PRESS INFORMATION

# More Flexibility and Usability for Mobile Robotics with Locator

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## Software component Locator from Bosch Rexroth positions and orients mobile robots in dynamic environments

**With Bosch Rexroth's ROKIT Locator software, mobile robots can independently determine their position. Users no longer need expert knowledge or additional infrastructure to commission a mobile robot. Locator allows mobile robots to determine their position and orientation in any environment, simplifying the automation of intralogistics tasks in industry and trade. Locator is compatible with various industrial controllers and laser sensors on the market and is suitable for mobile units of all sizes and drive types.**

Until now, many users have shied away from the effort required to introduce autonomous guided vehicles (AGVs) and autonomous mobile robots (AMRs). Project durations are often several months, and the areas of application in the facility must be equipped with marking strips, reflectors or mirrors. Afterwards, specialists must manually train the mobile units to effectively navigate their environment.

With Locator, this time-consuming process can be replaced with quick and easy commissioning, without requiring additional expert knowledge. Locator enables the robots to evaluate the signals from a laser sensor in the vehicle and convert them into coordinates in space. No permanently installed aids, such as markers or reflectors, are required for orientation and position determination. Users only need one click to start up the system and familiarize the unit with its surroundings in a one-time orientation trip. An intuitive user interface based on 3D technology is provided for this purpose. The software maps an initially unknown environment and automatically creates a map.

Locator stores this map on the vehicle itself, or optionally on an on-site server component, also offered by Bosch Rexroth. If several mobile units are used, they all access this map. Afterwards, immediate localization is possible without initial knowledge.

If a vehicle detects a change in the environment, such as when setting up a new storage location, it sends this information to the server, which automatically updates the map accordingly and sends it to all the mobile units in the fleet. Mobile units purchased subsequently with the Locator take over the server data when they are put into operation and can drive off immediately.

The Locator can be used in a wide variety of vehicle types, industries and applications. The software is independent of the hardware used by a vehicle manufacturer. As an encapsulated function block, it fits into numerous control systems and supports a wide range of laser sensors, including safety lasers. Locator is already being used by various AGV and AMR manufacturers, including Bosch Rexroth's MP1000R and ACTIVE Shuttle.

Learn more about the MP1000R and ACTIVE Shuttle at https://www.boschrexroth.com/en/us/products/product-groups/assembly-technology/topics/amr/

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From project to product on the shelf: Creating dynamic maps for mobile robots with the software component Locator

## 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.

## Basic Information Bosch

The Bosch Group is a leading global supplier of technology and services. It employs roughly 402,600 associates worldwide (as of December 31, 2021). The company generated sales of 78.7 billion euros in 2021. 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 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 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. With its more than 400 locations worldwide, the Bosch Group has been carbon neutral since the first quarter of 2020. The basis for the company's future growth is its innovative strength. At 128 locations across the globe, Bosch employs some 76,100 associates in research and development, of which more than 38,000 are software engineers.

## Press Contact

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