

PRESS INFORMATION

Durable cylinders for high forces: High power electromechanical cylinders cover heavy-duty applications with forces up to 250 kN

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New high-power versions of the EMC-HP electromechanical cylinder cover a wide range of heavy-duty applications with forces up to 250 kN

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- High power density and precision for demanding applications
- Simple engineering and quick commissioning
- Optional oil bath lubrication for continuous load applications
- Sensor package displays lubrication recommendation, oil temperature, and more data via IO-Link

Whether it's pressing, forming, riveting, tensioning, positioning or testing, there are numerous processes in which linear movements with high forces must be performed precisely and energy-efficiently. As such, Bosch Rexroth is expanding the electromechanical cylinders in the EMC-HP high-power series to include sizes 190 and 220. These sizes can be implemented in heavy-duty applications with high axial forces of up to 250 kN in a precise and dynamic manner using a direct drive or a parallel spur gear configuration. An integrated sensor and display package provides a lubrication recommendation or oil temperature (depending on the version) to ensure maximum productivity. As part of the digital quick selection, an oil bath can also be selected as a lubrication option for continuous load applications. The new sizes meet the highest requirements of power density, precision, and dynamics, which are required in the calendaring process in battery production, in wood panel pressing, and in sheet metal forming. The EMC-HP portfolio has protection class IP 65 and can provide strokes of up to 1,500 mm in length. The proven PLSA planetary screw assembly installed in the EMC-HP covers dynamic load capacities (C_{dyn}) of up to 473 kN and features a top speed of 0.83 m/s. The new sizes have a robust spur gear side drive that offers efficient, reliable power transmission to the screw drive. The new EMC-HP offers additional benefits of durability, maintenance, and efficiency through an integrated sensor package. An optional LED-colored strip indicates a re-lubrication recommendation and the oil bath temperature. **Simple engineering, quick commissioning** Actuators of various lengths and mounting options can be selected easily and quickly using the LinSelect tool online. Complete automation packages including motor, controller, and cables are also available to allow quick, seamless commissioning. A software package (Smart Function Kit) for easy parameterization of the motion task is available on request. After the final online configuration, the individual cylinder or subsystem can be ordered directly from the Rexroth shop. The preconfigured complete package, with parameters stored in the motor memory for the drive controller, simplifies and shortens commissioning considerably. The compact design with lightweight aluminum housing and the single-cable solution, which is available for most drives, ensures easy integration and quick mounting. You can find more information at: www.boschrexroth.com/emc-hp Download link for the selection and design tool LinSelect: www.boschrexroth.de/linselect

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

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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 32,600 associates generated sales revenue of 6.5 billion euros in 2024.

Basic Information Bosch

The Bosch Group is a leading global supplier of technology and services. It employs roughly 417,900 associates worldwide (as of December 31, 2024). According to preliminary figures, the company generated sales of 90.5 billion euros in 2024. 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, electrification, digitalization, connectivity, and an orientation to sustainability. In this context, Bosch's broad diversification across regions and industries strengthens its innovativeness and robustness. Bosch uses its proven expertise in sensor technology, 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 user-friendly, 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 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. Bosch's innovative strength is key to the company's further development. At 136 locations across the globe, Bosch employs some 86,900 associates in research and development, of which nearly 48,000 are software engineers.

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