

PRESS INFORMATION

Linear robots now even more versatile

Manuela Kessler | 08.09.2022 | Lohr am Main / Germany | PI 041/22

From handling small parts to large masses: An extended range of Cartesian subsystems opens up new areas of application

- Predefined linear robots for a wide range of working areas and loads
- ctrlX AUTOMATION as a shared automation platform
- Optionally available with preinstalled software for quicker commissioning and programming



Predefined linear robots save time and allow dynamic applications with high repetition accuracy thanks to numerous form factors. Illustrated: 2D linear gantry for wall mounting (Image source: Bosch Rexroth)

Bosch Rexroth has expanded its portfolio of linear robots for various applications in factory automation by adding new axis combinations and sizes. The much wider range of working areas and loads makes the Cartesian subsystems also suitable for applications like battery handling or intralogistics. The linear robots can be selected and sized quickly and easily thanks to predefined axis combinations. They can then be configured and finalized online and ordered as preassembled subsystems – optionally with controllers for the new ctrlX AUTOMATION platform. Each multi-axis system is also available as a Smart Function Kit for handling or dispensing. Preinstalled software then allows even quicker commissioning and intuitive programming. This significantly reduces the engineering time.

The expanded range includes eight different axis combinations with 68 sizes. The products can be used in a variety of sectors such as automotive (including battery production), pharmaceuticals and FMCG. Applications range from pick and place, positioning and palletizing to feeding, shifting and loading and even dispensing tasks.

For use in intralogistics, including order picking and packaging, the new multi-axis systems cover large working ranges with stroke lengths of up to three meters in the X and Y directions and up to 1.5 m in the Z direction. The new load spectrum extends to up to 160 kg with three axes and up to 200 kg with two axes. The Cartesian robots are thus suitable for a range of tasks including handling individual parts, containers and boxes.



PRESS INFORMATION

The preassembled multi-axis systems with the Smart Function Kit option for handling or dispensing require little maintenance and achieve a high level of process quality and productivity. This is possible thanks to the special design properties such as rigidity, dynamics and repetition accuracy and the new ctrIX AUTOMATION platform which is particularly suitable for complex movements.

The standardized procedure for selecting and sizing a suitable subsystem can be carried out quickly and easily using predefined reference processes with LinSelect. While the design is finalized in the online configurator, the 3D CAD data can be retrieved, an inquiry started or the system ordered via the e-shop. In order to minimize installation times, Bosch Rexroth supplies the selected robot system in preassembled form. If required, it can be supplied with a complete energy chain and cable management. To make commissioning easier, the relevant axis parameters are stored in the motor encoder memory and can be read out automatically. Various attachment parts and interfaces make assembly easier.

The software add-on for the Smart Function Kits for handling or dispensing save users even more time. As part of the preinstalled software package, a wizard guides users intuitively through the commissioning process. The system is parameterized and the axes referenced automatically. Sequencing is carried out on a visual basis with the help of ready-to-use functional modules and can be completed in just a few minutes. Thanks to the flexible combination of hardware platform and innovative software, even complex line movements can be reproduced using simple graphic programming. Line integration can also be carried out easily with the help of suitable function modules.



The Smart Function Kits with preinstalled software not only make commissioning and programming easier. They also make it easier to connect external peripherals. (Image source: Bosch Rexroth AG)

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 Applications, Machinery Applications and Engineering, and Factory Automation. With its intelligent components, customized system solutions 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 31,000 associates generated sales revenue of around 6.2 billion euros in 2021.



PRESS INFORMATION

Basic Information Bosch

The Bosch Group is a leading global supplier of technology and services. It employs roughly 400,000 associates worldwide (as of December 31, 2019). The company generated sales of 77.7 billion euros in 2019. Its operations are divided into four business sectors: Mobility Solutions, 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 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 440 subsidiary and regional companies in some 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. Bosch employs some 72,600 associates in research and development at 126 locations across the globe, as well as roughly 30,000 software engineers.

Press Contact

Please get in touch with our Press Contact



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