilitation Devices
7.2.3 Industrial Automation and Collaborative Robots
7.2.4 Others
7.3 Market Segment by Application
7.3.1 World Bionic Fingertip Tactile Sensor Production by Application (2021-2032)
7.3.2 World Bionic Fingertip Tactile Sensor Production Value by Application (2021-2032)
7.3.3 World Bionic Fingertip Tactile Sensor Average Price by Application (2021-2032)

**8 COMPANY PROFILES**

+357 96 030922
info@marketpublishers.com

8.1 SynTouch, LLC
8.1.1 SynTouch, LLC Details
8.1.2 SynTouch, LLC Major Business
8.1.3 SynTouch, LLC Bionic Fingertip Tactile Sensor Product and Services
8.1.4 SynTouch, LLC Bionic Fingertip Tactile Sensor Production, Price, Value, Gross Margin and Market Share (2021-2026)
8.1.5 SynTouch, LLC Recent Developments/Updates
8.1.6 SynTouch, LLC Competitive Strengths & Weaknesses
8.2 XELA Robotics Inc.
8.2.1 XELA Robotics Inc. Details
8.2.2 XELA Robotics Inc. Major Business
8.2.3 XELA Robotics Inc. Bionic Fingertip Tactile Sensor Product and Services
8.2.4 XELA Robotics Inc. Bionic Fingertip Tactile Sensor Production, Price, Value, Gross Margin and Market Share (2021-2026)
8.2.5 XELA Robotics Inc. Recent Developments/Updates
8.2.6 XELA Robotics Inc. Competitive Strengths & Weaknesses
8.3 GelSight, Inc.
8.3.1 GelSight, Inc. Details
8.3.2 GelSight, Inc. Major Business
8.3.3 GelSight, Inc. Bionic Fingertip Tactile Sensor Product and Services
8.3.4 GelSight, Inc. Bionic Fingertip Tactile Sensor Production, Price, Value, Gross Margin and Market Share (2021-2026)
8.3.5 GelSight, Inc. Recent Developments/Updates
8.3.6 GelSight, Inc. Competitive Strengths & Weaknesses
8.4 Contactile Pty Ltd
8.4.1 Contactile Pty Ltd Details
8.4.2 Contactile Pty Ltd Major Business
8.4.3 Contactile Pty Ltd Bionic Fingertip Tactile Sensor Product and Services
8.4.4 Contactile Pty Ltd Bionic Fingertip Tactile Sensor Production, Price, Value, Gross Margin and Market Share (2021-2026)
8.4.5 Contactile Pty Ltd Recent Developments/Updates
8.4.6 Contactile Pty Ltd Competitive Strengths & Weaknesses
8.5 Pressure Profile Systems, Inc.
8.5.1 Pressure Profile Systems, Inc. Details
8.5.2 Pressure Profile Systems, Inc. Major Business
8.5.3 Pressure Profile Systems, Inc. Bionic Fingertip Tactile Sensor Product and Services
8.5.4 Pressure Profile Systems, Inc. Bionic Fingertip Tactile Sensor Production, Price, Value, Gross Margin and Market Share (2021-2026)

+357 96 030922
info@marketpublishers.com

8.5.5 Pressure Profile Systems, Inc. Recent Developments/Updates
8.5.6 Pressure Profile Systems, Inc. Competitive Strengths & Weaknesses
8.6 Bota Systems
8.6.1 Bota Systems Details
8.6.2 Bota Systems Major Business
8.6.3 Bota Systems Bionic Fingertip Tactile Sensor Product and Services
8.6.4 Bota Systems Bionic Fingertip Tactile Sensor Production, Price, Value, Gross Margin and Market Share (2021-2026)
8.6.5 Bota Systems Recent Developments/Updates
8.6.6 Bota Systems Competitive Strengths & Weaknesses

