



## Mobile robot load towing indoor

**EZS 350a**

Load capacity: 5000 kg

# The compact tow tractor

## In automatic mode.

### For tow train applications with multiple trailers

Our versatile and robust EZS 350a enhances your production environment as an automated tow tractor. It is particularly suited for the effective pulling of trailers carrying up to 5,000 kg, for example for production supply. The Automated Guided Vehicle System (AGV\_S) was developed based on our proven standard trucks in order to specifically optimise warehouse work and transport processes.

The automatic tow tractor fulfils routine tasks reliably and convinces with precision navigation technology and an extensive safety system.

A 24-V 3-phase AC motor ensures high performance with low energy consumption. The truck is controlled by laser navigation using reflectors installed along the travel route.

The EZS 350a can be used in mixed operations mode with manual trucks and pedestrians, in existing structures or as a stand-alone solution – for more efficiency in your production facility.



### 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

- Efficient, process-reliable completion of transport tasks
- Optimised transport routes thanks to precise laser navigation
- Extensive safety systems for use in mixed operations
- Various couplings possible
- Easy integration into existing IT systems

# Your Jungheinrich tug for maximum customer benefits.



## Efficiency

Maximum performance with the most efficient automation solution.

Our AGVs have a lot to offer: High availability, maximum efficiency and optimum performance.

Established standard truck used as basis

- Standard truck EZS 350XL electric tow tractor combined with appropriate safety technology as well as automation and navigation components.
- Simple manual operation in mixed mode is performed via the standard controls of the production truck.

Efficient drive technology and equipment

- 24-V 3-phase AC drive motor.
- No carbon brushes: Maintenance-free drive motor.
- Robust design.
- Compact design.
- jetPILOT multifunctional steering wheel.

Lithium-Ionen-Technology

- High availability thanks to extremely short charging times.
- No battery exchange required.
- 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.

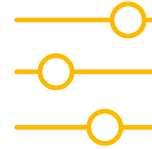
Always well informed: The AGV control panel delivers a complete overview rapidly – for efficient and safe operations.

Safety system on the vehicle

- Standard personal protection scanner in the drive 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.
- Side sensors to protect the sides of the truck.
- Emergency disconnect on the truck.

Process reliability in the warehouse

- Everything at a glance with the AGV 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.

Time for the future: Make your warehouse sustainable and build on proven basic trucks with automation components.

Simple system integration

- Can be easily integrated into existing IT and network landscapes.
- Effortless connection to existing WMS/ERP system via Jungheinrich Logistics Interface.
- For communication, the existing Wi-Fi structure is used.

High level of flexibility

- Full manual and automatic use, e.g. reliable surface transport in automatic mode with distribution of the goods by one employee.
- The optional comfort terminal enables employees to determine the next destination and simply enter it with just one click at the truck.

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.

# Overview

The right solution for your applications:

Name	Load capacity/load	Travel speed unladen	total height
EZS 350a	5000 kg	12.5 km/h	2273 mm

The German production facilities in  
Norderstedt, Moosburg and Landsberg ISO 9001  
are certified as well as our Genuine Parts ISO 14001  
Center in Kaltenkirchen.

**JUNGHEINRICH**