

Global Thermo Transducer Market 2023 by Manufacturers, Regions, Type and Application, Forecast to 2029

https://marketpublishers.com/r/GEF3DA66CA33EN.html

Date: November 2023 Pages: 127 Price: US\$ 3,480.00 (Single User License) ID: GEF3DA66CA33EN

Abstracts

According to our (Global Info Research) latest study, the global Thermo Transducer market size was valued at USD million in 2022 and is forecast to a readjusted size of USD million by 2029 with a CAGR of % during review period.

The Global Info Research report includes an overview of the development of the Thermo Transducer industry chain, the market status of Industrial Processes (Shell and Tube, Plate), Automotive Industry (Shell and Tube, Plate), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of Thermo Transducer.

Regionally, the report analyzes the Thermo Transducer markets in key regions. North America and Europe are experiencing steady growth, driven by government initiatives and increasing consumer awareness. Asia-Pacific, particularly China, leads the global Thermo Transducer market, with robust domestic demand, supportive policies, and a strong manufacturing base.

Key Features:

The report presents comprehensive understanding of the Thermo Transducer market. It provides a holistic view of the industry, as well as detailed insights into individual components and stakeholders. The report analysis market dynamics, trends, challenges, and opportunities within the Thermo Transducer industry.

The report involves analyzing the market at a macro level:



Market Sizing and Segmentation: Report collect data on the overall market size, including the sales quantity (K Units), revenue generated, and market share of different by Type (e.g., Shell and Tube, Plate).

Industry Analysis: Report analyse the broader industry trends, such as government policies and regulations, technological advancements, consumer preferences, and market dynamics. This analysis helps in understanding the key drivers and challenges influencing the Thermo Transducer market.

Regional Analysis: The report involves examining the Thermo Transducer market at a regional or national level. Report analyses regional factors such as government incentives, infrastructure development, economic conditions, and consumer behaviour to identify variations and opportunities within different markets.

Market Projections: Report covers the gathered data and analysis to make future projections and forecasts for the Thermo Transducer market. This may include estimating market growth rates, predicting market demand, and identifying emerging trends.

The report also involves a more granular approach to Thermo Transducer:

Company Analysis: Report covers individual Thermo Transducer manufacturers, suppliers, and other relevant industry players. This analysis includes studying their financial performance, market positioning, product portfolios, partnerships, and strategies.

Consumer Analysis: Report covers data on consumer behaviour, preferences, and attitudes towards Thermo Transducer This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Industrial Processes, Automotive Industry).

Technology Analysis: Report covers specific technologies relevant to Thermo Transducer. It assesses the current state, advancements, and potential future developments in Thermo Transducer areas.

Competitive Landscape: By analyzing individual companies, suppliers, and consumers, the report present insights into the competitive landscape of the Thermo Transducer market. This analysis helps understand market share, competitive advantages, and potential areas for differentiation among industry players.



Market Validation: The report involves validating findings and projections through primary research, such as surveys, interviews, and focus groups.

Market Segmentation

Thermo Transducer market is split by Type and by Application. For the period 2018-2029, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value.

Market segment by Type

Shell and Tube

Plate

Tube

Market segment by Application

Industrial Processes

Automotive Industry

Medical Devices

Energy Management

Environmental Monitoring

Aerospace Industry

Major players covered

Amphenol Corporation

Honeywell International Inc.



Omega Engineering, Inc.

Panasonic Corporation

Sensata Technologies Holding PLC

TE Connectivity Ltd.

Vishay Intertechnology, Inc.

PCE Instruments

Alfa Laval

Danfoss

Kelvion

Xylem

SPX Corporation

API Heat Transfer

GEA Group

SWEP International

Hisaka Works Ltd.

Sondex Holding A/S

Vahterus Oy

Tranter International AB

Thermowave GmbH



HRS Heat Exchangers Ltd.

Accessen Group

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)

The content of the study subjects, includes a total of 15 chapters:

Chapter 1, to describe Thermo Transducer product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Thermo Transducer, with price, sales, revenue and global market share of Thermo Transducer from 2018 to 2023.

Chapter 3, the Thermo Transducer competitive situation, sales quantity, revenue and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Thermo Transducer breakdown data are shown at the regional level, to show the sales quantity, consumption value and growth by regions, from 2018 to 2029.

Chapter 5 and 6, to segment the sales by Type and application, with sales market share and growth rate by type, application, from 2018 to 2029.

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 2017



to 2022.and Thermo Transducer market forecast, by regions, type and application, with sales and revenue, from 2024 to 2029.

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 Thermo Transducer.

Chapter 14 and 15, to describe Thermo Transducer sales channel, distributors, customers, research findings and conclusion.



