

# Smart Pneumatics Market by Component (Hardware, Software, and Services), Type (Valves, Actuators, and Modules), Industries (Automotive, Semiconductor, Food & Beverage, Water & Wastewater, Oil & Gas), and Geography - Global Forecast to 2023

<https://marketpublishers.com/r/S084A204F94EN.html>

Date: January 2019

Pages: 115

Price: US\$ 5,650.00 (Single User License)

ID: S084A204F94EN

## Abstracts

“Growing awareness about predictive maintenance is propelling growth of smart pneumatics market”

The global smart pneumatics market expected to grow at a CAGR of 6.7% from 2018 to 2023, reaching USD 4.6 billion by 2023 from USD 3.3 billion in 2018. Smart pneumatic systems facilitate predictive maintenance through integrated diagnostics. For systems, such as valves, actuators, and cylinders, determining the state of wear from the outside is difficult; however, the addition of sensors and modules can provide information for analyzing the expected service life of systems. Preventive maintenance is carried out to avoid downtimes in critical applications. Therefore, the transition from preventive to predictive maintenance contributes significantly to the market’s growth. However, the lack of standardized certifications and government policies is a major factor restraining the smart pneumatics market’s growth.

“Smart pneumatics market to be driven by hardware component during forecast period”

The hardware components segment is expected to hold a significant share of the smart pneumatics market during the forecast period. Hardware components offered by smart pneumatics solution providers mainly include position sensors, pressure sensors, and motion sensors. These sensors, along with communications technology, are integrated into pneumatic systems, such as valves and actuators, enabling them to be “smart”. These devices are considered to be the main components of smart pneumatics

systems. The data extracted by hardware components enable effective predictive maintenance to avoid costly downtime.

“Smart pneumatic actuators expected to grow at a higher CAGR during the forecast period”

The smart pneumatic actuator market is expected to witness significant growth during the forecast period. Smart actuators use sensors and other electronics to provide operational feedback (such as speed, force, end-of-travel, stroke length, and cycle time) to controllers. The collected data enable condition monitoring to determine if an actuator is performing as intended. By using such information, actuator performance can be optimized, saving end users time and money. Additionally, actuator failures can also be predicted and avoided.

“Smart pneumatics market in APAC to witness the highest growth rate in the coming years”

The smart pneumatics market in APAC is expected to grow at the highest CAGR from 2018 to 2023. APAC is a preferred manufacturing hub. China presents a huge potential for digital transformation of the manufacturing industry. Dense population, growing per capita income, large-scale industrialization and urbanization, and increasing adoption of IoT are the factors driving the growth of the market in this region. India is the fastest-growing country in APAC.

To determine and verify the market size of several segments and subsegments, extensive primary interviews have been conducted with key personalities in the smart pneumatics market. Following is the breakup of the primary participants:

By Company Type: Tier 1 = 40 %, Tier 2 = 35%, and Tier 3 = 25%

By Designation: C-Level Executives = 45%, Directors = 30%, and Others = 25%

By Region: North America = 35%, Europe = 30%, APAC = 25%, and RoW = 10%

The report profiles the key players in the smart pneumatics market and analyzes their market rankings. The prominent players profiled in this report are Emerson Electric Co. (US), Festo AG & Co. KG (Germany), Parker Hannifin Corporation (US), Bimba

Manufacturing Co. (US), Rotork plc (UK), Metso Corporation (Finland), and Thomson Industries, Inc. (US).

#### Research Coverage:

This research report categorizes the smart pneumatics market based on component, type, industry, and region. The report describes the major drivers, restraints, challenges, and opportunities pertaining to this market, as well as value chain and market ranking analyses.

#### Reasons to Buy the Report:

The report would help leaders/new entrants in the smart pneumatics market in the following ways:

1. The report segments the smart pneumatics market comprehensively and provides the market size estimation for all subsegments across different regions.
2. The report helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.
3. The report would help stakeholders understand their competitors better and gain insights to improve their position in the smart pneumatics market. The competitive landscape section describes the competitor ecosystem.

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