**9 INDUSTRY CHAIN ANALYSIS**

9.1 Bionic Fingertip Tactile Sensor Industry Chain
9.2 Bionic Fingertip Tactile Sensor Upstream Analysis
9.2.1 Bionic Fingertip Tactile Sensor Core Raw Materials
9.2.2 Main Manufacturers of Bionic Fingertip Tactile Sensor Core Raw Materials
9.3 Midstream Analysis
9.4 Downstream Analysis
9.5 Bionic Fingertip Tactile Sensor Production Mode
9.6 Bionic Fingertip Tactile Sensor Procurement Model
9.7 Bionic Fingertip Tactile Sensor Industry Sales Model and Sales Channels
9.7.1 Bionic Fingertip Tactile Sensor Sales Model
9.7.2 Bionic Fingertip Tactile Sensor Typical Distributors

**10 RESEARCH FINDINGS AND CONCLUSION**

**11 APPENDIX**

11.1 Methodology
11.2 Research Process and Data Source
11.3 Disclaimer

+357 96 030922
info@marketpublishers.com

# List Of Tables

## LIST OF TABLES

Table 1. World Bionic Fingertip Tactile Sensor Production Value by Region (2021, 2025 and 2032) & (USD Million)
Table 2. World Bionic Fingertip Tactile Sensor Production Value by Region (2021-2026) & (USD Million)
Table 3. World Bionic Fingertip Tactile Sensor Production Value by Region (2027-2032) & (USD Million)
Table 4. World Bionic Fingertip Tactile Sensor Production Value Market Share by Region (2021-2026)
Table 5. World Bionic Fingertip Tactile Sensor Production Value Market Share by Region (2027-2032)
Table 6. World Bionic Fingertip Tactile Sensor Production by Region (2021-2026) & (K Units)
Table 7. World Bionic Fingertip Tactile Sensor Production by Region (2027-2032) & (K Units)
Table 8. World Bionic Fingertip Tactile Sensor Production Market Share by Region (2021-2026)
Table 9. World Bionic Fingertip Tactile Sensor Production Market Share by Region (2027-2032)
Table 10. World Bionic Fingertip Tactile Sensor Average Price by Region (2021-2026) & (US$/Unit)
Table 11. World Bionic Fingertip Tactile Sensor Average Price by Region (2027-2032) & (US$/Unit)
Table 12. Bionic Fingertip Tactile Sensor Major Market Trends
Table 13. World Bionic Fingertip Tactile Sensor Consumption Growth Rate Forecast by Region (2021 & 2025 & 2032) & (K Units)
Table 14. World Bionic Fingertip Tactile Sensor Consumption by Region (2021-2026) & (K Units)
Table 15. World Bionic Fingertip Tactile Sensor Consumption Forecast by Region (2027-2032) & (K Units)
Table 16. World Bionic Fingertip Tactile Sensor Production Value by Manufacturer (2021-2026) & (USD Million)
Table 17. Production Value Market Share of Key Bionic Fingertip Tactile Sensor Producers in 2025
Table 18. World Bionic Fingertip Tactile Sensor Production by Manufacturer (2021-2026) & (K Units)