Contents

1 MARKET OVERVIEW

- 1.1 Product Overview and Scope of Thermo Transducer
- 1.2 Market Estimation Caveats and Base Year
- 1.3 Market Analysis by Type
- 1.3.1 Overview: Global Thermo Transducer Consumption Value by Type: 2018 Versus 2022 Versus 2029
 - 1.3.2 Shell and Tube
 - 1.3.3 Plate
 - 1.3.4 Tube
- 1.4 Market Analysis by Application
- 1.4.1 Overview: Global Thermo Transducer Consumption Value by Application: 2018
- Versus 2022 Versus 2029
 - 1.4.2 Industrial Processes
 - 1.4.3 Automotive Industry
 - 1.4.4 Medical Devices
 - 1.4.5 Energy Management
 - 1.4.6 Environmental Monitoring
 - 1.4.7 Aerospace Industry
- 1.5 Global Thermo Transducer Market Size & Forecast
- 1.5.1 Global Thermo Transducer Consumption Value (2018 & 2022 & 2029)
- 1.5.2 Global Thermo Transducer Sales Quantity (2018-2029)
- 1.5.3 Global Thermo Transducer Average Price (2018-2029)

2 MANUFACTURERS PROFILES

- 2.1 Amphenol Corporation
 - 2.1.1 Amphenol Corporation Details
 - 2.1.2 Amphenol Corporation Major Business
 - 2.1.3 Amphenol Corporation Thermo Transducer Product and Services
 - 2.1.4 Amphenol Corporation Thermo Transducer Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

- 2.1.5 Amphenol Corporation Recent Developments/Updates
- 2.2 Honeywell International Inc.
 - 2.2.1 Honeywell International Inc. Details
- 2.2.2 Honeywell International Inc. Major Business
- 2.2.3 Honeywell International Inc. Thermo Transducer Product and Services



2.2.4 Honeywell International Inc. Thermo Transducer Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.2.5 Honeywell International Inc. Recent Developments/Updates

2.3 Omega Engineering, Inc.

2.3.1 Omega Engineering, Inc. Details

2.3.2 Omega Engineering, Inc. Major Business

2.3.3 Omega Engineering, Inc. Thermo Transducer Product and Services

2.3.4 Omega Engineering, Inc. Thermo Transducer Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.3.5 Omega Engineering, Inc. Recent Developments/Updates

2.4 Panasonic Corporation

2.4.1 Panasonic Corporation Details

2.4.2 Panasonic Corporation Major Business

- 2.4.3 Panasonic Corporation Thermo Transducer Product and Services
- 2.4.4 Panasonic Corporation Thermo Transducer Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.4.5 Panasonic Corporation Recent Developments/Updates

2.5 Sensata Technologies Holding PLC

2.5.1 Sensata Technologies Holding PLC Details

- 2.5.2 Sensata Technologies Holding PLC Major Business
- 2.5.3 Sensata Technologies Holding PLC Thermo Transducer Product and Services
- 2.5.4 Sensata Technologies Holding PLC Thermo Transducer Sales Quantity, Average

Price, Revenue, Gross Margin and Market Share (2018-2023)

2.5.5 Sensata Technologies Holding PLC Recent Developments/Updates

2.6 TE Connectivity Ltd.

2.6.1 TE Connectivity Ltd. Details

- 2.6.2 TE Connectivity Ltd. Major Business
- 2.6.3 TE Connectivity Ltd. Thermo Transducer Product and Services
- 2.6.4 TE Connectivity Ltd. Thermo Transducer Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.6.5 TE Connectivity Ltd. Recent Developments/Updates

2.7 Vishay Intertechnology, Inc.

- 2.7.1 Vishay Intertechnology, Inc. Details
- 2.7.2 Vishay Intertechnology, Inc. Major Business
- 2.7.3 Vishay Intertechnology, Inc. Thermo Transducer Product and Services

2.7.4 Vishay Intertechnology, Inc. Thermo Transducer Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.7.5 Vishay Intertechnology, Inc. Recent Developments/Updates

2.8 PCE Instruments



2.8.1 PCE Instruments Details

- 2.8.2 PCE Instruments Major Business
- 2.8.3 PCE Instruments Thermo Transducer Product and Services
- 2.8.4 PCE Instruments Thermo Transducer Sales Quantity, Average Price, Revenue,

Gross Margin and Market Share (2018-2023)

2.8.5 PCE Instruments Recent Developments/Updates

2.9 Alfa Laval

- 2.9.1 Alfa Laval Details
- 2.9.2 Alfa Laval Major Business
- 2.9.3 Alfa Laval Thermo Transducer Product and Services
- 2.9.4 Alfa Laval Thermo Transducer Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
- 2.9.5 Alfa Laval Recent Developments/Updates

2.10 Danfoss

- 2.10.1 Danfoss Details
- 2.10.2 Danfoss Major Business
- 2.10.3 Danfoss Thermo Transducer Product and Services
- 2.10.4 Danfoss Thermo Transducer Sales Quantity, Average Price, Revenue, Gross
- Margin and Market Share (2018-2023)
- 2.10.5 Danfoss Recent Developments/Updates
- 2.11 Kelvion
 - 2.11.1 Kelvion Details
 - 2.11.2 Kelvion Major Business
 - 2.11.3 Kelvion Thermo Transducer Product and Services
- 2.11.4 Kelvion Thermo Transducer Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
- 2.11.5 Kelvion Recent Developments/Updates

2.12 Xylem

- 2.12.1 Xylem Details
- 2.12.2 Xylem Major Business
- 2.12.3 Xylem Thermo Transducer Product and Services

2.12.4 Xylem Thermo Transducer Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.12.5 Xylem Recent Developments/Updates

2.13 SPX Corporation

- 2.13.1 SPX Corporation Details
- 2.13.2 SPX Corporation Major Business
- 2.13.3 SPX Corporation Thermo Transducer Product and Services
- 2.13.4 SPX Corporation Thermo Transducer Sales Quantity, Average Price, Revenue,



