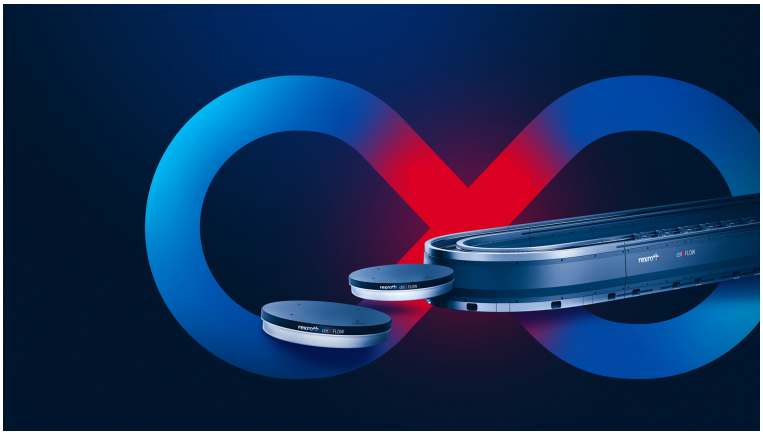
PRESS INFORMATION

Bosch Rexroth presents the linear motion system ctrlX FLOWHS: High-speed transport and positioning

Manuela Kessler | 25.10.2023 | Lohr am Main / Germany | PI 058/23

- Openness: Fully integrated into the automation toolkit ctrlX AUTOMATION
- Flexible topologies and quick commissioning
- High speed, precision and a compact design



The product family ctrlX FLOW offers easy-to-integrate solutions for optimum and highly efficient material and goods flows. (Image source: Bosch Rexroth AG)

In connected factories, everything must interact seamlessly and quickly. This also applies to the transport and positioning of products and materials. The linear motion system ctrlX FLOWHS achieves this through flexibility and high speed – with less space required. The compact solution can be configured flexibly to suit various topologies and applications. It is 100 percent integrated into the automation toolkit ctrlX AUTOMATION and benefits from the openness and safety and the entire ecosystem.

The linear motion system ctrlX FLOWHS is an integral part of Bosch Rexroth's automation toolkit ctrlX AUTOMATION. It gives users access to all features, including interfaces for interoperability with other systems and communication and security standards thanks to ctrlX IOT. Using the embedded software ctrlX MOTION, it is also possible to operate robots and other axes in a synchronized manner.

ctrlX FLOWHS is based on the control platform ctrlX CORE with the operating system ctrlX OS. Thanks to app technology, the solution is future proof and can easily be expanded.

"The connection to our automation system means that all building blocks of the platform and also the apps of the partner network ctrlX World can be used. This is a major benefit compared to self-contained systems, as users are able to access a range of functions and expand individual parts. As a result, companies can easily adapt their processes to meet changing requirements. This encourages not only innovation but also efficiency in the entire production process chain," explained Steffen Winkler, Vice President Sales Business Unit Automation & Electrification Solutions at Bosch Rexroth.

Flexible topologies and quick commissioning

ctrlX FLOWHS is designed for openness and flexibility. Based on a modular construction kit, it has plug and play functionality. Straight and curved segments as well as switches can be combined as necessary to create specific topologies, lengths and routes.

“Users can easily configure their individual solution and put it into operation quickly. What is more, the system is designed to allow adjustments and easy maintenance later on,” said Steffen Winkler. He added: “ctrlX FLOWHS essentially has no control cabinet. The entire electronics is integrated into the segments. This reduces the amount of space required and the work involved.”

High-speed with minimal space required

Another benefit of ctrlX FLOWHS is its high dynamics which helps to ensure the necessary performance levels in modern factories. With acceleration of up to 10 G and a speed of 5 m/s, the system allows quick movements. Multiple movers with a scalable payload of up to 2.5 kg (individually) or 5 kg (in a group) offer suitable performance and precision. The U-shaped design improves routing and minimizes friction to ensure a constant maximum speed – even in curves.

At the same time, the system takes up only a very small amount of space. “Compared to other solutions, the system has smaller movers and a product spacing reduced by 20 percent to just 40 millimeters. As a result, it can be used efficiently even in confined production environments. This makes it possible to build more compact products, manufacture more efficiently and ultimately reduce the footprint,” said Winkler, summing up the benefits.

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 more than 32,000 associates generated sales revenue of around 7.0 billion euros in 2022.

Basic Information Bosch

The Bosch Group is a leading global supplier of technology and services. It employs roughly 421,000 associates worldwide (as of December 31, 2022). The company generated sales of 88.2 billion euros in 2022. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. As a leading IoT provider, Bosch offers innovative solutions for smart homes, Industry 4.0, and connected mobility. Bosch is pursuing a vision of mobility that is sustainable, safe, and exciting. It uses its expertise in sensor technology, software, and services, as well as its own IoT cloud, to offer its customers connected, cross-domain solutions from a single source. The Bosch Group’s strategic objective is

to facilitate connected living with products and solutions that either contain artificial intelligence (AI) or have been developed or manufactured with its help. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is “Invented for life.” The Bosch Group comprises Robert Bosch GmbH and its roughly 470 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. The basis for the company’s future growth is its innovative strength. At 136 locations across the globe, Bosch employs some 85,500 associates in research and development, of which nearly 44,000 are software engineers.

Press Contact

Please get in touch with our Press Contact

Manuela Kessler
Spokesperson
technology topics
+49 9352 184145
Manuela.Kessler@boschrexroth.de