+357 96 030922
info@marketpublishers.com

Table 19. Production Market Share of Key Bionic Fingertip Tactile Sensor Producers in 2025
Table 20. World Bionic Fingertip Tactile Sensor Average Price by Manufacturer (2021-2026) & (US$/Unit)
Table 21. Global Bionic Fingertip Tactile Sensor Company Evaluation Quadrant
Table 22. World Bionic Fingertip Tactile Sensor Industry Rank of Major Manufacturers, Based on Production Value in 2025
Table 23. Head Office and Bionic Fingertip Tactile Sensor Production Site of Key Manufacturer
Table 24. Bionic Fingertip Tactile Sensor Market: Company Product Type Footprint
Table 25. Bionic Fingertip Tactile Sensor Market: Company Product Application Footprint
Table 26. Bionic Fingertip Tactile Sensor Competitive Factors
Table 27. Bionic Fingertip Tactile Sensor New Entrant and Capacity Expansion Plans
Table 28. Bionic Fingertip Tactile Sensor Mergers & Acquisitions Activity
Table 29. United States VS China Bionic Fingertip Tactile Sensor Production Value Comparison, (2021 & 2025 & 2032) & (USD Million)
Table 30. United States VS China Bionic Fingertip Tactile Sensor Production Comparison, (2021 & 2025 & 2032) & (K Units)
Table 31. United States VS China Bionic Fingertip Tactile Sensor Consumption Comparison, (2021 & 2025 & 2032) & (K Units)
Table 32. United States Based Bionic Fingertip Tactile Sensor Manufacturers, Headquarters and Production Site (States, Country)
Table 33. United States Based Manufacturers Bionic Fingertip Tactile Sensor Production Value, (2021-2026) & (USD Million)
Table 34. United States Based Manufacturers Bionic Fingertip Tactile Sensor Production Value Market Share (2021-2026)
Table 35. United States Based Manufacturers Bionic Fingertip Tactile Sensor Production (2021-2026) & (K Units)
Table 36. United States Based Manufacturers Bionic Fingertip Tactile Sensor Production Market Share (2021-2026)
Table 37. China Based Bionic Fingertip Tactile Sensor Manufacturers, Headquarters and Production Site (Province, Country)
Table 38. China Based Manufacturers Bionic Fingertip Tactile Sensor Production Value, (2021-2026) & (USD Million)
Table 39. China Based Manufacturers Bionic Fingertip Tactile Sensor Production Value Market Share (2021-2026)
Table 40. China Based Manufacturers Bionic Fingertip Tactile Sensor Production, (2021-2026) & (K Units)

+357 96 030922
info@marketpublishers.com

Table 41. China Based Manufacturers Bionic Fingertip Tactile Sensor Production Market Share (2021-2026)
Table 42. Rest of World Based Bionic Fingertip Tactile Sensor Manufacturers, Headquarters and Production Site (State, Country)
Table 43. Rest of World Based Manufacturers Bionic Fingertip Tactile Sensor Production Value, (2021-2026) & (USD Million)
Table 44. Rest of World Based Manufacturers Bionic Fingertip Tactile Sensor Production Value Market Share (2021-2026)
Table 45. Rest of World Based Manufacturers Bionic Fingertip Tactile Sensor Production, (2021-2026) & (K Units)
Table 46. Rest of World Based Manufacturers Bionic Fingertip Tactile Sensor Production Market Share (2021-2026)
Table 47. World Bionic Fingertip Tactile Sensor Production Value by Sensing Technology, (USD Million), 2021 & 2025 & 2032
Table 48. World Bionic Fingertip Tactile Sensor Production by Sensing Technology (2021-2026) & (K Units)
Table 49. World Bionic Fingertip Tactile Sensor Production by Sensing Technology (2027-2032) & (K Units)
Table 50. World Bionic Fingertip Tactile Sensor Production Value by Sensing Technology (2021-2026) & (USD Million)
Table 51. World Bionic Fingertip Tactile Sensor Production Value by Sensing Technology (2027-2032) & (USD Million)
Table 52. World Bionic Fingertip Tactile Sensor Average Price by Sensing Technology (2021-2026) & (US$/Unit)
Table 53. World Bionic Fingertip Tactile Sensor Average Price by Sensing Technology (2027-2032) & (US$/Unit)
Table 54. World Bionic Fingertip Tactile Sensor Production Value by Sensor Form Factor, (USD Million), 2021 & 2025 & 2032
Table 55. World Bionic Fingertip Tactile Sensor Production by Sensor Form Factor (2021-2026) & (K Units)
Table 56. World Bionic Fingertip Tactile Sensor Production by Sensor Form Factor (2027-2032) & (K Units)
Table 57. World Bionic Fingertip Tactile Sensor Production Value by Sensor Form Factor (2021-2026) & (USD Million)
Table 58. World Bionic Fingertip Tactile Sensor Production Value by Sensor Form Factor (2027-2032) & (USD Million)
Table 59. World Bionic Fingertip Tactile Sensor Average Price by Sensor Form Factor (2021-2026) & (US$/Unit)
Table 60. World Bionic Fingertip Tactile Sensor Average Price by Sensor Form Factor