Gross Margin and Market Share (2018-2023)

2.13.5 SPX Corporation Recent Developments/Updates

2.14 API Heat Transfer

2.14.1 API Heat Transfer Details

2.14.2 API Heat Transfer Major Business

2.14.3 API Heat Transfer Thermo Transducer Product and Services

2.14.4 API Heat Transfer Thermo Transducer Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.14.5 API Heat Transfer Recent Developments/Updates

2.15 GEA Group

2.15.1 GEA Group Details

2.15.2 GEA Group Major Business

2.15.3 GEA Group Thermo Transducer Product and Services

2.15.4 GEA Group Thermo Transducer Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.15.5 GEA Group Recent Developments/Updates

2.16 SWEP International

2.16.1 SWEP International Details

2.16.2 SWEP International Major Business

2.16.3 SWEP International Thermo Transducer Product and Services

2.16.4 SWEP International Thermo Transducer Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.16.5 SWEP International Recent Developments/Updates

2.17 Hisaka Works Ltd.

- 2.17.1 Hisaka Works Ltd. Details
- 2.17.2 Hisaka Works Ltd. Major Business

2.17.3 Hisaka Works Ltd. Thermo Transducer Product and Services

2.17.4 Hisaka Works Ltd. Thermo Transducer Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.17.5 Hisaka Works Ltd. Recent Developments/Updates

2.18 Sondex Holding A/S

2.18.1 Sondex Holding A/S Details

2.18.2 Sondex Holding A/S Major Business

2.18.3 Sondex Holding A/S Thermo Transducer Product and Services

2.18.4 Sondex Holding A/S Thermo Transducer Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.18.5 Sondex Holding A/S Recent Developments/Updates

2.19 Vahterus Oy

2.19.1 Vahterus Oy Details



2.19.2 Vahterus Oy Major Business

2.19.3 Vahterus Oy Thermo Transducer Product and Services

2.19.4 Vahterus Oy Thermo Transducer Sales Quantity, Average Price, Revenue,

Gross Margin and Market Share (2018-2023)

2.19.5 Vahterus Oy Recent Developments/Updates

2.20 Tranter International AB

2.20.1 Tranter International AB Details

2.20.2 Tranter International AB Major Business

2.20.3 Tranter International AB Thermo Transducer Product and Services

2.20.4 Tranter International AB Thermo Transducer Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.20.5 Tranter International AB Recent Developments/Updates

2.21 Thermowave GmbH

2.21.1 Thermowave GmbH Details

2.21.2 Thermowave GmbH Major Business

2.21.3 Thermowave GmbH Thermo Transducer Product and Services

2.21.4 Thermowave GmbH Thermo Transducer Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.21.5 Thermowave GmbH Recent Developments/Updates

2.22 HRS Heat Exchangers Ltd.

2.22.1 HRS Heat Exchangers Ltd. Details

2.22.2 HRS Heat Exchangers Ltd. Major Business

2.22.3 HRS Heat Exchangers Ltd. Thermo Transducer Product and Services

2.22.4 HRS Heat Exchangers Ltd. Thermo Transducer Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.22.5 HRS Heat Exchangers Ltd. Recent Developments/Updates

2.23 Accessen Group

2.23.1 Accessen Group Details

2.23.2 Accessen Group Major Business

2.23.3 Accessen Group Thermo Transducer Product and Services

2.23.4 Accessen Group Thermo Transducer Sales Quantity, Average Price, Revenue,

Gross Margin and Market Share (2018-2023)

2.23.5 Accessen Group Recent Developments/Updates

3 COMPETITIVE ENVIRONMENT: THERMO TRANSDUCER BY MANUFACTURER

3.1 Global Thermo Transducer Sales Quantity by Manufacturer (2018-2023)

3.2 Global Thermo Transducer Revenue by Manufacturer (2018-2023)

3.3 Global Thermo Transducer Average Price by Manufacturer (2018-2023)



3.4 Market Share Analysis (2022)

3.4.1 Producer Shipments of Thermo Transducer by Manufacturer Revenue (\$MM) and Market Share (%): 2022

- 3.4.2 Top 3 Thermo Transducer Manufacturer Market Share in 2022
- 3.4.2 Top 6 Thermo Transducer Manufacturer Market Share in 2022
- 3.5 Thermo Transducer Market: Overall Company Footprint Analysis
- 3.5.1 Thermo Transducer Market: Region Footprint
- 3.5.2 Thermo Transducer Market: Company Product Type Footprint
- 3.5.3 Thermo Transducer 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 Thermo Transducer Market Size by Region
 - 4.1.1 Global Thermo Transducer Sales Quantity by Region (2018-2029)
- 4.1.2 Global Thermo Transducer Consumption Value by Region (2018-2029)
- 4.1.3 Global Thermo Transducer Average Price by Region (2018-2029)
- 4.2 North America Thermo Transducer Consumption Value (2018-2029)
- 4.3 Europe Thermo Transducer Consumption Value (2018-2029)
- 4.4 Asia-Pacific Thermo Transducer Consumption Value (2018-2029)
- 4.5 South America Thermo Transducer Consumption Value (2018-2029)
- 4.6 Middle East and Africa Thermo Transducer Consumption Value (2018-2029)

