Mobile robot high-stack applications

ERC 213a / 217a

Lift height: 3100-4400 mm / Load capacity: 1300-1700 kg

LI-ION technology

JUNGHEINRICH

The versatile AGV-S
for the efficient transport of goods.

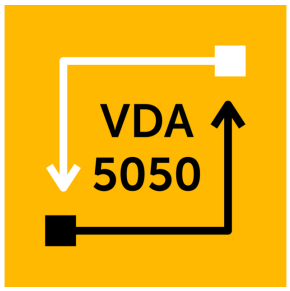
For standardised load aids and accessible stations.

As an Automated Guided Vehicle (AGV), our reliable and versatile ERCa takes on recurring transport tasks. Due to its compact design, the ERCa is the perfect choice to boost the efficiency of your transport processes in narrow spaces.

A 2.8 kW 3-phase AC motor ensures constant power and the electrically controlled, high-performance lift motor ensures gentle, quiet lifting and lowering – even at high lift heights. Safety is enhanced by the sturdy construction with its steel frame and enclosed structure.

The use of our Automated Guided Vehicles in mixed operation is guaranteed by safety systems such as the standard personal protection scanners. Depending on the speed, these scanners scan the travel route for obstacles: in the direction of travel, load direction and when cornering. The vehicle navigates by means of laser navigation. Reflectors on the travel route or a combination of reflectors and environmental features can be used for this purpose.

The stacker truck is based on our tested standard truck and can be easily integrated into existing IT structures or used as a stand-alone system.



VDA 5050 compatibility

Mobile robots from Jungheinrich are VDA 5050-compatible and have a standardised interface for communication with the master control. This enables the mobile robots to be used with manufacturer-independent control systems.

All benefits at a glance

- Compact design for narrow aisle widths.
- Efficient, process-reliable completion of routine tasks.
- Optimised transport routes thanks to precise laser navigation.
- Extensive safety systems for use in mixed operations.
- Short payback period thanks to process optimisation.

Your Jungheinrich AGV-S
for maximum customer benefits.

Efficiency

Maximum performance with the most efficient automation solution.

Rely on an overall concept where intelligent software provides continuously high performance and maximum process reliability.

Established standard truck used as basis.

- The basic ERC electric pedestrian pallet truck in combination with comprehensive safety technology as well as automation and navigation components.
- Future-proof investment through design of safety equipment in accordance with current standards.
- Simple manual operation in mixed mode is performed via the standard controls of the production truck.

Efficient drive technology and equipment.

- 2.8 kW 3-phase AC drive motor. Optional 3.2 kW with the drivePLUS option.
- Automatically controlled high-performance lift motor giving energy-efficient lifting and lowering.
- Sturdy design with steel frame and enclosed frame contours.

Lithium-ion technology.

- High availability thanks to extremely short charging times.
- No battery exchange required.
- Optionally available with automatic charging.
- Saving costs due to longer service life and zero maintenance as compared to lead-acid batteries.
- No charging rooms and ventilation required as there is no build up of gas.

Safety

Best prerequisites for working safely.

Safety components installed in the truck ensure that you can use the ERCa in mixed operations with manual trucks and pedestrians.

Safety system installed in the truck.

- Standard personal protection scanner in the drive direction and load direction scans the travel route in front of the AGV for obstacles depending on the speed.
- Should an obstacle be located in the path of the truck, the AGV will reliably come to a halt in front of it.
- The sensor also scans ahead for obstacles when cornering.
- Emergency disconnect on the truck.

Process reliability in the warehouse.

- Everything at a glance – with the AGV-S control panel.
- The graphic display on the AGV control panel displays all the information relating to the AGV in use.
- Quick overview of the status of pending transport tasks.
- Prioritised orders can be entered and processed in the corresponding order.
- Depending on the project-specific requirements, individual customer functions can be specially implemented and activated for the respective system.

Individuality

An automated solution as individual as your business.

Our automated guided vehicle systems adapt individually to your IT and network landscapes.

Simple system integration.

- Integration into existing IT and network landscapes possible.
- Effortless connection to existing WMS/ERP system via Jungheinrich Logistics Interface.
- The existing Wi-Fi structure can be used for communication.

Precise navigation.

- Millimetre-accurate positioning of trucks and loads at the defined stations.
- Different navigation types can be used as hybrid navigation.
- Project- and environment-specific design and implementation.

Optional system enhancements.

- Charging contact plates on the AGV for automatic battery charging.
- Floor spot.
- Barcode scanner.
- Obstacle detection scanner.

Overview

The right solution for your applications:

Name	Load capacity/load	Lift height (max.)	Travel speed unladen	total height
ERC 213a	1300 kg	4400 mm	9 km/h	2285 mm
ERC 217a	1700 kg	4400 mm	7 km/h	2285 mm

The German production facilities in Norderstedt, Moosburg and Landsberg are certified as well as our Genuine Parts Center in Kaltenkirchen.

ISO 9001
ISO 14001

JUNGHEINRICH