+357 96 030922
info@marketpublishers.com

(2027-2032) & (US$/Unit)
Table 61. World Bionic Fingertip Tactile Sensor Production Value by Application, (USD Million), 2021 & 2025 & 2032
Table 62. World Bionic Fingertip Tactile Sensor Production by Application (2021-2026) & (K Units)
Table 63. World Bionic Fingertip Tactile Sensor Production by Application (2027-2032) & (K Units)
Table 64. World Bionic Fingertip Tactile Sensor Production Value by Application (2021-2026) & (USD Million)
Table 65. World Bionic Fingertip Tactile Sensor Production Value by Application (2027-2032) & (USD Million)
Table 66. World Bionic Fingertip Tactile Sensor Average Price by Application (2021-2026) & (US$/Unit)
Table 67. World Bionic Fingertip Tactile Sensor Average Price by Application (2027-2032) & (US$/Unit)
Table 68. SynTouch, LLC Basic Information, Manufacturing Base and Competitors
Table 69. SynTouch, LLC Major Business
Table 70. SynTouch, LLC Bionic Fingertip Tactile Sensor Product and Services
Table 71. SynTouch, LLC Bionic Fingertip Tactile Sensor Production (K Units), Price (US$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
Table 72. SynTouch, LLC Recent Developments/Updates
Table 73. SynTouch, LLC Competitive Strengths & Weaknesses
Table 74. XELA Robotics Inc. Basic Information, Manufacturing Base and Competitors
Table 75. XELA Robotics Inc. Major Business
Table 76. XELA Robotics Inc. Bionic Fingertip Tactile Sensor Product and Services
Table 77. XELA Robotics Inc. Bionic Fingertip Tactile Sensor Production (K Units), Price (US$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
Table 78. XELA Robotics Inc. Recent Developments/Updates
Table 79. XELA Robotics Inc. Competitive Strengths & Weaknesses
Table 80. GelSight, Inc. Basic Information, Manufacturing Base and Competitors
Table 81. GelSight, Inc. Major Business
Table 82. GelSight, Inc. Bionic Fingertip Tactile Sensor Product and Services
Table 83. GelSight, Inc. Bionic Fingertip Tactile Sensor Production (K Units), Price (US$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
Table 84. GelSight, Inc. Recent Developments/Updates
Table 85. GelSight, Inc. Competitive Strengths & Weaknesses

+357 96 030922
info@marketpublishers.com

Table 86. Contactile Pty Ltd Basic Information, Manufacturing Base and Competitors
Table 87. Contactile Pty Ltd Major Business
Table 88. Contactile Pty Ltd Bionic Fingertip Tactile Sensor Product and Services
Table 89. Contactile Pty Ltd Bionic Fingertip Tactile Sensor Production (K Units), Price (US$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
Table 90. Contactile Pty Ltd Recent Developments/Updates
Table 91. Contactile Pty Ltd Competitive Strengths & Weaknesses
Table 92. Pressure Profile Systems, Inc. Basic Information, Manufacturing Base and Competitors
Table 93. Pressure Profile Systems, Inc. Major Business
Table 94. Pressure Profile Systems, Inc. Bionic Fingertip Tactile Sensor Product and Services
Table 95. Pressure Profile Systems, Inc. Bionic Fingertip Tactile Sensor Production (K Units), Price (US$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
Table 96. Pressure Profile Systems, Inc. Recent Developments/Updates
Table 97. Pressure Profile Systems, Inc. Competitive Strengths & Weaknesses
Table 98. Bota Systems Basic Information, Manufacturing Base and Competitors
Table 99. Bota Systems Major Business
Table 100. Bota Systems Bionic Fingertip Tactile Sensor Product and Services
Table 101. Bota Systems Bionic Fingertip Tactile Sensor Production (K Units), Price (US$/Unit), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
Table 102. Bota Systems Recent Developments/Updates
Table 103. Bota Systems Competitive Strengths & Weaknesses
Table 104. Global Key Players of Bionic Fingertip Tactile Sensor Upstream (Raw Materials)
Table 105. Global Bionic Fingertip Tactile Sensor Typical Customers
Table 106. Bionic Fingertip Tactile Sensor Typical Distributors

