

PRESS INFORMATION

Faster format changes, precise filling, efficient packaging

Manuela Kessler | 07.05.2026 | Lohr am Main / Germany | PI 021/26

Bosch Rexroth shows the strengths of electromechanical cylinders in the food and packaging industry at interpack

- Controllable and flexible movements without compressed air and with no leakage
- High energy efficiency and low maintenance requirements
- Tailored complete solutions for stable and economical processes



Precise and flexible control: electromechanical cylinder for the food, pharmaceutical, and packaging industries with integrated servo motor (Image source: Bosch Rexroth AG)

Increasing demands on product quality, product variety, and process reliability are putting greater pressure on machinery and equipment manufacturers in the food, pharmaceutical, and packaging industries. At interpack, Bosch Rexroth will be demonstrating how linear movements can be precisely controlled, flexibly adapted, and economically implemented using electromechanical cylinders. At the Rexroth booth, visitors can find out which applications benefit from the precisely controllable and low-maintenance actuators – including dosing and filling, portioning and cutting, as well as cartoning, folding, and wrapping.

With individual and high-quality products, frequent format changes, and high demands in terms of quality and hygiene, pneumatic solutions are increasingly reaching their limits. What is needed are economical machine concepts that make motion processes such as dosing, filling, cutting, or packaging manageable over a wide range of forces and achieve reproducible results.

"Electromechanical cylinders play to their technical strengths wherever there is a need for precision, flexibility, and a low risk of contamination," explains Tobias Gerhard, Business Development Manager Fast Moving Consumer Goods at Bosch Rexroth. "This is especially true when different product formats are to be processed on one line, movements are to be positioned exactly, or forces are to be metered."

The EMC series of electromechanical cylinders from Bosch Rexroth are designed specifically for the industry and allow precise positioning, defined motion profiles, and exact force control. This enables stable processes to be implemented and adapted during operation, even with varying requirements.

Typical applications of electromechanical cylinders include precise dosing and filling processes, linear filling with varying container sizes, and force-controlled capping or sealing. The precisely controllable actuators are just as impressive when portioning and slicing with force as they are when packaging and cartoning – including folding or flow wrapping with tension control.

With a variety of versions and industry-specific options, the EMC series meets the requirements of hygiene-sensitive applications. These include food-safe seals, lubricants (H1), and components

PRESS INFORMATION

such as stainless steel piston rods. The EMC's hygienic design with smooth surfaces, EG1935/2004-compliant design, and IP65 protection class prevents the accumulation of dirt and facilitates cleaning. Compared to pneumatic solutions, electromechanical cylinders also reduce potential contamination risks.

From an economic point of view, electromechanical cylinders boast significantly lower maintenance requirements and lower energy consumption than pneumatic actuators. Depending on the application, the investment costs are usually recouped within two to three years. This applies in particular to tailored complete solutions that include servo motors and drives, with which Bosch Rexroth also minimizes the engineering effort.

With extensive industry and application experience, Bosch Rexroth assists machinery and equipment manufacturers in the food, pharmaceutical, and packaging industries in identifying suitable application scenarios for electromechanical cylinders and finding the economically optimal solution for their specific requirements.

Basic Information Bosch Rexroth

As one of the world's leading suppliers of drive and control technologies, Bosch Rexroth ensures efficient, powerful and safe movement in machines and systems of any size. The company bundles global application experience in the market segments of Mobile and Industrial Applications as well as Factory Automation. With its intelligent components, customized system solutions, engineering and services, Bosch Rexroth is creating the necessary environment for fully connected applications. Bosch Rexroth offers its customers hydraulics, electric drive and control technology, gear technology and linear motion and assembly technology, including software and interfaces to the Internet of Things. With locations in over 80 countries, around 31,900 associates generated sales revenue of 6.5 billion euros in 2025.

Basic Information Bosch

The Bosch Group is a leading global supplier of technology and services. It employs roughly 413,000 associates worldwide (as of December 31, 2025). The company generated sales of 91 billion euros in 2025. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. With its business activities, the company aims to use technology to help shape universal trends such as automation, digitalization, electrification, and artificial intelligence. In this context, Bosch's broad diversification across regions and industries strengthens its innovativeness and robustness. Bosch uses its proven expertise in hardware, software, and services to offer customers cross-domain solutions from a single source. It also applies its expertise in connectivity and artificial intelligence in order to develop and manufacture intelligent, user-friendly, and sustainable products. With technology that is "Invented for life," Bosch wants to help improve quality of life and conserve natural resources. The Bosch Group comprises Robert Bosch GmbH and its roughly 500 subsidiary and regional companies in over 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. Bosch's innovative strength is key to the company's further development. Bosch employs some 82,000 associates in research and development.

Press Contact

Please get in touch with our Press Contact

PRESS INFORMATION



Manuela Kessler

Spokesperson
technology topics
+49 9352 184145

Manuela.Kessler@boschrexroth.de