5 MARKET SEGMENT BY TYPE

- 5.1 Global Thermo Transducer Sales Quantity by Type (2018-2029)
- 5.2 Global Thermo Transducer Consumption Value by Type (2018-2029)
- 5.3 Global Thermo Transducer Average Price by Type (2018-2029)

6 MARKET SEGMENT BY APPLICATION

- 6.1 Global Thermo Transducer Sales Quantity by Application (2018-2029)
- 6.2 Global Thermo Transducer Consumption Value by Application (2018-2029)
- 6.3 Global Thermo Transducer Average Price by Application (2018-2029)

7 NORTH AMERICA

7.1 North America Thermo Transducer Sales Quantity by Type (2018-2029)



- 7.2 North America Thermo Transducer Sales Quantity by Application (2018-2029)
- 7.3 North America Thermo Transducer Market Size by Country
- 7.3.1 North America Thermo Transducer Sales Quantity by Country (2018-2029)
- 7.3.2 North America Thermo Transducer Consumption Value by Country (2018-2029)
- 7.3.3 United States Market Size and Forecast (2018-2029)
- 7.3.4 Canada Market Size and Forecast (2018-2029)
- 7.3.5 Mexico Market Size and Forecast (2018-2029)

8 EUROPE

- 8.1 Europe Thermo Transducer Sales Quantity by Type (2018-2029)
- 8.2 Europe Thermo Transducer Sales Quantity by Application (2018-2029)
- 8.3 Europe Thermo Transducer Market Size by Country
- 8.3.1 Europe Thermo Transducer Sales Quantity by Country (2018-2029)
- 8.3.2 Europe Thermo Transducer Consumption Value by Country (2018-2029)
- 8.3.3 Germany Market Size and Forecast (2018-2029)
- 8.3.4 France Market Size and Forecast (2018-2029)
- 8.3.5 United Kingdom Market Size and Forecast (2018-2029)
- 8.3.6 Russia Market Size and Forecast (2018-2029)
- 8.3.7 Italy Market Size and Forecast (2018-2029)

9 ASIA-PACIFIC

- 9.1 Asia-Pacific Thermo Transducer Sales Quantity by Type (2018-2029)
- 9.2 Asia-Pacific Thermo Transducer Sales Quantity by Application (2018-2029)
- 9.3 Asia-Pacific Thermo Transducer Market Size by Region
- 9.3.1 Asia-Pacific Thermo Transducer Sales Quantity by Region (2018-2029)
- 9.3.2 Asia-Pacific Thermo Transducer Consumption Value by Region (2018-2029)
- 9.3.3 China Market Size and Forecast (2018-2029)
- 9.3.4 Japan Market Size and Forecast (2018-2029)
- 9.3.5 Korea Market Size and Forecast (2018-2029)
- 9.3.6 India Market Size and Forecast (2018-2029)
- 9.3.7 Southeast Asia Market Size and Forecast (2018-2029)
- 9.3.8 Australia Market Size and Forecast (2018-2029)

10 SOUTH AMERICA

10.1 South America Thermo Transducer Sales Quantity by Type (2018-2029) 10.2 South America Thermo Transducer Sales Quantity by Application (2018-2029)



10.3 South America Thermo Transducer Market Size by Country

10.3.1 South America Thermo Transducer Sales Quantity by Country (2018-2029)

10.3.2 South America Thermo Transducer Consumption Value by Country

(2018-2029)

10.3.3 Brazil Market Size and Forecast (2018-2029)

10.3.4 Argentina Market Size and Forecast (2018-2029)

11 MIDDLE EAST & AFRICA

11.1 Middle East & Africa Thermo Transducer Sales Quantity by Type (2018-2029)

11.2 Middle East & Africa Thermo Transducer Sales Quantity by Application (2018-2029)

11.3 Middle East & Africa Thermo Transducer Market Size by Country

11.3.1 Middle East & Africa Thermo Transducer Sales Quantity by Country (2018-2029)

11.3.2 Middle East & Africa Thermo Transducer Consumption Value by Country (2018-2029)

11.3.3 Turkey Market Size and Forecast (2018-2029)

11.3.4 Egypt Market Size and Forecast (2018-2029)

11.3.5 Saudi Arabia Market Size and Forecast (2018-2029)

11.3.6 South Africa Market Size and Forecast (2018-2029)

12 MARKET DYNAMICS

- 12.1 Thermo Transducer Market Drivers
- 12.2 Thermo Transducer Market Restraints
- 12.3 Thermo Transducer 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 Thermo Transducer and Key Manufacturers
- 13.2 Manufacturing Costs Percentage of Thermo Transducer
- 13.3 Thermo Transducer Production Process

Global Thermo Transducer Market 2023 by Manufacturers, Regions, Type and Application, Forecast to 2029



13.4 Thermo Transducer Industrial Chain

14 SHIPMENTS BY DISTRIBUTION CHANNEL

- 14.1 Sales Channel 14.1.1 Direct to End-User
 - 14.1.2 Distributors
- 14.2 Thermo Transducer Typical Distributors
- 14.3 Thermo Transducer 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 Thermo Transducer Consumption Value by Type, (USD Million), 2018 & 2022 & 2029