+357 96 030922
info@marketpublishers.com

# List Of Figures

## LIST OF FIGURES

Figure 1. Bionic Fingertip Tactile Sensor Picture
Figure 2. World Bionic Fingertip Tactile Sensor Production Value: 2021 & 2025 & 2032, (USD Million)
Figure 3. World Bionic Fingertip Tactile Sensor Production Value and Forecast (2021-2032) & (USD Million)
Figure 4. World Bionic Fingertip Tactile Sensor Production (2021-2032) & (K Units)
Figure 5. World Bionic Fingertip Tactile Sensor Average Price (2021-2032) & (US$/Unit)
Figure 6. World Bionic Fingertip Tactile Sensor Production Value Market Share by Region (2021-2032)
Figure 7. World Bionic Fingertip Tactile Sensor Production Market Share by Region (2021-2032)
Figure 8. North America Bionic Fingertip Tactile Sensor Production (2021-2032) & (K Units)
Figure 9. Europe Bionic Fingertip Tactile Sensor Production (2021-2032) & (K Units)
Figure 10. China Bionic Fingertip Tactile Sensor Production (2021-2032) & (K Units)
Figure 11. Japan Bionic Fingertip Tactile Sensor Production (2021-2032) & (K Units)
Figure 12. South Korea Bionic Fingertip Tactile Sensor Production (2021-2032) & (K Units)
Figure 13. Southeast Asia Bionic Fingertip Tactile Sensor Production (2021-2032) & (K Units)
Figure 14. China Taiwan Bionic Fingertip Tactile Sensor Production (2021-2032) & (K Units)
Figure 15. Bionic Fingertip Tactile Sensor Market Drivers
Figure 16. Factors Affecting Demand
Figure 17. World Bionic Fingertip Tactile Sensor Consumption (2021-2032) & (K Units)
Figure 18. World Bionic Fingertip Tactile Sensor Consumption Market Share by Region (2021-2032)
Figure 19. United States Bionic Fingertip Tactile Sensor Consumption (2021-2032) & (K Units)
Figure 20. China Bionic Fingertip Tactile Sensor Consumption (2021-2032) & (K Units)
Figure 21. Europe Bionic Fingertip Tactile Sensor Consumption (2021-2032) & (K Units)
Figure 22. Japan Bionic Fingertip Tactile Sensor Consumption (2021-2032) & (K Units)
Figure 23. South Korea Bionic Fingertip Tactile Sensor Consumption (2021-2032) & (K Units)
Figure 24. ASEAN Bionic Fingertip Tactile Sensor Consumption (2021-2032) & (K

