

Rexroth ROKIT Navigator

Your Advanced Motion Planning Software



The ROKIT Navigator by Bosch Rexroth is navigation software for the efficient motion planning of mobile robots, thus making it a natural extension of the ROKIT Locator. The modular and easy-to-integrate software reliably and transparently controls the movement of your goods from A to B. It also ensures smooth, elegant driving and responds to obstacles. Like the ROKIT Locator, the ROKIT Navigator is compatible with a wide range of mobile robots and offers interfaces for other components as standard.

Increase your productivity

Navigation made perfect: high-precision, deterministic, reliable. A straightforward targeted integration phase enables the motion planning software to simplify the parameterization effort for different types of vehicles.

Compatible with a wide range of software and hardware applications

Integrate the ROKIT Navigator into existing standards – with no need for adapters or additional interfaces. The component is compatible with VDA 5050 interface-enabled fleet management systems and takes into account your current on-premises safety requirements.

PLAN YOUR NEXT MOVE

- ▶ Reliable goods delivery and handling
- ▶ Obstacle avoidance and navigation in cramped spaces
- ▶ Transparent driving behavior
- ▶ Efficient algorithm

EASY TO INTEGRATE

- ▶ Fast and easy integration – no expert knowledge required
- ▶ Observance of general safety conditions
- ▶ Fast adaptation to different kinematics
- ▶ VDA 5050-compatible
- ▶ Open interfaces

ROKIT Navigator Features

Obstacle avoidance

Takes into account objects in the driving tube and avoids them within the permitted avoidance area.

Compliance with external safety requirements

Smooth interaction between vehicle motion planning and safety control.

Observance of acceleration restrictions

Motion planning takes into account compliance with the maximum longitudinal and lateral acceleration.

Consideration of vehicle and load contour

Prevents vehicle or load collision with obstacles.

VDA 5050-compatible

Support of the VDA 5050 specification between vehicle and fleet management.

Consideration of orientation restrictions

Enables, depending on the drive type, motion sequences independent of the vehicle orientation.

Zone observance

Compliance with specific conditions in defined areas (e.g. speed limit, exclusive driving area).

Navigation in confined spaces

Safe vehicle manoeuvring in limited spaces.

Support of different drive types

e.g. Ackermann, differential drives, omnidirectional drives.

Fast integration and commissioning

Tool-supported offline calibration of system parameters.



Have we sparked your interest?

Please contact us at robotics@boschrexroth.de and discover the ROKIT Navigator.