Table 2. Global Thermo Transducer Consumption Value by Application, (USD Million), 2018 & 2022 & 2029

Table 3. Amphenol Corporation Basic Information, Manufacturing Base and Competitors Table 4. Amphenol Corporation Major Business

 Table 5. Amphenol Corporation Thermo Transducer Product and Services

Table 6. Amphenol Corporation Thermo Transducer Sales Quantity (K Units), Average

Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 7. Amphenol Corporation Recent Developments/Updates

Table 8. Honeywell International Inc. Basic Information, Manufacturing Base and Competitors

Table 9. Honeywell International Inc. Major Business

Table 10. Honeywell International Inc. Thermo Transducer Product and Services

Table 11. Honeywell International Inc. Thermo Transducer Sales Quantity (K Units),

Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 12. Honeywell International Inc. Recent Developments/Updates

Table 13. Omega Engineering, Inc. Basic Information, Manufacturing Base and Competitors

Table 14. Omega Engineering, Inc. Major Business

Table 15. Omega Engineering, Inc. Thermo Transducer Product and Services

Table 16. Omega Engineering, Inc. Thermo Transducer Sales Quantity (K Units),

Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 17. Omega Engineering, Inc. Recent Developments/Updates

Table 18. Panasonic Corporation Basic Information, Manufacturing Base andCompetitors

 Table 19. Panasonic Corporation Major Business

Table 20. Panasonic Corporation Thermo Transducer Product and Services

Table 21. Panasonic Corporation Thermo Transducer Sales Quantity (K Units), Average

Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 22. Panasonic Corporation Recent Developments/Updates

Table 23. Sensata Technologies Holding PLC Basic Information, Manufacturing Base and Competitors



Table 24. Sensata Technologies Holding PLC Major Business

Table 25. Sensata Technologies Holding PLC Thermo Transducer Product and Services

Table 26. Sensata Technologies Holding PLC Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 27. Sensata Technologies Holding PLC Recent Developments/Updates

Table 28. TE Connectivity Ltd. Basic Information, Manufacturing Base and Competitors

Table 29. TE Connectivity Ltd. Major Business

Table 30. TE Connectivity Ltd. Thermo Transducer Product and Services

Table 31. TE Connectivity Ltd. Thermo Transducer Sales Quantity (K Units), Average

Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 32. TE Connectivity Ltd. Recent Developments/Updates

Table 33. Vishay Intertechnology, Inc. Basic Information, Manufacturing Base and Competitors

Table 34. Vishay Intertechnology, Inc. Major Business

Table 35. Vishay Intertechnology, Inc. Thermo Transducer Product and Services

Table 36. Vishay Intertechnology, Inc. Thermo Transducer Sales Quantity (K Units),

Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 37. Vishay Intertechnology, Inc. Recent Developments/Updates

Table 38. PCE Instruments Basic Information, Manufacturing Base and Competitors

Table 39. PCE Instruments Major Business

Table 40. PCE Instruments Thermo Transducer Product and Services

Table 41. PCE Instruments Thermo Transducer Sales Quantity (K Units), Average Price

(US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 42. PCE Instruments Recent Developments/Updates

Table 43. Alfa Laval Basic Information, Manufacturing Base and Competitors

Table 44. Alfa Laval Major Business

Table 45. Alfa Laval Thermo Transducer Product and Services

Table 46. Alfa Laval Thermo Transducer Sales Quantity (K Units), Average Price

(US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 47. Alfa Laval Recent Developments/Updates

Table 48. Danfoss Basic Information, Manufacturing Base and Competitors

Table 49. Danfoss Major Business

Table 50. Danfoss Thermo Transducer Product and Services

Table 51. Danfoss Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 52. Danfoss Recent Developments/Updates



Table 53. Kelvion Basic Information, Manufacturing Base and Competitors Table 54. Kelvion Major Business Table 55. Kelvion Thermo Transducer Product and Services Table 56. Kelvion Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 57. Kelvion Recent Developments/Updates Table 58. Xylem Basic Information, Manufacturing Base and Competitors Table 59. Xylem Major Business Table 60. Xylem Thermo Transducer Product and Services Table 61. Xylem Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 62. Xylem Recent Developments/Updates Table 63. SPX Corporation Basic Information, Manufacturing Base and Competitors Table 64. SPX Corporation Major Business Table 65. SPX Corporation Thermo Transducer Product and Services Table 66. SPX Corporation Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 67. SPX Corporation Recent Developments/Updates Table 68. API Heat Transfer Basic Information, Manufacturing Base and Competitors Table 69. API Heat Transfer Major Business Table 70. API Heat Transfer Thermo Transducer Product and Services Table 71. API Heat Transfer Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 72. API Heat Transfer Recent Developments/Updates Table 73. GEA Group Basic Information, Manufacturing Base and Competitors Table 74. GEA Group Major Business Table 75. GEA Group Thermo Transducer Product and Services Table 76. GEA Group Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 77. GEA Group Recent Developments/Updates Table 78. SWEP International Basic Information, Manufacturing Base and Competitors Table 79. SWEP International Major Business Table 80. SWEP International Thermo Transducer Product and Services Table 81. SWEP International Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 82. SWEP International Recent Developments/Updates Table 83. Hisaka Works Ltd. Basic Information, Manufacturing Base and Competitors Table 84. Hisaka Works Ltd. Major Business Table 85. Hisaka Works Ltd. Thermo Transducer Product and Services