+357 96 030922
info@marketpublishers.com

Units)
Figure 25. India Bionic Fingertip Tactile Sensor Consumption (2021-2032) & (K Units)
Figure 26. Producer Shipments of Bionic Fingertip Tactile Sensor by Manufacturer Revenue ($MM) and Market Share (%): 2025
Figure 27. Global Four-firm Concentration Ratios (CR4) for Bionic Fingertip Tactile Sensor Markets in 2025
Figure 28. Global Four-firm Concentration Ratios (CR8) for Bionic Fingertip Tactile Sensor Markets in 2025
Figure 29. United States VS China: Bionic Fingertip Tactile Sensor Production Value Market Share Comparison (2021 & 2025 & 2032)
Figure 30. United States VS China: Bionic Fingertip Tactile Sensor Production Market Share Comparison (2021 & 2025 & 2032)
Figure 31. United States VS China: Bionic Fingertip Tactile Sensor Consumption Market Share Comparison (2021 & 2025 & 2032)
Figure 32. United States Based Manufacturers Bionic Fingertip Tactile Sensor Production Market Share 2025
Figure 33. China Based Manufacturers Bionic Fingertip Tactile Sensor Production Market Share 2025
Figure 34. Rest of World Based Manufacturers Bionic Fingertip Tactile Sensor Production Market Share 2025
Figure 35. World Bionic Fingertip Tactile Sensor Production Value by Sensing Technology, (USD Million), 2021 & 2025 & 2032
Figure 36. World Bionic Fingertip Tactile Sensor Production Value Market Share by Sensing Technology in 2025
Figure 37. Capacitive Type
Figure 38. Piezoresistive Type
Figure 39. Optical Type
Figure 40. Piezoelectric Type
Figure 41. Others
Figure 42. World Bionic Fingertip Tactile Sensor Production Market Share by Sensing Technology (2021-2032)
Figure 43. World Bionic Fingertip Tactile Sensor Production Value Market Share by Sensing Technology (2021-2032)
Figure 44. World Bionic Fingertip Tactile Sensor Average Price by Sensing Technology (2021-2032) & (US$/Unit)
Figure 45. World Bionic Fingertip Tactile Sensor Production Value by Sensor Form Factor, (USD Million), 2021 & 2025 & 2032
Figure 46. World Bionic Fingertip Tactile Sensor Production Value Market Share by Sensor Form Factor in 2025

+357 96 030922
info@marketpublishers.com

Figure 47. Fingertip Sensor (<20 mm Sensing Area)
Figure 48. Flexible Skin Sensor (20–200 mm Sensing Area)
Figure 49. Tactile Array Sensor (>200 mm Sensing Area)
Figure 50. World Bionic Fingertip Tactile Sensor Production Market Share by Sensor Form Factor (2021-2032)
Figure 51. World Bionic Fingertip Tactile Sensor Production Value Market Share by Sensor Form Factor (2021-2032)
Figure 52. World Bionic Fingertip Tactile Sensor Average Price by Sensor Form Factor (2021-2032) & (US$/Unit)
Figure 53. World Bionic Fingertip Tactile Sensor Production Value by Application, (USD Million), 2021 & 2025 & 2032
Figure 54. World Bionic Fingertip Tactile Sensor Production Value Market Share by Application in 2025
Figure 55. Robotic Hand and Manipulation
Figure 56. Prosthetic Hand and Rehabilitation Devices
Figure 57. Industrial Automation and Collaborative Robots
Figure 58. Others
Figure 59. World Bionic Fingertip Tactile Sensor Production Market Share by Application (2021-2032)
Figure 60. World Bionic Fingertip Tactile Sensor Production Value Market Share by Application (2021-2032)
Figure 61. World Bionic Fingertip Tactile Sensor Average Price by Application (2021-2032) & (US$/Unit)
Figure 62. Bionic Fingertip Tactile Sensor Industry Chain
Figure 63. Bionic Fingertip Tactile Sensor Procurement Model
Figure 64. Bionic Fingertip Tactile Sensor Sales Model
Figure 65. Bionic Fingertip Tactile Sensor Sales Channels, Direct Sales, and Distribution
Figure 66. Methodology
Figure 67. Research Process and Data Source

+357 96 030922
info@marketpublishers.com

## I would like to order

Product name: Global Bionic Fingertip Tactile Sensor Supply, Demand and Key Producers, 2026-2032

Product link: https://marketpublishers.com/r/G393BFE89766EN.html

Price: US$ 4,480.00 (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/G393BFE89766EN.html