Table 86. Hisaka Works Ltd. Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 87. Hisaka Works Ltd. Recent Developments/Updates Table 88. Sondex Holding A/S Basic Information, Manufacturing Base and Competitors Table 89. Sondex Holding A/S Major Business Table 90. Sondex Holding A/S Thermo Transducer Product and Services Table 91. Sondex Holding A/S Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 92. Sondex Holding A/S Recent Developments/Updates Table 93. Vahterus Oy Basic Information, Manufacturing Base and Competitors Table 94. Vahterus Oy Major Business Table 95. Vahterus Oy Thermo Transducer Product and Services Table 96. Vahterus Oy Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 97. Vahterus Oy Recent Developments/Updates Table 98. Tranter International AB Basic Information, Manufacturing Base and Competitors Table 99. Tranter International AB Major Business Table 100. Tranter International AB Thermo Transducer Product and Services Table 101. Tranter International AB Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018 - 2023)Table 102. Tranter International AB Recent Developments/Updates Table 103. Thermowave GmbH Basic Information, Manufacturing Base and Competitors Table 104. Thermowave GmbH Major Business Table 105. Thermowave GmbH Thermo Transducer Product and Services Table 106. Thermowave GmbH Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 107. Thermowave GmbH Recent Developments/Updates Table 108. HRS Heat Exchangers Ltd. Basic Information, Manufacturing Base and Competitors Table 109. HRS Heat Exchangers Ltd. Major Business Table 110. HRS Heat Exchangers Ltd. Thermo Transducer Product and Services Table 111. HRS Heat Exchangers Ltd. Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018 - 2023)Table 112. HRS Heat Exchangers Ltd. Recent Developments/Updates

Table 113. Accessen Group Basic Information, Manufacturing Base and Competitors



Table 114. Accessen Group Major Business Table 115. Accessen Group Thermo Transducer Product and Services Table 116. Accessen Group Thermo Transducer Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 117. Accessen Group Recent Developments/Updates Table 118. Global Thermo Transducer Sales Quantity by Manufacturer (2018-2023) & (K Units) Table 119. Global Thermo Transducer Revenue by Manufacturer (2018-2023) & (USD Million) Table 120. Global Thermo Transducer Average Price by Manufacturer (2018-2023) & (US\$/Unit) Table 121. Market Position of Manufacturers in Thermo Transducer, (Tier 1, Tier 2, and Tier 3), Based on Consumption Value in 2022 Table 122. Head Office and Thermo Transducer Production Site of Key Manufacturer Table 123. Thermo Transducer Market: Company Product Type Footprint Table 124. Thermo Transducer Market: Company Product Application Footprint Table 125. Thermo Transducer New Market Entrants and Barriers to Market Entry Table 126. Thermo Transducer Mergers, Acquisition, Agreements, and Collaborations Table 127. Global Thermo Transducer Sales Quantity by Region (2018-2023) & (K Units) Table 128. Global Thermo Transducer Sales Quantity by Region (2024-2029) & (K Units) Table 129. Global Thermo Transducer Consumption Value by Region (2018-2023) & (USD Million) Table 130. Global Thermo Transducer Consumption Value by Region (2024-2029) & (USD Million) Table 131. Global Thermo Transducer Average Price by Region (2018-2023) & (US\$/Unit) Table 132. Global Thermo Transducer Average Price by Region (2024-2029) & (US\$/Unit) Table 133. Global Thermo Transducer Sales Quantity by Type (2018-2023) & (K Units) Table 134. Global Thermo Transducer Sales Quantity by Type (2024-2029) & (K Units) Table 135. Global Thermo Transducer Consumption Value by Type (2018-2023) & (USD Million) Table 136. Global Thermo Transducer Consumption Value by Type (2024-2029) & (USD Million) Table 137. Global Thermo Transducer Average Price by Type (2018-2023) & (US\$/Unit) Table 138. Global Thermo Transducer Average Price by Type (2024-2029) & (US\$/Unit) Table 139. Global Thermo Transducer Sales Quantity by Application (2018-2023) & (K



Units)

Table 140. Global Thermo Transducer Sales Quantity by Application (2024-2029) & (K Units)

Table 141. Global Thermo Transducer Consumption Value by Application (2018-2023) & (USD Million)

Table 142. Global Thermo Transducer Consumption Value by Application (2024-2029) & (USD Million)

Table 143. Global Thermo Transducer Average Price by Application (2018-2023) & (US\$/Unit)

Table 144. Global Thermo Transducer Average Price by Application (2024-2029) & (US\$/Unit)

Table 145. North America Thermo Transducer Sales Quantity by Type (2018-2023) & (K Units)

Table 146. North America Thermo Transducer Sales Quantity by Type (2024-2029) & (K Units)

Table 147. North America Thermo Transducer Sales Quantity by Application (2018-2023) & (K Units)

Table 148. North America Thermo Transducer Sales Quantity by Application (2024-2029) & (K Units)

Table 149. North America Thermo Transducer Sales Quantity by Country (2018-2023) & (K Units)

Table 150. North America Thermo Transducer Sales Quantity by Country (2024-2029) & (K Units)

Table 151. North America Thermo Transducer Consumption Value by Country (2018-2023) & (USD Million)

Table 152. North America Thermo Transducer Consumption Value by Country (2024-2029) & (USD Million)

Table 153. Europe Thermo Transducer Sales Quantity by Type (2018-2023) & (K Units) Table 154. Europe Thermo Transducer Sales Quantity by Type (2024-2029) & (K Units) Table 155. Europe Thermo Transducer Sales Quantity by Application (2018-2023) & (K Units)

Table 156. Europe Thermo Transducer Sales Quantity by Application (2024-2029) & (K Units)

Table 157. Europe Thermo Transducer Sales Quantity by Country (2018-2023) & (K Units)

Table 158. Europe Thermo Transducer Sales Quantity by Country (2024-2029) & (K Units)

Table 159. Europe Thermo Transducer Consumption Value by Country (2018-2023) & (USD Million)



Table 160. Europe Thermo Transducer Consumption Value by Country (2024-2029) & (USD Million)

Table 161. Asia-Pacific Thermo Transducer Sales Quantity by Type (2018-2023) & (K Units)

Table 162. Asia-Pacific Thermo Transducer Sales Quantity by Type (2024-2029) & (K Units)

Table 163. Asia-Pacific Thermo Transducer Sales Quantity by Application (2018-2023) & (K Units)

Table 164. Asia-Pacific Thermo Transducer Sales Quantity by Application (2024-2029) & (K Units)

Table 165. Asia-Pacific Thermo Transducer Sales Quantity by Region (2018-2023) & (K Units)

Table 166. Asia-Pacific Thermo Transducer Sales Quantity by Region (2024-2029) & (K Units)

Table 167. Asia-Pacific Thermo Transducer Consumption Value by Region (2018-2023) & (USD Million)

Table 168. Asia-Pacific Thermo Transducer Consumption Value by Region (2024-2029)& (USD Million)

Table 169. South America Thermo Transducer Sales Quantity by Type (2018-2023) & (K Units)

Table 170. South America Thermo Transducer Sales Quantity by Type (2024-2029) & (K Units)

Table 171. South America Thermo Transducer Sales Quantity by Application (2018-2023) & (K Units)

Table 172. South America Thermo Transducer Sales Quantity by Application (2024-2029) & (K Units)

Table 173. South America Thermo Transducer Sales Quantity by Country (2018-2023) & (K Units)

Table 174. South America Thermo Transducer Sales Quantity by Country (2024-2029) & (K Units)

Table 175. South America Thermo Transducer Consumption Value by Country(2018-2023) & (USD Million)

Table 176. South America Thermo Transducer Consumption Value by Country(2024-2029) & (USD Million)

Table 177. Middle East & Africa Thermo Transducer Sales Quantity by Type(2018-2023) & (K Units)

Table 178. Middle East & Africa Thermo Transducer Sales Quantity by Type(2024-2029) & (K Units)

Table 179. Middle East & Africa Thermo Transducer Sales Quantity by Application



(2018-2023) & (K Units)
Table 180. Middle East & Africa Thermo Transducer Sales Quantity by Application
(2024-2029) & (K Units)
Table 181. Middle East & Africa Thermo Transducer Sales Quantity by Region
(2018-2023) & (K Units)
Table 182. Middle East & Africa Thermo Transducer Sales Quantity by Region
(2024-2029) & (K Units)
Table 183. Middle East & Africa Thermo Transducer Consumption Value by Region
(2018-2023) & (USD Million)
Table 184. Middle East & Africa Thermo Transducer Consumption Value by Region
(2024-2029) & (USD Million)
Table 185. Thermo Transducer Raw Material
Table 186. Key Manufacturers of Thermo Transducer Raw Materials
Table 187. Thermo Transducer Typical Distributors
Table 188. Thermo Transducer Typical Customers



List Of Figures

LIST OF FIGURES

- Figure 1. Thermo Transducer Picture
- Figure 2. Global Thermo Transducer Consumption Value by Type, (USD Million), 2018 & 2022 & 2029
- Figure 3. Global Thermo Transducer Consumption Value Market Share by Type in 2022
- Figure 4. Shell and Tube Examples
- Figure 5. Plate Examples
- Figure 6. Tube Examples
- Figure 7. Global Thermo Transducer Consumption Value by Application, (USD Million), 2018 & 2022 & 2029
- Figure 8. Global Thermo Transducer Consumption Value Market Share by Application in 2022
- Figure 9. Industrial Processes Examples
- Figure 10. Automotive Industry Examples
- Figure 11. Medical Devices Examples
- Figure 12. Energy Management Examples
- Figure 13. Environmental Monitoring Examples
- Figure 14. Aerospace Industry Examples
- Figure 15. Global Thermo Transducer Consumption Value, (USD Million): 2018 & 2022 & 2029

Figure 16. Global Thermo Transducer Consumption Value and Forecast (2018-2029) & (USD Million)

- Figure 17. Global Thermo Transducer Sales Quantity (2018-2029) & (K Units)
- Figure 18. Global Thermo Transducer Average Price (2018-2029) & (US\$/Unit)

Figure 19. Global Thermo Transducer Sales Quantity Market Share by Manufacturer in 2022

Figure 20. Global Thermo Transducer Consumption Value Market Share by Manufacturer in 2022

Figure 21. Producer Shipments of Thermo Transducer by Manufacturer Sales Quantity (\$MM) and Market Share (%): 2021

Figure 22. Top 3 Thermo Transducer Manufacturer (Consumption Value) Market Share in 2022

Figure 23. Top 6 Thermo Transducer Manufacturer (Consumption Value) Market Share in 2022

Figure 24. Global Thermo Transducer Sales Quantity Market Share by Region (2018-2029)



Figure 25. Global Thermo Transducer Consumption Value Market Share by Region (2018-2029)

Figure 26. North America Thermo Transducer Consumption Value (2018-2029) & (USD Million)

Figure 27. Europe Thermo Transducer Consumption Value (2018-2029) & (USD Million)

Figure 28. Asia-Pacific Thermo Transducer Consumption Value (2018-2029) & (USD Million)

Figure 29. South America Thermo Transducer Consumption Value (2018-2029) & (USD Million)

Figure 30. Middle East & Africa Thermo Transducer Consumption Value (2018-2029) & (USD Million)

Figure 31. Global Thermo Transducer Sales Quantity Market Share by Type (2018-2029)

Figure 32. Global Thermo Transducer Consumption Value Market Share by Type (2018-2029)

Figure 33. Global Thermo Transducer Average Price by Type (2018-2029) & (US\$/Unit) Figure 34. Global Thermo Transducer Sales Quantity Market Share by Application (2018-2029)

Figure 35. Global Thermo Transducer Consumption Value Market Share by Application (2018-2029)

Figure 36. Global Thermo Transducer Average Price by Application (2018-2029) & (US\$/Unit)

Figure 37. North America Thermo Transducer Sales Quantity Market Share by Type (2018-2029)

Figure 38. North America Thermo Transducer Sales Quantity Market Share by Application (2018-2029)

Figure 39. North America Thermo Transducer Sales Quantity Market Share by Country (2018-2029)

Figure 40. North America Thermo Transducer Consumption Value Market Share by Country (2018-2029)

Figure 41. United States Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 42. Canada Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 43. Mexico Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 44. Europe Thermo Transducer Sales Quantity Market Share by Type (2018-2029)

Figure 45. Europe Thermo Transducer Sales Quantity Market Share by Application



(2018-2029)

Figure 46. Europe Thermo Transducer Sales Quantity Market Share by Country (2018-2029)

Figure 47. Europe Thermo Transducer Consumption Value Market Share by Country (2018-2029)

Figure 48. Germany Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 49. France Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 50. United Kingdom Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 51. Russia Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 52. Italy Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 53. Asia-Pacific Thermo Transducer Sales Quantity Market Share by Type (2018-2029)

Figure 54. Asia-Pacific Thermo Transducer Sales Quantity Market Share by Application (2018-2029)

Figure 55. Asia-Pacific Thermo Transducer Sales Quantity Market Share by Region (2018-2029)

Figure 56. Asia-Pacific Thermo Transducer Consumption Value Market Share by Region (2018-2029)

Figure 57. China Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 58. Japan Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 59. Korea Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 60. India Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 61. Southeast Asia Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 62. Australia Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 63. South America Thermo Transducer Sales Quantity Market Share by Type (2018-2029)

Figure 64. South America Thermo Transducer Sales Quantity Market Share by Application (2018-2029)



Figure 65. South America Thermo Transducer Sales Quantity Market Share by Country (2018-2029)

Figure 66. South America Thermo Transducer Consumption Value Market Share by Country (2018-2029)

Figure 67. Brazil Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 68. Argentina Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 69. Middle East & Africa Thermo Transducer Sales Quantity Market Share by Type (2018-2029)

Figure 70. Middle East & Africa Thermo Transducer Sales Quantity Market Share by Application (2018-2029)

Figure 71. Middle East & Africa Thermo Transducer Sales Quantity Market Share by Region (2018-2029)

Figure 72. Middle East & Africa Thermo Transducer Consumption Value Market Share by Region (2018-2029)

Figure 73. Turkey Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 74. Egypt Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 75. Saudi Arabia Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 76. South Africa Thermo Transducer Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 77. Thermo Transducer Market Drivers

Figure 78. Thermo Transducer Market Restraints

- Figure 79. Thermo Transducer Market Trends
- Figure 80. Porters Five Forces Analysis

Figure 81. Manufacturing Cost Structure Analysis of Thermo Transducer in 2022

- Figure 82. Manufacturing Process Analysis of Thermo Transducer
- Figure 83. Thermo Transducer Industrial Chain
- Figure 84. Sales Quantity Channel: Direct to End-User vs Distributors
- Figure 85. Direct Channel Pros & Cons
- Figure 86. Indirect Channel Pros & Cons
- Figure 87. Methodology
- Figure 88. Research Process and Data Source



I would like to order

 Product name: Global Thermo Transducer Market 2023 by Manufacturers, Regions, Type and Application, Forecast to 2029
 Product link: <u>https://marketpublishers.com/r/GEF3DA66CA33EN.html</u>
 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 <u>https://marketpublishers.com/r/GEF3DA66CA33EN.html</u>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

**All fields are required

Custumer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970



Global Thermo Transducer Market 2023 by Manufacturers, Regions, Type and Application, Forecast to 2029